BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	**R09-10**
AMENDMENTS TO 35 ILL. ADM.	)	
CODE 225: CONTROL OF EMISSIONS	)	**(Rulemaking – Air)**
FROM LARGE COMBUSTION SOURCES	)	

NOTICE

TO: John Therriault, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601

SEE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S POST-HEARING COMMENTS TO THE DECEMBER 17, 2008, HEARING ON THE PROPOSAL FOR AMENDING 35 ILL. ADM. CODE 225, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S SECOND ERRATA SHEET TO ITS PROPOSAL TO AMEND 35 ILL. ADM. CODE 225 and MOTION FOR WAIVER OF REQUIREMENTS of the Illinois Environmental Protection Agency a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: _____
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Assistant Counsel
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DATED: January 14, 2009

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THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R09-10
PROPOSED AMENDMENTS TO	)	(Rulemaking – Air)
35 ILL. ADM. CODE 225	)	
CONTROL OF EMISSIONS FROM	)	
LARGE COMBUSTION SOURCES	)	

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S POST-HEARING COMMENTS TO THE DECEMBER 17, 2008, HEARING ON THE PROPOSAL FOR AMENDING 35 ILL. ADM. CODE 225

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), by its attorneys, and hereby submits its post-hearing comments in the above rulemaking proceeding. The Illinois EPA has reviewed the transcript of the December 17, 2008, hearing and responds to the information requests as follows. Other information requested at the hearing will be addressed in the Illinois EPA's Second Errata, filed concurrently with these post-hearing comments:

1. To the information request on Transcript page 27, line 14: The Agency was asked to identify the sections of the proposed rule that limit a source's ability to switch between emissions testing and continuous emissions monitoring systems ("CEMS"). The Agency identifies Section 225.233(d)(4), Sections 225.239(a)(4), (d)(6), and (g)(2), Section 225.240(b)(4), and Section 225.294(e)(1)(B) (some of which are modified by the Agency's Second Errata).

2. To the information request on Transcript page 25, line 15: The Agency agreed to consider deferring the December 31, 2008, date in Section 225.220(a)(2)(A), as the current rulemaking will not be completed by that date. The Agency believes that the date in the current proposal is appropriate. All of the subject sources have already submitted their initial permit applications and thus no revision is necessary.

3. To the information request on Transcript page 18, line 8: The Agency agreed to identify the rule provisions that allow submission of alternative mercury monitoring plans. The Agency identifies Section 225.210(b)(1) and (2).

4. To the information request on Transcript page 80, line 9: The Agency agreed to address whether a source that obtains a construction permit to install and operate a sorbent injection system, but subsequently moves the injection sites, must obtain another construction permit. The Agency responds that, if and when such a situation arises, the source should contact the Agency and seek guidance regarding the appropriate way to proceed considering that source's specific circumstances. The need for a construction permit or a revised permit will be dependent on several factors, including any existing permit requirements and the extent of the proposed changes.

5. To the information request on Transcript page 91, line 13: The Agency agreed to address whether Section 225.233(d)(4) accomplishes the same purpose as Section 225.233(c)(6). The subsections do not accomplish the same purpose. Section 225.233(c)(6) addresses monitoring, while Section 225.233(d)(4) addresses compliance with emission limits. In its Second Errata, the Agency has revised these subsections to further clarify the difference.

6. To the information request on Transcript page 92, line 16: The Agency agreed to consider amending the date in Section 225.233(f)(5) in light of the dates in Sections 225.233(f)(1) and (f)(2). The Agency believes that the date in the current proposal is appropriate. Because CAIR allowances are allocated several years in advance, such that sources can trade them before the date on the allowance, even though the rule does not restrict trading until "vintage years 2012 and beyond," the sources will have those allowances in their accounts probably by 2009 and almost certainly by 2010. Allowances for 2012 and beyond do not need to be retired until those years, and sources will not necessarily be able to determine which allowances are available due to overcompliance until that year has actually passed. However, the report required by Section 225.233(f)(5) asks for, among other things, "identification of any allowances that were sold, gifted, used, exchanged, or traded because they became available due to over-compliance," and it is possible that sources may be able to make a determination of such actions ahead of time. Since the report only covers the previous calendar year, if the Agency does not start getting reports until the 2012 calendar year, the Agency would not be provided with the necessary information in cases when trading occurred in 2010 or 2011. Accordingly, it is necessary to have sources begin submitting reports in 2010, as currently required in the rule.

7. To the information request on Transcript page 146, line 14: The Agency agreed to look at the interplay between the dates in Section 225.240(b)(1) and (b)(3). However, there is no actual interplay between the dates in these subsections, as they deal with two different topics. Section 225.240(b)(1) covers the deadline date by which monitoring is required for existing sources; (b)(3) deals with the monitoring date for sources that later add on a control device. Thus, an existing source needs to begin monitoring with a certified CEMS by July 1, 2009, per the proposed Agency change to the date (from the original date of January 1, 2009). If that source then adds a control system described in (b)(3), the modified CEMS

has the lesser of 90 unit operating days or 180 calendar days to re-certify the CEMS.

8. To the information request on Transcript page 172, line 1: The Agency was asked to review a list to be submitted by Midwest Generation detailing references to bias adjustment factor and missing data substitution procedures and strike such references from the proposed rule where appropriate. Midwest Generation provided such a list, which also included references to records, reports, electronic data, AETB, NIST, and designated representatives. The Agency deleted or revised several of the references, as outlined in the Agency's Second Errata. The remaining references were kept and/or revised as follows:

   A. Section 1.8(a): The Agency is not proposing changes to this Section. The monitor availability calculations in 40 CFR Part 75, suggested for use here by Midwest Generation, are to be performed for missing data substitution calculations for a trading regulation and are not appropriate for this command and control rule. In addition, those calculations are for annual calculations, while the Illinois Mercury Rule uses a quarterly standard.

   B. Section 1.10(d)(1)(A-I): Revisions were made to remove electronic reporting. However, the electronic storage of data will be required to be furnished to the Agency upon request.

   C. Section 1.11(a): Revisions were made to remove electronic reporting. However, the electronic storage of data will be required to be furnished to the Agency upon request.

   D. Section 1.11(b-f): The Agency is not proposing revisions to this Section, as this decision would be made by the owner/operator and the vendor.

   E. Section 1.12(a-b): The Agency is not proposing revisions to this Section. It does not concern missing data substitution, but rather parametric monitoring when the mercury CEMS is unavailable.

   F. Section 1.13(a)(1-7): Revisions were made to remove electronic reporting. However, the electronic storage of data will be required to be furnished to the Agency upon request.

   G. Section 1.13(b): The Agency is not proposing revisions to this Section. It does not concern missing data substitution, but rather parametric monitoring when the mercury CEMS is unavailable.

   H. Section 1.18(a)(1): The Agency is not proposing revisions to this Section, as this decision would be made by the owner/operator and the vendor.

I. Section 1.18(a)(2): The Agency is not proposing revisions to this Section. It does not concern missing data substitution, but rather parametric monitoring when the mercury CEMS is unavailable.

J. Section 1.18(e)(1): Revisions were made to remove electronic reporting. However, the electronic storage of data will be required to be furnished to the Agency upon request.

K. Section 1.18(f)(1): Revisions were made to remove electronic reporting. However, the electronic storage of data will be required to be furnished to the Agency upon request.

L. Section 1.18(f)(1)(B)(iii) and 1.18(f)(2)(B)(ii): The Agency is not proposing revisions to these subsections. They do not concern missing data substitution, but rather parametric monitoring when the mercury CEMS is unavailable.

M. Exhibit A, Section 2.1.3.1: The Agency is not proposing revisions to this Section. It does not concern missing data substitution, and the value(s) is needed for calculating the proper span and range of the CEMS.

N. Exhibit A, Section 2.1.3.2: The Agency is not proposing revisions to this Section. It does not concern missing data substitution, and the value(s) is needed for calculating the proper span and range of the CEMS.

O. Exhibit A, Section 2.1.3.3(b): The Agency is not proposing revisions to this Section. It does not concern missing data substitution, and the value(s) is needed for calculating the proper span and range of the CEMS.

P. Exhibit A, Section 2.1.3.4: The Agency is not proposing revisions to this Section. It does not concern missing data substitution, and the value(s) is needed for calculating the proper span and range of the CEMS.

Q. Exhibit A, Section 4: Revisions were made to remove electronic reporting. However, the electronic storage of data will be required to be furnished to the Agency upon request.

R. Exhibit A, Section 5.1.9: The Agency is not proposing revisions to this Section. The Agency believes there will be NIST traceable source standards for oxidized mercury prior to January 1, 2010.

S. Exhibit A, Section 6.1.2(a-c) and Exhibit B, Section 1.1.4: These provisions will be stayed indefinitely pending an outcome by the USEPA.

T. Exhibit B, Section 1.2.4: The Agency is not proposing revisions to this Section. It does not concern missing data substitution, but rather parametric monitoring when the mercury CEMS is unavailable.

U. Exhibit B, Section 2.6: The Agency is not proposing revisions to this Section. Exhibit A, Section 5.1.9 has already addressed the use of a NIST traceable source for oxidized mercury standards.

V. Section 1.13(a)(7)(H): "All appropriate data elements for Methods 30A and 30B" means those data elements, specific for each reference method, which would be contained in a Relative Accuracy Test Audit report demonstrating proper execution of the reference method, and proper calculation and analysis of the raw test data.

9. To the information request on Transcript page 190, line 11: The Agency agreed to consider changing the date in Section 225.233(f)(5) to May 1. The Agency is not proposing such a change. The information required under subsection (f)(5) is different from other information that sources are required to submit to the Agency, such as information submitted in Title V annual compliance certifications. There is therefore no overlap and no need for a revision.

10. To the information request on Transcript page 197, line 12: The Agency agreed to explain the procedural history post-CAMR vacatur (i.e., the date the mandate vacating CAMR was issued and the issues currently on appeal to the United States Supreme Court). The federal Clean Air Mercury Rule ("CAMR") was challenged by numerous states in the U.S. Court of Appeals for the D.C. Circuit. The court accepted the petition as *New Jersey v. EPA*. The Utility Air Regulatory Group ("UARG") was also a respondent. On February 8, the court issued a decision vacating the CAMR. The court, based upon the "plain text and structure of section 112," vacated EPA's delisting of mercury from electric generating units ("EGUs") from Section 112 of the Clean Air Act ("CAA"). In the court's view, this then required "vacation of CAMR's regulations for both new and existing EGUs." On March 14, 2008, the court issued the final mandate vacating CAMR.

    Following several unsuccessful petitions for review filed by both UARG and the USEPA, both respondents separately filed petitions for *writ of certiorari* with the U.S. Supreme Court for certain issues. The petition by UARG, filed on September 17, 2008, presented the Supreme Court with two issues:

    > 1. Whether the D.C. Circuit acted contrary to *Chevron* by focusing solely on the supposed meaning of CAA § 112(c) to find that EPA must regulate EGUs under CAA §112(d), even though EPA determined under CAA § 112(n) that such regulation was neither "appropriate" nor "necessary."

> 2. Whether an outgoing EPA Administrator may, without notice-and-comment, require a subsequent Administrator to regulate EGUs under CAA § 112(d), despite the subsequent Administrator's determination after rulemaking that such regulation is not "appropriate and necessary."

Petition for a Writ of Certiorari in UARG v. New Jersey.

On October 17, 2008, the USEPA filed a *writ of certiorari* with the Supreme Court for the following issue:

> Whether the Environmental Protection Agency may remove power plants from a list of source categories to be regulated under 42 U.S.C. 7412 when it determines that regulation under that provision is not appropriate or necessary.

Petition for a Writ of Certiorari in EPA v. New Jersey.

Respondents (New Jersey, et al.) replied on November 24, 2008, by requesting an extension of time to file responses to the *writs*. On December 1, 2008, the Supreme Court granted respondents' requests and extended the deadline for responses until January 21, 2009.

11. The Agency agreed to consider allowing additional time for sources to submit original monitoring reports. The Agency is not proposing such a change, as it has not identified any reports that would require additional time. For example, the quarterly reports required pursuant to Section 225.290(b) are due 45 days after the end of a quarter, meaning the first report will not be due until mid-November. If there is a different report that sources believe requires additional time, the Agency will consider extending the deadline if such report is identified.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R09-10
PROPOSED AMENDMENTS TO	)	(Rulemaking – Air)
35 ILL. ADM. CODE 225	)	
CONTROL OF EMISSIONS FROM	)	
LARGE COMBUSTION SOURCES	)	

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S SECOND ERRATA SHEET TO ITS PROPOSAL TO AMEND 35 ILL. ADM. CODE 225

NOW COMES the Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"), by and through its attorneys, and submits this Second Errata Sheet to its proposal to amend 35 Ill. Adm. Code 225. The Illinois EPA proposes the following amendments to the text of the rules submitted in its proposal to the Board dated October 2, 2008, and revised by the Agency's First Errata, submitted to the Board on December 2, 2008:

1. *The Agency proposes amending Section 225.210 to add the acronym QAMO, resulting from a change to the monitoring calculation provisions (explained under Second Errata number 5). The Agency also proposes correcting "quality certification" to "quality control," which is the proper term.*

Section 225.120 Acronyms

QAMO	quality-assured monitor operating
QC	quality control ~~certification~~

2. *The Agency proposes amending Section 225.130, Definitions, to allow for changes to the term "Designated Representative" to account for the separation of the Illinois Mercury Rule and the federal Clean Air Interstate Rule. This was done in response to questions at the first hearing and to remove any confusion about the need to refer to federal programs when implementing the Illinois Mercury Rule. In addition, a definition for the term "Sorbent Trap Monitoring System" was added to the rule as it was inadvertently left out of the original proposal. "NIST traceable elemental mercury standards" was amended based upon United States Environmental Protection Agency ("USEPA")comments that*

interim versions of the mercury generator protocols will be issued in early 2009 and are acceptable until final protocols are issued. A definition for "Excepted Monitoring System" was added to the rule for clarity.

Section 225.130 Definitions

The following definitions apply for the purposes of this Part. Unless otherwise defined in this Section or a different meaning for a term is clear from its context, the terms used in this Part have the meanings specified in 35 Ill. Adm. Code 211.

"Designated representative" means, for the purposes of Subpart B of this Part, the ~~same~~ natural person ~~as the person~~ who is ~~the~~ designated by the owner or operator of an EGU, in a letter to the Manager of the Bureau of Air's Compliance Section, to be responsible for compliance with Subpart B of this Part, including all monitoring, reporting, and recordkeeping requirements herein. ~~representative for the CAIR trading and Acid Rain programs.~~

***

"Excepted monitoring system" means a sorbent trap monitoring system, as defined in this section.

***

"NIST traceable elemental mercury standards" means either:

(1) Compressed gas cylinders having known concentrations of elemental mercury, which have been prepared according to the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards"; or

(2) Calibration gases having known concentrations of elemental mercury, produced by a generator that fully meets the performance requirements of the "EPA Traceability Protocol for Qualification and Certification of Elemental Mercury Gas Generators~~,~~" or an interim version of that protocol until such time as a final protocol is issued.

"NIST traceable source of oxidized mercury" means a generator that is capable of providing known concentrations of vapor phase mercuric chloride (HgCl2), and that fully meets the performance requirements of the "EPA Traceability Protocol for Qualification and Certification of Mercuric Chloride ~~Oxidized Mercury~~ Gas Generators~~,~~" or an interim version of that protocol until such time as a final protocol is issued.

***

"Sorbent Trap Monitoring System" means the equipment required by Appendix B of this Part for the continuous monitoring of Hg emissions, using paired sorbent traps containing iodated charcoal (IC) or other suitable reagents. This excepted monitoring system consists of a probe, the paired sorbent traps, an umbilical line, moisture removal components, an air tight sample pump, a gas flow meter, and an automated data acquisition and handling system. The monitoring system samples the stack gas at a rate proportional to the stack gas volumetric flowrate. The sampling is a batch process. Using the sample volume measured by the gas flow meter and the results of the analyses of the sorbent traps, the average mercury concentration in the stack gas for the sampling period is determined, in units of micrograms per dry standard cubic meter (µg/dscm). Mercury mass emissions for each hour in the sampling period are calculated using the average Hg concentration for that period, in conjunction with contemporaneous hourly measurements of the stack gas flow rate, corrected for the stack moisture content.

3. *The Agency proposes amending Section 225.140(a) to more accurately cite the provisions of the Code of Federal Regulations incorporated by reference. This was done at the behest of the USEPA for the sake of clarity. The Agency also proposes amending subsection (c) to incorporate by reference 40 CFR 75, as the Agency is proposing to add two references to Part 75 in Second Errata number 16 below. In addition, at the request of industry representatives, a new ASTM standard was added to subsection (h) as an additional means of determining the mercury content of coal.*

Section 225.140

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) Appendices ~~Appendix~~ A-1 through A-8, Subpart A, and Performance Specifications 2 and 3 of Appendix B of 40 CFR 60 (2005).

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c) ~~40 CFR 75.4, 75.11 through 75.14, 75.16 through 75.19, 75.30, 75.34 through 75.37, 75.40 through 75.48, 75.53(e), 75.57(c)(2)(i) through 75.57(c)(2)(vi), 75.60 through 75.67, 75.71, 75.74(c)~~40 CFR 75 (2006), Sections 2.1.1.5, 2.1.1.2, 7.7, and 7.8 of Appendix A to 40 CFR 75, Appendix C to 40 CFR 75, Section 3.3.5 of Appendix F to 40 CFR 75 (2006).

***

h) ASTM. The following methods from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken PA 19428-2959, (610) 832-9585:

1) ASTM D388-77 (approved February 25, 1977), D388-90 (approved March 30, 1990), D388-91a (approved April 15, 1991), D388-95 (approved January 15, 1995), D388-98a (approved September 10, 1998), or D388-99 (approved September 10, 1999, reapproved in 2004), Classification of Coals by Rank.

2) ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke (Approved April 10, 2003).

3) ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method (Approved October 10, 2001).

4) ASTM D4840-99, Standard Guide for Sampling Chain-of-Custody Procedures (Reapproved 2004).

5) ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke (Approved April 1, 2004).

6) ASTM D6414-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Acid Extraction or Wet Oxidation/Cold Vapor Atomic Absorption (Approved October 10, 2001).

7) ASTM D6722-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis (2001).

8~~7~~) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (Approved April 10, 2002).

9~~8~~) ASTM D6911-03, Standard Guide for Packaging and Shipping Environmental Samples for Laboratory Analysis.

10~~9~~) ASTM D7036-04, Standard Practice for Competence of Air Emission Testing Bodies.

4. *The Agency proposes amending Section 225.202 to add a new subsection (f) to reflect the addition of the new ASTM standard, referenced in Second Errata number 3 above, as an allowable test method for determining the mercury content*

of coal. The Agency also proposes amending the new subsection (h) to specify the proper test methods.

Section 225.202 Measurement Methods

Measurement of mercury must be according to the following:

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f) ASTM D6722-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis (2001), incorporated by reference in Section 225.140.

gf) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (Approved April 10, 2002), incorporated by reference in Section 225.140.

hg) Emissions testing pursuant to Methods 29, 30A, and 30B in Appendix A-8 to ~~of~~ 40 CFR 60.

5. *The Agency proposes amending Section 225.230 in response to comments from USEPA. The Agency has included amendments to remedy issues presented by the elimination of the data substitution procedures. Because EGUs could potentially have monitor downtime of up to 25% during a given quarter, allowable emissions must be based upon emissions that are recorded during quality-assured monitor operating ("QAMO") hours. Sources recording emissions for less than 100% of operating hours cannot calculate an emission rate or control efficiency based on only the emissions recorded during monitor up time while averaging emissions over 100% of operating hours. Emission rates and control efficiencies will be calculated using emissions from QAMO hours and an average of mercury input or electrical output for a given month based upon the uptime of the monitor system recording emissions.*

Section 225.230 Emission Standards for EGUs at Existing Sources

a) Emission Standards.

1) Except as provided in Sections 225.230(b) and (d), 225.232 through 225.234, 225.239, and 225.291 through 225.299 of this Subpart B, beginning July 1, 2009, the owner or operator of a source with one or more EGUs subject to this Subpart B that commenced commercial operation on or before December 31,

2008, must comply with one of the following standards for each EGU on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

2) For an EGU complying with subsection (a)(1)(A) of this Section, the ~~actual~~ mercury emission rate during quality-assured monitoring operating "QAMO" hours of the EGU for each 12-month rolling period, as monitored in accordance with this Subpart B and calculated as follows, must not exceed the applicable emission standard:

$$ER = \sum_{i=1}^{12} E_i \div \sum_{i=1}^{12} O_i$$

Where:

ER = Mercury ~~Actual mercury~~ emissions rate of the EGU during QAMO hours for the particular 12-month rolling period, expressed in lb/GWh.

E_i = Mercury ~~Actual mercury~~ emissions of the EGU during QAMO hours, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with the emissions monitoring provisions of this Subpart B.

O_i = Gross electrical output of the EGU during QAMO hours, in GWh, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.263 of this Subpart B.

3) For an EGU complying with subsection (a)(1)(B) of this Section, the actual control efficiency for mercury emissions achieved by the EGU for each 12-month rolling period, as monitored in accordance with this Subpart B and calculated as follows, must meet or exceed the applicable efficiency requirement:

$$CE = 100 \times \{1 - (\sum_{i=1}^{12} E_i \div \sum_{i=1}^{12} I_i)\}$$

Where:

CE = Control ~~Actual control~~ efficiency for mercury emissions of the EGU during QAMO hours for the particular 12-month rolling period, expressed as a percent.

E_i = Mercury ~~Actual mercury~~ emissions of the EGU during QAMO hours, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with the emissions monitoring provisions of this Subpart B.

I_i = Amount of mercury in the fuel fired in the EGU during QAMO hours, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.265 of this Subpart B. I_i is determined by multiplying the amount of mercury in the fuel fired in the EGU in month *i* by the number of QAMO hours in that month, and dividing that product by the number of EGU operating hours in that month.

b) Alternative Emission Standards for Single EGUs.

1) As an alternative to compliance with the emission standards in subsection (a) of this Section, the owner or operator of the EGU may comply with the emission standards of this Subpart B by demonstrating that the ~~actual~~ emissions of mercury from the EGU are less than the allowable emissions of mercury from the EGU on a rolling 12-month basis.

2) For the purpose of demonstrating compliance with the alternative emission standards of this subsection (b), for each rolling 12-month period, the ~~actual~~ emissions of mercury from the EGU, as monitored in accordance with this Subpart B, must not exceed the allowable emissions of mercury from the EGU, as further provided by the following formulas:

$$E_{12} \leq A_{12}$$

$$E_{12} = \sum_{i=1}^{12} E_i$$

$$A_{12} = \sum_{i=1}^{12} A_i$$

Where:

E_{12} = Mercury ~~Actual mercury~~ emissions of the EGU during QAMO hours for the particular 12-month rolling period.

A_{12} = Allowable mercury emissions of the EGU during QAMO hours for the particular 12-month rolling period.

E_i = Mercury ~~Actual mercury~~ emissions of the EGU during QAMO hours in an individual month in the 12-month rolling period.
A_i = Allowable mercury emissions of the EGU during QAMO hours in an individual month in the 12-month rolling period, based on either the input mercury to the unit ($A_{Input\ i}$) or the electrical output from the EGU ($A_{Output\ i}$), as selected by the owner or operator of the EGU for that given month. A_i is determined by multiplying the allowable mercury emissions based on either input mercury or electrical output in month i by the number of QAMO hours in that month, and dividing that product by the number of EGU operating hours in that month.
$A_{Input\ i}$ = Allowable mercury emissions of the EGU in an individual month based on the input mercury to the EGU, calculated as 10.0 percent (or 0.100) of the input mercury to the EGU.
$A_{Output\ i}$ = Allowable mercury emissions of the EGU in a particular month based on the electrical output from the EGU, calculated as the product of the output based mercury limit, i.e., 0.0080 lb/GWh, and the electrical output from the EGU, in GWh.

3) If the owner or operator of an EGU does not conduct the necessary sampling, analysis, and recordkeeping, in accordance with Section 225.265 of this Subpart B, to determine the mercury input to the EGU, the allowable emissions of the EGU must be calculated based on the electrical output of the EGU.

c) If two or more EGUs are served by common stack(s) and the owner or operator conducts monitoring for mercury emissions in the common stack(s), as provided for by Sections 1.14 through 1.18 of Appendix B to this Part, such that the mercury emissions of each EGU are not determined separately, compliance of the EGUs with the applicable emission standards of this Subpart B must be determined as if the EGUs were a single EGU.

d) Alternative Emission Standards for Multiple EGUs.

1) As an alternative to compliance with the emission standards of subsection (a) of this Section, the owner or operator of a source with multiple EGUs may comply with the emission standards of this Subpart B by demonstrating that the ~~actual~~ emissions of mercury from all EGUs at the source during QAMO hours are less than the allowable emissions of mercury from all EGUs at the source on a rolling 12-month basis.

2) For the purposes of the alternative emission standard of subsection (d)(1) of this Section, for each rolling 12-month period, the ~~actual~~ emissions of mercury from all the EGUs at the source during

QAMO hours, as monitored in accordance with this Subpart B, must not exceed the sum of the allowable emissions of mercury from all the EGUs at the source, as further provided by the following formulas:

$$E_S \leq A_S$$

$$E_S = \sum_{i=1}^{n} E_i$$

$$A_S = \sum_{i=1}^{n} A_i$$

Where:

E_S = Sum of the ~~actual~~ mercury emissions of the EGUs at the source during QAMO hours.
A_S = Sum of the allowable mercury emissions of the EGUs at the source during QAMO hours.
E_i = Mercury ~~Actual mercury~~ emissions of an individual EGU at the source during QAMO hours, as determined in accordance with subsection (b)(2) of this Section.
A_i = Allowable mercury emissions of an individual EGU at the source during QAMO hours, as determined in accordance with subsection (b)(2) of this Section.
n = Number of EGUs covered by the demonstration.

3) If an owner or operator of a source with two or more EGUs that is relying on this subsection (d) to demonstrate compliance fails to meet the requirements of this subsection (d) in a given 12-month rolling period, all EGUs at such source covered by the compliance demonstration are considered out of compliance with the applicable emission standards of this Subpart B for the entire last month of that period.

6. The Agency proposes amending Section 225.232 to remove the word "actual." This was necessitated by the changes to the calculations in Section 225.230.

Section 225.232 Averaging Demonstrations for Existing Sources

a) Through December 31, 2013, as an alternative to compliance with the emission standards of Section 225.230(a) of this Subpart B, the owner or

operator of an EGU may comply with the emission standards of this Subpart B by means of an Averaging Demonstration (Demonstration) that demonstrates that the ~~actual~~ emissions of mercury from the EGU and other EGUs at the source and other EGUs at other sources covered by the Demonstration are less than the allowable emissions of mercury from all EGUs covered by the Demonstration on a rolling 12-month basis.

7. *The Agency proposes amending Section 225.233 in several places. First, the Agency proposes amending subsection 225.233(c)(6) to clarify the ability to use an excepted monitoring system and clarify that the sunset date of June 30, 2012, applies. This was inadvertently left out of the proposal. Second, in response to a request on pages 88-89 of the Transcript of the December 17, 2008, hearing, the Agency proposes amending subsection 225.233(d)(3) to clarify that EGUs in the MPS may utilize the averaging provisions set forth in Section 225.232 until December 31, 2013. The Agency also proposes amending subsection 225.233(d)(4) to provide the proper citation to emission testing in Section 225.239. Finally, the Agency proposes amending subsection 225.233(f)(4) consistent with the terms and conditions agreed to by the affected sources in their multi-pollutant reduction agreements with the Agency regarding the treatment of NOx and SO2 allowances. This revision is necessary due to the uncertainty surrounding the future of the federal CAIR as adopted by Illinois in Sections 225.310, 225.410, or 225.510. The CAIR was reinstated on December 23, 2008 and remanded back to USEPA with instructions to fix the rule, however, no deadline was imposed upon USEPA under which to accomplish this task. It is envisioned that either a new or modified version of CAIR will be forthcoming from USEPA.*

Section 225.233(c)(6) - Multi-Pollutant Standards (MPS)

6) Until June 30, 2012, as ~~As~~ an alternative to the CEMS or excepted monitoring system (sorbent trap system) monitoring, recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).

***

d) Emission Standards for Mercury.

1) For each EGU in an MPS Group that is not addressed by subsection (c)(1)(B) of this Section, beginning January 1, 2015 (or such earlier date when the owner or operator of the EGU notifies the Agency that it will comply with these standards) and

continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

2) For each EGU in an MPS Group that has been addressed under subsection (c)(1)(B) of this Section, beginning on the date when the owner or operator of the EGU notifies the Agency that it will comply with these standards and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

3) Compliance with the mercury emission standard or reduction requirement of this subsection (d) must be calculated in accordance with Section 225.230(a) or (d), or Section 225.232 until December 31, 2013.

4) Until June 30, 2012, as an alternative to demonstrating compliance with the emissions standards in this subsection (d), the owner or operator of an EGU may elect to comply with the emissions testing requirements in Section 225.239(a)(4), (b), (c), (d), (e), (f)~~(1) and (2)~~, (g), (h)~~(2)~~, (i)~~(3) and (4)~~, and (j)~~(1)~~ of this Subpart.

e) Emission Standards for NO_x and SO_2.

1) NO_x Emission Standards.

A) Beginning in calendar year 2012 and continuing in each calendar thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NOx annual emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 52 percent of the Base Annual Rate of NO_x emissions, whichever is more stringent.

B) Beginning in the 2012 ozone season and continuing in each ozone season thereafter, for the EGUs in each MPS Group,

the owner and operator of the EGUs must comply with an overall NO_x seasonal emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 80 percent of the Base Seasonal Rate of NO_x emissions, whichever is more stringent.

2) SO_2 Emission Standards.

A) Beginning in calendar year 2013 and continuing in calendar year 2014, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall SO_2 annual emission rate of 0.33 lbs/million Btu or a rate equivalent to 44 percent of the Base Rate of SO_2 emissions, whichever is more stringent.

B) Beginning in calendar year 2015 and continuing in each calendar year thereafter, for the EGUs in each MPS Grouping, the owner and operator of the EGUs must comply with an overall annual emission rate for SO_2 of 0.25 lbs/million Btu or a rate equivalent to 35 percent of the Base Rate of SO_2 emissions, whichever is more stringent.

3) Compliance with the NO_x and SO_2 emission standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of EGUs must complete the demonstration of compliance before March 1 of the following year for annual standards and before November 1 for seasonal standards, by which date a compliance report must be submitted to the Agency.

f) Requirements for NO_x and SO_2 Allowances.

1) The owner or operator of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person NO_x allowances allocated to the EGUs in the MPS Group for vintage years 2012 and beyond that would otherwise be available for sale, trade, or exchange as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance must be surrendered to the Agency on an annual basis, beginning in calendar year 2013. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.

2) The owners or operators of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person SO_2 allowances allocated to the EGUs in the MPS Group

for vintage years 2013 and beyond that would otherwise be available for sale or trade as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance, or otherwise surrendered pursuant to a consent decree to which the State of Illinois is a party, must be surrendered to the Agency on an annual basis, beginning in calendar year 2014. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.

3) The provisions of this subsection (f) do not restrict or inhibit the sale or trading of allowances that become available from one or more EGUs in a MPS Group as a result of holding allowances that represent over-compliance with the NO_x or SO_2 standard in subsection (e) of this Section, once such a standard becomes effective, whether such over-compliance results from control equipment, fuel changes, changes in the method of operation, unit shut downs, or other reasons.

4) For purposes of this subsection (f), NO_x and SO_2 allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510,~~Subpart W of Section 217 (NO_x Trading Program for Electrical Generating Units),~~ 40 CFR 72, or Subparts AA and AAAA ~~through I~~ of 40 CFR 96, or any future federal NO_x or SO_2 emissions trading programs that modify or replace these programs.~~include Illinois sources.~~ This Section does not prohibit the owner or operator of EGUs in an MPS Group from purchasing or otherwise obtaining allowances from other sources as allowed by law for purposes of complying with federal or state requirements, except as specifically set forth in this Section.

5) Before March 1, 2010, and continuing each year thereafter, the owner or operator of EGUs in an MPS Group must submit a report to the Agency that demonstrates compliance with the requirements of this subsection (f) for the previous calendar year, and which includes identification of any allowances that have been surrendered to the USEPA or to the Agency and any allowances that were sold, gifted, used, exchanged, or traded because they became available due to over-compliance. All allowances that are required to be surrendered must be surrendered by August 31, unless USEPA has not yet deducted the allowances from the previous year. A final report must be submitted to the Agency by August 31 of each year, verifying that the actions described in the initial report have taken place or, if such actions have not taken place, an explanation of all changes that have occurred and the reasons for such changes. If USEPA has not deducted the

allowances from the previous year by August 31, the final report will~~must~~ be due, and all allowances required to be surrendered must be surrendered, within 30 days after such deduction occurs.

g) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), until an EGU has complied with the applicable emission standards of subsections (d) and (e) of this Section for 12 months, the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO_x, or SO_2.

8. In response to a request at the December 17, 2008, hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending Section 225.234(a)(4) to include a reference to excepted monitoring systems. Also, the Agency proposes amending subsection (b)(3)(B) to remove an extra "the" that was inadvertently left in the proposal.

Section 225.234(a)(4)

4) Until June 30, 2012, as an alternative to the CEMS monitoring (or an excepted monitoring system), recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).

Section 225.234(b)(3)(B)

B) For the owner or operator of only a single existing source with EGUs (i.e., City, Water, Light & Power, City of Springfield, ID 167120AAO; Kincaid Generating Station, ID 021814AAB; and Southern Illinois Power Cooperative/Marion Generating Station, ID 199856AAC), 25 percent of the total rated capacity, in MW, of ~~the~~ all the EGUs at the existing sources, other than any EGUs operating pursuant to Section 225.235.

9. In response to a request at the December 17, 2008, hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending Section 225.237(b) to include a reference to excepted monitoring systems.

Section 225.237(b)

b) The initial 12-month rolling period for which compliance with the emission standards of subsection (a)(1) of this Section must be demonstrated for a new EGU will commence on the date that the initial performance testing commences under 40 CFR 60.8. The CEMS (or excepted monitoring system) monitoring required by this Subpart B for mercury emissions from the EGU must be certified prior to this date. Thereafter, compliance must be demonstrated on a rolling 12-month basis based on calendar months.

10. In response to a request at the December 17, 2008, hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending Section 225.238(a)(4) to include a reference to excepted monitoring systems.

Section 225.238(a)(4)

4) Until June 30, 2012, as an alternative to the CEMS (or excepted monitoring system) monitoring, recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).

11. The Agency proposes amending Section 225.239 in several places. First, in response to a request at the December 17, 2008, hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending Section 225.239 to include references to excepted monitoring systems. Next, in response to a request for clarification at hearing, the Agency proposes amending subsection (a)(4) to specify that such subsection applies to EGUs in the MPS and CPS. Next, subsection 225.239(d)(2) is being amended to specify that EGUs in the MPS and CPS that opt into either the 0.0080 lb mercury/GWh gross electric output emission limit or 90% control efficiency requirement early are excepted from performing emissions testing on a semi-annual calendar basis, and instead must perform such testing on a quarterly basis. This amendment corrects an error in the Agency's original proposal regarding the frequency of emissions testing for MPS/CPS sources that opt into an emissions standard early.

The Agency further proposes amending Section 225.239(e)(3) to clarify that EGUs in the MPS or CPS complying with the 90% control efficiency requirement and electing to demonstrate compliance pursuant to the emissions testing requirements in Section 225.239 are included in the group that must perform coal sampling according to the schedule set forth in subsection (e)(3).

In addition, the Agency proposes amending Section 225.239(f)(4) to specify that EGUs in the MPS or CPS that opt into either the 0.0080 lb/GWh emission limit or the 90% control efficiency requirement early and that elect to demonstrate compliance pursuant to the emissions testing requirements in Section 225.239 must submit a Continuous Parameter Monitoring Plan. Similarly, the Agency proposes amending Section 225.239(h)(2) to specify that such EGUs must submit an updated Continuous Parameter Monitoring Plan following a significant change.

In response to a request on pages 146-147 of the Transcript of the December 17, 2008, hearing that the Agency clarify what is meant by a "significant change," the Agency proposes amending Section 225.239(h)(2) to specify that any "change that would render the most recent test no longer representative of current operations according to the parameters listed in the Continuous Parameter Monitoring Plan," is a significant change. Also in response to a request at hearing, the Agency proposes amending subsection (h)(2) to give sources additional time to perform an emissions test following a significant change.

Section 225.239(i)(2)(A) is being amended to require use of parts per million rather than pounds per trillion BTUs when recording the daily mercury content of coal used.

Finally, in response to a request at hearing, the Agency proposes amending Section 225.239(i)(4) to require that records be retained for five years.

Section 225.239 Periodic Emissions Testing Alternative Requirements

a) General.

1) As an alternative to demonstrating compliance with the emissions standards of Sections 225.230(a) or 225.237(a), the owner or operator of an EGU may elect to demonstrate compliance pursuant to the emission standards in subsection (b) of this Section and the use of quarterly emissions testing as an alternative to the use of CEMS or an excepted monitoring system;

2) The owner or operator of an EGU that elects to demonstrate compliance pursuant to this Section must comply with the testing, recordkeeping, and reporting requirements of this Section in addition to other applicable recordkeeping and reporting requirements in this Subpart;

3) The alternative method of compliance provided under this subsection may only be used until June 30, 2012, after which a CEMS (or an excepted monitoring system) certified in accordance with Section 225.250 of this Subpart B must be used.

4) If an owner or operator of an EGU demonstrating compliance pursuant to Section 225.230, 225.233(d)(1) or (2), ~~or~~ 225.237, or 225.294(e)(1)(A) discontinues use of CEMS (or an excepted monitoring system) before collecting a full 12 months of ~~CEMS~~ data and elects to demonstrate compliance pursuant to this Section, the data collected prior to that point must be averaged to determine compliance for such period. In such case, for purposes of calculating an emission standard or mercury control efficiency using the equations in Section 225.230(a) or (b), the "12" in the equations will be replaced by a variable equal to the number of full and partial months for which the owner or operator collected data from a CEMS ~~data.~~ or an excepted monitoring system.

b) Emission Limits.

1) Existing Units: Beginning July 1, 2009, the owner or operator of a source with one or more EGUs subject to this Subpart B that commenced commercial operation on or before June 30, 2009, must comply with one of the following standards for each EGU, as determined through quarterly emissions testing according to subsections (c), (d), (e), and (f) of this Section:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

2) New Units: Beginning within the first 2,160 hours after the commencement of commercial operations, the owner or operator of a source with one or more EGUs subject to this Subpart B that commenced commercial operation after June 30, 2009, must comply with one of the following standards for each EGU, as determined through quarterly emissions testing in accordance with subsections (c), (d), (e), and (f) of this Section:

A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or

B) A minimum 90-percent reduction of input mercury.

c) Initial Emissions Testing Requirements for New Units. The owner or operator of an EGU that commenced commercial operation after June 30, 2009, and that is complying by means of this Section must conduct an initial performance test in accordance with the requirements of subsections

(d) and (e) of this Section within the first 2,160 hours after the commencement of commercial operations.

d) Emissions Testing Requirements

1) Subsequent to the initial performance test, emissions tests must be performed on a quarterly calendar basis in accordance with the requirements of subsections (d), (e), and (f) of this Section;

2) Notwithstanding the provisions in subparagraph (1) of this subsection, owners or operators of EGUs demonstrating compliance under Section 225.233 or Sections 225.291 through 225.299, and which have not opted in to the emission limit provisions of Section 225.233(d)(1) or (d)(2), or Section 225.294(c) pursuant to Section 225.294(e)(1)(B), must perform emissions testing on a semi-annual calendar basis, where the periods consist of the months of January through June and July through December, in accordance with the requirements of subsections (d), (e), and (f)(1) and (2) of this Section;

3) Emissions tests which demonstrate compliance with this Subpart must be performed at least 45 days apart. However, if an emissions test fails to demonstrate compliance with this Subpart or the emissions test is being performed subsequent to a significant change in the operations of an EGU under subsection (h)(2) of this Section, the owner or operator of an EGU may perform additional emissions test(s) using the same test protocol previously submitted in the same period, with less than 45 days in between emissions tests;

4) A minimum of three and a maximum of nine emissions test runs, lasting at least one hour each, shall be conducted and averaged to determine compliance. All test runs performed will be reported.

5) If the EGU shares a common stack with one or more other EGUs, the owner or operator of the EGU will conduct emissions testing in the duct to the common stack from each unit, unless the owner or operator of the EGU considers the combined emissions measured at the common stack as the mass emissions of mercury for the EGUs for recordkeeping and compliance purposes.

6) If an owner or operator of an EGU demonstrating compliance pursuant to this Section later elects to demonstrate compliance pursuant to the CEMS monitoring provisions (or excepted monitoring system provisions) in Section 225.240 of this Subpart,

the owner or operator must comply with the emissions monitoring deadlines in Section 225.240(b)(4) of this Subpart.

e) Emissions Testing Procedures

1) The owner or operator must conduct a compliance test in accordance with Method 29, 30A, or 30B of 40 CFR 60, Appendix A, as incorporated by reference in Section 225.140;

2) Mercury emissions or control efficiency must be measured while the affected unit is operating at or above 90% of peak load;

3) For units complying with the control efficiency standard of subsection (b)(1)(B) or (b)(2)(B) of this Section, Section 225.233(d)(1)(B) or (d)(2)(B) and electing to demonstrate compliance pursuant to Section 225.233(d)(4), or Section 225.294(c)(2) pursuant to Section 225.294(e)(1)(B), the owner or operator must perform coal sampling as follows:

A) in accordance with Section 225.265 of this Subpart at least once during each day of testing; and

B) in accordance with Section 225.265 of this Subpart, once each month in those months when emissions testing is not performed unless the boiler did not operate or combust coal at all during that month;

4) For units complying with the output-based emission standard of subsection (b)(1)(A) or (b)(2)(A) of this Section, the owner or operator must monitor gross electrical output for the duration of the testing.

5) The owner or operator of an EGU may use an alternative emissions testing method if such alternative is submitted to the Agency in writing and approved in writing by the Manager of the Bureau of Air's Compliance Section.

f) Notification Requirements

1) The owner or operator of an EGU must submit a testing protocol as described in USEPA's Emission Measurement Center's Guideline Document #42 to the Agency at least 45 days prior to a scheduled emissions test, except as provided in Section 225.239(h)(2) and (h)(3). Upon written request directed to the Manager of the Bureau of Air's Compliance Section, the Agency may, in its sole discretion, waive the 45-day requirement. Such waiver shall only

be effective if it is provided in writing and signed by the Manager of the Bureau of Air's Compliance Section, or his or her designee;

2) Notification of a scheduled emissions test must be submitted to the Agency in writing, directed to the Manager of the Bureau of Air's Compliance Section, at least 30 days prior to the expected date of the emissions test. Upon written request directed to the Manager of the Bureau of Air's Compliance Section, the Agency may, in its sole discretion, -waive the 30-day notification requirement. Such waiver shall only be effective if it is provided in writing and signed by the Manager of the Bureau of Air's Compliance Section, or his or her designee. Notification of the actual date and expected time of testing must be submitted in writing, directed to the Manager of the Bureau of Air's Compliance Section, at least five working days prior to the actual date of the test;

3) For an EGU that has elected to demonstrate compliance by use of the emission standards of subsection (b) of this Section, if an emissions test performed under the requirements of this Section fails to demonstrate compliance with the limits of subsection (b) of this Section, the owner or operator of an EGU may perform a new emissions test using the same test protocol previously submitted in the same period, by notifying the Manager of the Bureau of Air's Compliance Section or his or her designee of the actual date and expected time of testing at least five working days prior to the actual date of the test. The Agency may, in its sole discretion, waive this five-day notification requirement. Such waiver shall only be effective if it is provided in writing and signed by the Manager of the Bureau of Air's Compliance Section, or his or her designee;

4) In addition to the testing protocol required by subsection (f)(1) of this Section, the owner or operator of an EGU that has elected to demonstrate compliance by use of the emission standards of subsection (b) of this Section, that opts into Section 225.233(d)(1) or (d)(2) early and elects to demonstrate compliance pursuant to Section 225.233(d)(4), or that opts into Section 225.294(c) pursuant to Section 225.294(e)(1)(B), must submit a Continuous Parameter Monitoring Plan to the Agency at least 45 days prior to a scheduled emissions test. Upon written request directed to the Manager of the Bureau of Air's Compliance Section, the Agency may, in its sole discretion, waive the 45-day requirement. Such waiver shall only be effective if it is provided in writing and signed by the Manager of the Bureau of Air's Compliance Section, or his or her designee. The Continuous Parameter Monitoring Plan must detail how the EGU will continue to operate within the parameters

enumerated in the testing protocol and how those parameters will ensure compliance with the applicable mercury limit. For example, the Continuous Parameter Monitoring Plan must include coal sampling as described in Section 225.239(e)(3) of this Subpart and must ensure that an EGU that performs an emissions test using a blend of coals continues to operate using that same blend of coal. If the Agency disapproves the Continuous Parameter Monitoring Plan, the owner or operator of the EGU has 30 days from the date of receipt of the disapproval to submit more detailed information in accordance with the Agency's request.

g) Compliance Determination

1) Each quarterly emissions test shall determine compliance with this Subpart for that quarter, where the quarterly periods consist of the months of January through March, April through June, July through September, and October through December;

2) If emissions testing conducted pursuant to this Section fails to demonstrate compliance, the owner or operator of the EGU will be deemed to have been out of compliance with this Subpart beginning on the day after the most recent emissions test that demonstrated compliance or the last day of certified CEMS data (or certified data from an excepted monitoring system) demonstrating compliance on a rolling 12-month basis, and the EGU will remain out of compliance until a subsequent emissions test successfully demonstrates compliance with the limits of this Section.

h) Operation Requirements

1) The owner or operator of an EGU that has elected to demonstrate compliance by use of the emission standards of subsection (b) of this Section must continue to operate the EGU commensurate with the Continuous Parameter Monitoring Plan until another Continuous Parameter Monitoring Plan is developed and submitted to the Agency in conjunction with the next compliance demonstration, in accordance with subsection (f)(4) of this Section.

2) If the owner or operator makes a significant change to the operations of an EGU subject to this Section, such as changing from bituminous to subbituminous coal or any other change that would render the most recent test no longer representative of current operations according to the parameters listed in the Continuous Parameter Monitoring Plan, the owner or operator must submit a testing protocol to the Agency ~~and perform an~~

~~emissions test~~ within seven operating days of the significant change and perform an emissions test within 30 days of the change if the change takes place more than 30 days before the end of the current calendar quarter, or within 30 days of the beginning of the new quarter if the change takes place less than 30 days before the end of the current calendar quarter. In addition, the owner or operator of an EGU that has elected to demonstrate compliance by use of the emission standards of subsection (b) of this Section, Section 225.233(d)(1) or (d)(2), or Section 225.294(c) pursuant to Section 225.294(e)(1)(B) must submit an ~~a~~ updated Continuous Parameter Monitoring Plan within seven operating days of the significant change.

3) If a blend of bituminous and subbituminous coal is fired in the EGU, the owner or operator of the EGU must ensure that the EGU continues to operate using the same blend that was used during the most recent successful emissions test. If the blend of coal changes, the owner or operator of the EGU must re-test in accordance with subsections (d), (e), (f), and (g) of this Section within 30 days of the change in coal blend, notwithstanding the requirement of subsection (d)(3) of this Section that there must be 45 days between emissions tests.

i) Recordkeeping

1) The owner or operator of an EGU and its designated representative must comply with all applicable recordkeeping and reporting requirements in this Section.

2) Continuous Parameter Monitoring. The owner or operator of an EGU must maintain records to substantiate that the EGU is operating in compliance with the parameters listed in the Continuous Parameter Monitoring Plan, detailing the parameters that impact mercury reduction and including the following records related to the emissions of mercury:

A) For an EGU for which the owner or operator is complying with this Subpart B pursuant to Section 225.239(b)(1)(B) or 225.239(b)(2)(B), records of the daily mercury content of coal used (parts per million~~lbs/trillion Btu~~) and the daily and quarterly input mercury (lbs).

B) For an EGU for which the owner or operator of an EGU complying with this Subpart B pursuant to Section 225.239(b)(1)(A) or 225.239(b)(2)(A), records of the daily

and quarterly gross electrical output (MWh) on an hourly basis.:

3) The owner or operator of an EGU using activated carbon injection must also comply with the following requirements:

A) Maintain records of the usage of sorbent, the exhaust gas flow rate from the EGU, and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on a weekly average;

B) If a blend of bituminous and subbituminous coal is fired in the EGU, keep records of the amount of each type of coal burned and the required injection rate for injection of activated carbon, on a weekly basis.

4) The owner or operator of an EGU must retain all records required by this Section at the source for a period of five years from the date the document is created unless otherwise provided in the CAAPP permit issued for the source and must make a copy of any record available to the Agency promptly upon request. This period may be extended in writing by the Agency, for cause, at any time prior to the end of five years.

5) The owner or operator of an EGU demonstrating compliance pursuant to this Section must monitor and report the heat input rate at the unit level.

6) The owner or operator of an EGU demonstrating compliance pursuant to this Section must perform and report coal sampling in accordance with subsection 225.239(e)(3).

j) Reporting Requirements

1) An owner or operator of an EGU shall submit to the Agency a Final Source Test Report for each periodic emissions test within 45 days after the test is completed. The Final Source Test Report will be directed to the Manager of the Bureau of Air's Compliance Section, or his or her designee, and include at a minimum:

A) A summary of results;

B) A description of test method(s), including a description of sampling points, sampling train, analysis equipment, and test schedule, and a detailed description of test conditions, including:

i) Process information, including but not limited to mode(s) of operation, process rate, and fuel or raw material consumption;

ii) Control equipment information (i.e., equipment condition and operating parameters during testing);

iii) A discussion of any preparatory actions taken (i.e., inspections, maintenance, and repair); and

iv) Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

2) The owner or operator of a source with one or more EGUs demonstrating compliance with Subpart B in accordance with this Section must submit to the Agency a Quarterly Certification of Compliance within 45 days following the end of each calendar quarter. Quarterly certifications of compliance must certify whether compliance existed for each EGU for the calendar quarter covered by the certification. If the EGU failed to comply during the quarter covered by the certification, the owner or operator must provide the reasons the EGU or EGUs failed to comply and a full description of the noncompliance (i.e., tested emissions rate, coal sample data, etc.). In addition, for each EGU, the owner or operator must provide the following appropriate data to the Agency as set forth in this Section.

A) A list of all emissions tests performed within the calendar quarter covered by the Certification and submitted to the Agency for each EGU, including the dates on which such tests were performed.

B) Any deviations or exceptions each month and discussion of the reasons for such deviations or exceptions.

C) All Quarterly Certifications of Compliance required to be submitted must include the following certification by a responsible official:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person

or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3) Deviation Reports. For each EGU, the owner or operator must promptly notify the Agency of deviations from any of the requirements of this Subpart B. At a minimum, these notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken.

12. *The Agency proposes deleting subsection (c)(2) of Section 225.240, as the subsection is redundant. The Agency also proposes deleting the title of subsection (c), as it does not accurately reflect the content of the subsection. Finally, in response to a request at the December 17, 2008, hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending Section 225.240 to include references to excepted monitoring systems.*

Section 225.240 General Monitoring and Reporting Requirements

The owner or operator of an EGU must comply with the monitoring, recordkeeping, and reporting requirements as provided in this Section, Sections 225.250 through 225.290 of this Subpart B, and Sections 1.14 through 1.18 of Appendix B to this Part. If the EGU utilizes a common stack with units that are not EGUs and the owner or operator of the EGU does not conduct emissions monitoring in the duct to the common stack from each EGU, the owner or operator of the EGU must conduct emissions monitoring in accordance with Section 1.16(b)(2) of Appendix B to this Part and this Section, including monitoring in the duct to the common stack from each unit that is not an EGU, unless the owner or operator of the EGU counts the combined emissions measured at the common stack as the mass emissions of mercury for the EGUs for recordkeeping and compliance purposes.

a) Requirements for installation, certification, and data accounting. The owner or operator of each EGU must:

1) Install all monitoring systems required pursuant to this Section and Sections 225.250 through 225.290 for monitoring mercury mass emissions (including all systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and

CO_2 or O_2 concentration, as applicable, in accordance with Sections 1.15 and 1.16 of Appendix B to this Part.

2) Successfully complete all certification tests required pursuant to Section 225.250 and meet all other requirements of this Section, Sections 225.250 through 225.290, and Sections 1.14 through 1.18 of Appendix B to this Part applicable to the monitoring systems required under subsection (a)(1) of this Section.

3) Record, report, and assure the quality of the data from the monitoring systems required under subsection (a)(1) of this Section.

4) If the owner or operator elects to use the low mass emissions excepted monitoring methodology for an EGU that emits no more than 464 ounces (29 pounds) of mercury per year pursuant to Section 1.15(b) of Appendix B to this Part, it must perform emissions testing in accordance with Section 1.15(c) of Appendix B to this Part to demonstrate that the EGU is eligible to use this excepted emissions monitoring methodology, as well as comply with all other applicable requirements of Section 1.15(b) through (f) of Appendix B to this Part. Also, the owner or operator must submit a copy of any information required to be submitted to the USEPA pursuant to these provisions to the Agency. The initial emissions testing to demonstrate eligibility of an EGU for the low mass emissions excepted methodology must be conducted by the applicable of the following dates:

A) If the EGU has commenced commercial operation before July 1, 2008, at least by July 1, 2009, or 45 days prior to relying on the low mass emissions excepted methodology, whichever date is later.

B) If the EGU has commenced commercial operation on or after July 1, 2008, at least 45 days prior to the applicable date specified pursuant to subsection (b)(2) of this Section or 45 days prior to relying on the low mass emissions excepted methodology, whichever date is later.

b) Emissions Monitoring Deadlines. The owner or operator must meet the emissions monitoring system certification and other emissions monitoring requirements of subsections (a)(1) and (a)(2) of this Section on or before the applicable of the following dates. The owner or operator must record, report, and quality-assure the data from the emissions monitoring systems required under subsection (a)(1) of this Section on and after the applicable of the following dates:

1) For the owner or operator of an EGU that commences commercial operation before July 1, 2008, by July 1, 2009.

2) For the owner or operator of an EGU that commences commercial operation on or after July 1, 2008, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the EGU commences commercial operation.

3) For the owner or operator of an EGU for which construction of a new stack or flue or installation of add-on mercury emission controls, a flue gas desulfurization system, a selective catalytic reduction system, a fabric filter, or a compact hybrid particulate collector system is completed after the applicable deadline pursuant to subsection (b)(1) or (b)(2) of this Section, by 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which emissions first exit to the atmosphere through the new stack or flue, add-on mercury emission controls, flue gas desulfurization system, selective catalytic reduction system, fabric filter, or compact hybrid particulate collector system.

4) For an owner or operator of an EGU that originally elected to demonstrate compliance pursuant to the emissions testing requirements in Section 225.239, by the first day of the calendar quarter following the last emissions test demonstrating compliance with Section 225.239.

c) ~~Reporting Data.~~

~~1) Except as provided in subsection (c)(2) of this Section,~~ The~~the~~ owner or operator of an EGU that does not meet the applicable emissions monitoring date set forth in subsection (b) of this Section for any emissions monitoring system required pursuant to subsection (a)(1) of this Section must begin periodic emissions testing in accordance with Section 225.239.

~~2) The owner or operator of an EGU that does not meet the applicable emissions monitoring date set forth in subsection (b)(3) of this Section for any emissions monitoring system required pursuant to subsection (a)(1) of this Section must begin periodic emissions testing in accordance with Section 225.239.~~

d) Prohibitions.

1) No owner or operator of an EGU may use any alternative emissions monitoring system, alternative reference method for

measuring emissions, or other alternative to the emissions monitoring and measurement requirements of this Section and Sections 225.250 through 225.290, unless such alternative is submitted to the Agency in writing and approved in writing by the Manager of the Bureau of Air's Compliance Section, or his or her designee.

2) No owner or operator of an EGU may operate its EGU so as to discharge, or allow to be discharged, mercury emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290, and Sections 1.14 through 1.18 of Appendix B to this Part, unless demonstrating compliance pursuant to Section 225.239, as applicable.

3) No owner or operator of an EGU may disrupt the CEMS (or excepted monitoring system), any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording mercury mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290, and Sections 1.14 through 1.18 of Appendix B to this Part.

4) No owner or operator of an EGU may retire or permanently discontinue use of the CEMS (or excepted monitoring system) or any component thereof, or any other approved monitoring system pursuant to this Subpart B, except under any one of the following circumstances:

A) The owner or operator is monitoring emissions from the EGU with another certified monitoring system that has been approved, in accordance with the applicable provisions of this Section, Sections 225.250 through 225.290 of this Subpart B, and Sections 1.14 through 1.18 of Appendix B to this Part, by the Agency for use at that EGU and that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

B) The owner or operator or designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with Section 225.250(a)(3)(A).

C) The owner or operator is demonstrating compliance pursuant to the applicable subsections of Section 225.239.

e) Long-term Cold Storage.

The owner or operator of an EGU that is in long-term cold storage is subject to the provisions of 40 CFR 75.4 and 40 CFR 75.64, incorporated by reference in Section 225.140, relating to monitoring, recordkeeping, and reporting for units in long-term cold storage.

13. In response to a request at the December 17, 2008, hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending Section 225.250 to include references to excepted monitoring systems.

Section 225.250 Initial Certification and Recertification Procedures for Emissions Monitoring

a) The owner or operator of an EGU must comply with the following initial certification and recertification procedures for a CEMS (~~i.e., a CEMS~~ or an excepted monitoring system) ~~(sorbent trap monitoring system)~~ pursuant to Section 1.3 of Appendix B to this Part) required by Section 225.240(a)(1). The owner or operator of an EGU that qualifies for, and for which the owner or operator elects to use, the low-mass-emissions excepted methodology pursuant to Section 1.15(b) of Appendix B to this Part, must comply with the procedures set forth in subsection (c) of this Section.

1) Requirements for Initial Certification. The owner or operator of an EGU must ensure that, for each CEMS (or excepted monitoring system) required by Section 225.240(a)(1) (including the automated data acquisition and handling system), the owner or operator successfully completes all of the initial certification testing required pursuant to Section 1.4 of Appendix B to this Part, by the applicable deadline in Section 225.240(b). In addition, whenever the owner or operator of an EGU installs a monitoring system to meet the requirements of this Subpart B in a location where no such monitoring system was previously installed, the owner or operator must successfully complete the initial certification requirements of Section 1.4 of Appendix B to this Part.

2) Requirements for Recertification. Whenever the owner or operator of an EGU makes a replacement, modification, or change in any

certified CEMS, or an excepted monitoring system ~~(sorbent trap monitoring system)~~ pursuant to Section 1.3 of Appendix B to this Part, and required by Section 225.240(a)(1), that may significantly affect the ability of the system to accurately measure or record mercury mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of Section 1.5 of Appendix B to this Part or Exhibit B to Appendix B to this Part, the owner or operator of an EGU must recertify the monitoring system in accordance with Section 1.4(b) of Appendix B to this Part. Furthermore, whenever the owner or operator of an EGU makes a replacement, modification, or change to the flue gas handling system or the EGU's operation that may significantly change the stack flow or concentration profile, the owner or operator must recertify each CEMS, and each excepted monitoring system ~~(sorbent trap monitoring system)~~ pursuant to Section 1.3 to Appendix B to this Part, whose accuracy is potentially affected by the change, all in accordance with Section 1.4(b) to Appendix B to this Part. Examples of changes to a CEMS that require recertification include, but are not limited to, replacement of the analyzer, complete replacement of an existing CEMS, or change in location or orientation of the sampling probe or site.

3) Approval Process for Initial Certification and Recertification. Subsections (a)(3)(A) through (a)(3)(D) of this Section apply to both initial certification and recertification of a CEMS <u>(or an excepted monitoring system)</u> required by Section 225.240(a)(1). For recertifications, the words "certification" and "initial certification" are to be read as the word "recertification", the word "certified" is to be read as the word "recertified", and the procedures set forth in Section 1.4(b)(5) of Appendix B to this Part are to be followed in lieu of the procedures set forth in subsection (a)(3)(E) of this Section.

A) Notification of Certification. The owner or operator must submit written notice of the dates of certification testing to the Agency, directed to the Manager of the Bureau of Air's Compliance Section, in accordance with Section 225.270.

B) Certification Application. The owner or operator must submit to the Agency a certification application for each monitoring system. A complete certification application must include the information specified in 40 CFR 75.63, incorporated by reference in Section 225.140.

C) Provisional Certification Date. The provisional certification date for a monitoring system must be

determined in accordance with Section 1.4(a)(3) of Appendix B to this Part. A provisionally certified monitoring system may be used pursuant to this Subpart B for a period not to exceed 120 days after receipt by the Agency of the complete certification application for the monitoring system pursuant to subsection (a)(3)(B) of this Section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of Appendix B to this Part, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Agency does not invalidate the provisional certification by issuing a notice of disapproval within 120 days after the date of receipt by the Agency of the complete certification application.

D) Certification Application Approval Process. The Agency must issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days after receipt of the complete certification application required by subsection (a)(3)(B) of this Section. In the event the Agency does not issue a written notice of approval or disapproval within the 120-day period, each monitoring system that meets the applicable performance requirements of Appendix B to this Part -and which is included in the certification application will be deemed certified for use pursuant to this Subpart B.

i) Approval Notice. If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of Appendix B to this Part, then the Agency must issue a written notice of approval of the certification application within 120 days after receipt.

ii) Incomplete Application Notice. If the certification application is not complete, then the Agency must issue a written notice of incompleteness that sets a reasonable date by which the owner or operator must submit the additional information required to complete the certification application. If the owner or operator does not comply with the notice of incompleteness by the specified date, the Agency may issue a notice of disapproval pursuant to subsection (a)(3)(D)(iii) of this Section. The 120-

day review period will not begin before receipt of a complete certification application.

iii) Disapproval Notice. If the certification application shows that any monitoring system does not meet the performance requirements of Appendix B to this Part, or if the certification application is incomplete and the requirement for disapproval pursuant to subsection (a)(3)(D)(ii) of this Section is met, the Agency must issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated, and the data measured and recorded by each uncertified monitoring system will not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined pursuant to Section 1.4(a)(3) of Appendix B to this Part). The owner or operator must follow the procedures for loss of certification set forth in subsection (a)(3)(E) of this Section for each monitoring system that is disapproved for initial certification.

iv) Audit Decertification. The Agency may issue a notice of disapproval of the certification status of a monitor in accordance with Section 225.260(b).

E) Procedures for Loss of Certification. If the Agency issues a notice of disapproval of a certification application pursuant to subsection (a)(3)(D)(iii) of this Section or a notice of disapproval of certification status pursuant to subsection (a)(3)(D)(iv) of this Section, the owner or operator must fulfill the following requirements:

i) The owner or operator must submit a notification of certification retest dates and a new certification application in accordance with subsections (a)(3)(A) and (B) of this Section.

ii) The owner or operator must repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Agency's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

b) Exemption.

1) If an emissions monitoring system has been previously certified in accordance with Appendix B to this Part and the applicable quality assurance and quality control requirements of Section 1.5 and Exhibit B to Appendix B to this Part ~~-~~are fully met, the monitoring system will be exempt from the initial certification requirements of this Section.

2) The recertification provisions of this Section apply to an emissions monitoring system required by Section 225.240(a)(1) exempt from initial certification requirements pursuant to subsection (a)(1) of this Section.

c) Initial certification and recertification procedures for EGUs using the mercury low mass emissions excepted methodology pursuant to Section 1.15(b) of Appendix B to this Part. The owner or operator that has elected to use the mercury-low-mass-emissions-excepted methodology for a qualified EGU pursuant to Section 1.15(b) to Appendix B to this Part must meet the applicable certification and recertification requirements in Section 1.15(c) through (f) to Appendix B to this Part.

d) Certification Applications. The owner or operator of an EGU must submit an application to the Agency within 45 days after completing all initial certification or recertification tests required pursuant to this Section, including the information required pursuant to 40 CFR 75.63.

14. *In response to a request on page 160, line 3 of the Transcript of the December 17, 2008, hearing, the Agency proposes amending Section 225.260 to clarify that MPS and CPS sources are subject to the 75% data availability uptime requirement. The Agency also proposes amending subsection (c) to change "must" to "will."*

Section 225.260 Out of Control Periods and Data Availability for Emission Monitors

a) Out of control periods must be determined in accordance with Section 1.7 of Appendix B.

b) Monitor data availability must be determined on a calendar quarter basis in accordance with Section 1.8 of Appendix B following initial certification of the required CO_2, O_2, flow monitor, or mercury concentration or moisture monitoring system(s) at a particular unit or stack location. Compliance with the percent reduction standard in Section 225.230(a)(1)(B), 225.233(d)(1)(B) or (d)(2)(B), ~~or~~ 225.237(a)(1)(B), or 225.294(c)(2), or the emissions concentration standard in Section

225.230(a)(1)(A), 225.233(d)(1)(A) or (d)(2)(A), ~~or~~ 225.237(a)(1)(A), or 225.294(c)(1), can only be demonstrated if the monitor data availability is equal to or greater than 75 percent; that is, quality assured data must be recorded by a certified primary monitor, a certified redundant or non-redundant backup monitor, or reference method for that unit at least 75 percent of the time the unit is in operation.

c) Audit Decertification. Whenever both an audit of an emissions monitoring system and a review of the initial certification or recertification application reveal that any emissions monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Section 225.250 or the applicable provisions of Appendix B to this Part, both at the time of the initial certification or recertification application submission and at the time of the audit, the Agency must issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this subsection (c), an audit must be either a field audit or an audit of any information submitted to the Agency. By issuing the notice of disapproval, the Agency revokes prospectively the certification status of the emissions monitoring system. The data measured and recorded by the monitoring system will~~must~~ not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator must follow the applicable initial certification or recertification procedures in Section 225.250 for each disapproved monitoring system.

15. *The Agency proposes several changes to Section 225.265. First, in subsection (a), the Agency's proposed revisions clarify that the coal sampling requirements in this Section apply to EGUs in the MPS and CPS, except EGUs subject to the 0.0080 lb/GWh emission limit (this exception includes EGUs that opt into the emission limit early). Second, the Agency proposes dividing subsection (a)(1) into subsections (a)(1)(A) through (a)(1)(C) for clarity purposes. The proposed revisions to subsection (a)(1)(A) specify that, of the EGUs that need to perform coal sampling, those in the MPS or CPS, except EGUs complying with the 90% control efficiency standard or utilizing emissions testing to demonstrate compliance, must perform coal sampling at least once each month. The proposed revisions to subsection (a)(1)(B) clarify that EGUs in the MPS and CPS complying with the 90% control efficiency requirement, including EGUs that opt into such limit early, and that utilize emissions testing to demonstrate compliance must perform coal sampling according to the schedule set forth in Section 225.239. The proposed revisions to subsection (a)(1)(C) clarify that EGUs in the MPS and CPS subject to the 90% control efficiency standard, including EGUs that opt into such limit early, and that utilize CEMS to demonstrate compliance*

must perform coal sampling daily. Therefore, as revised, the coal sampling requirements set forth in subsection (a)(1) can be summarized as follows:

(a)(1)(A) EGUs in the MPS or CPS that comply pursuant to the sorbent injection rate requirement and utilize CEMS must coal sample monthly;

(a)(1)(B) EGUs electing to demonstrate compliance pursuant to the periodic emissions testing alternative in Section 225.239, including EGUs in the MPS/CPS that opt into the 90% control efficiency requirement and utilize periodic emissions testing, must coal sample according to the schedule set forth in Section 225.239;

(a)(1)(C) All other EGUs subject to Section 225.265, including EGUs in the MPS/CPS complying with the 90% control efficiency requirement and utilizing CEMS to demonstrate compliance, must coal sample daily.

Finally, in response to a request by a stakeholder, the Agency proposes amending subsection (a)(2) to include ASTM D6722-01 as an approved method for measuring mercury content of coal.

Section 225.265 Coal Analysis for Input Mercury Levels

a) The owner or operator of an EGU complying with this Subpart B by means of Section 225.230(a)(1)(B)~~;~~, using input mercury levels (I_i) and complying by means of Section 225.230(b) or (d) or Section 225.232~~;~~, electing to comply with the emissions testing, monitoring, and recordkeeping requirements under Section 225.239~~;~~ ~~or~~ demonstrating compliance under Section 225.233, except an EGU in an MPS Group that elects to comply with the emission standard in Section 225.233(d)(1)(A) or (d)(2)(A); or demonstrating compliance under Sections 225.291 through 225.299, except an EGU in a CPS Group that elects to comply with the emission standard in Section 225.294(c)(1) or that opts into the emission standard in Section 225.294(c)(1) pursuant to Section 225.294(e)(1), must fulfill the following requirements:

1) Perform sampling of the coal combusted in the EGU for mercury content. The owner or operator of such EGU must collect a minimum of one 2-lb. grab sample from the belt feeders anywhere between the crusher house or breaker building and the boiler, according to the schedule below. The sample must be taken in a manner that provides a representative mercury content for the coal burned on that day. If multiple samples are tested, the owner or operator must average those tests to arrive at the final mercury

content for that time period. The owner or operator of the EGU must perform coal sampling as follows:

A) EGUs complying by means of Section 225.233, except an EGU in an MPS Group that elects to comply with the control efficiency standard in Section 225.233(d)(1)(B) or (d)(2)(B) or elects to comply with Section 225.233(d)(4), or Sections 225.291 through 225.299, except an EGU in a CPS Group that elects to comply with the control efficiency standard in Section 225.294(c)(2) or that opts into the emission standard in Section 225.294(c)(2) pursuant to Section 225.294(e)(1), ~~of this Subpart~~ must perform such coal sampling at least once per month unless the boiler did not operate or combust coal at all during that month;

B) EGUs complying by means of the emissions testing, monitoring, and recordkeeping requirements under Section 225.239 or Section 225.233(d)(4), or EGUs that opt into the emission standard in Section 225.294(c)(2) pursuant to Section 225.294(e)(1)(B), must perform such coal sampling according to the schedule provided in Section 225.239(e)(3) of this Subpart;

C) All~~all~~ other EGUs subject to this requirement, including EGUs in an MPS or CPS Group electing to comply with the control efficiency standard in Section 225.233(d)(1)(B) or (d)(2)(B), Section 225.294(c)(2), or Section 225.294(c)(2) pursuant to Section 225.294(e)(1)(A), must perform such coal sampling on a daily basis when the boiler is operating and combusting coal. ~~If multiple samples are tested, the owner or operator must average those tests to arrive at the final mercury content for that time period.~~

2) Analyze the grab coal sample for the following:

A) Determine the heat content using ASTM D5865-04 or an equivalent method approved in writing by the Agency.

B) Determine the moisture content using ASTM D3173-03 or an equivalent method approved in writing by the Agency.

C) Measure the mercury content using ASTM D6414-01, ASTM D3684-01, ASTM D6722-01, or an

equivalent method approved in writing by the Agency.

3) The owner or operator of multiple EGUs at the same source using the same crusher house or breaker building may take one sample per crusher house or breaker building, rather than one per EGU.

4) The owner or operator of an EGU must use the data analyzed pursuant to subsection (b) of this Section to determine the mercury content in terms of parts per million~~lbs/trillion Btu~~.

b) The owner or operator of an EGU that must conduct sampling and analysis of coal pursuant to subsection (a) of this Section must begin such activity by the following date:

1) If the EGU is in daily service, at least 30 days before the start of the month for which such activity will be required.

2) If the EGU is not in daily service, on the day that the EGU resumes operation.

16. *The Agency proposes several changes to Section 225.290. The Agency proposes amending subsection (a)(1)(A) to require use of parts per million rather than pounds per trillion BTUs when recording the mercury content of coal. In response to requests at the December 17, 2008, hearing and the fact that, as discussed at the hearing, USEPA will not be accepting electronic reports from sources, the Agency proposes deleting subsection (a)(6), as it references electronic reporting, and proposes amending the new subsection (a)(6) to specify that sources must only retain records for five years. Also in response to requests at hearing and USEPA's inability to accept electronic reports, the Agency is amending subsection (b) regarding the content of quarterly reports. The Agency is also attaching a draft form as Exhibit 1 to this Second Errata that sources can utilize to aid in the reporting of the information listed in subsection (b). The draft form was previously provided to affected sources and revised based upon comments received from such sources.*

The Agency proposes amending subsection (c)(2) to replace a reference to missing data with a reference to data that is unavailable or out of control, for clarity purposes. The Agency also proposes amending this subsection to replace two references to Appendix B with references to 40 CFR 75. The Agency mistakenly deleted these references to Part 75 in its original proposal. Finally, the Agency proposes amending subsection (d) to add several references to QAMO, resulting from a change to the monitoring calculation provisions (explained in more detail under Second Errata number 5).

Section 225.290 Recordkeeping and Reporting

a) General Provisions.

1) The owner or operator of an EGU and its designated representative must comply with all applicable recordkeeping and reporting requirements in this Section and with all applicable recordkeeping and reporting requirements of Section 1.18 to Appendix B to this Part.

2) The owner or operator of an EGU must maintain records for each month identifying the emission standard in Section 225.230(a) or 225.237(a) of this Section with which it is complying or that is applicable for the EGU and the following records related to the emissions of mercury that the EGU is allowed to emit:

A) For an EGU for which the owner or operator is complying with this Subpart B by means of Section 225.230(a)(1)(B) or 225.237(a)(1)(B) or using input mercury levels to determine the allowable emissions of the EGU, records of the daily mercury content of coal used (parts per million~~lbs/trillion Btu~~) and the daily and monthly input mercury (lbs), which must be kept in the file pursuant to Section 1.18(a) of Appendix B to this Part.

B) For an EGU for which the owner or operator of an EGU complying with this Subpart B by means of Section 225.230(a)(1)(A) or 225.237(a)(1)(A) or using electrical output to determine the allowable emissions of the EGU, records of the daily and monthly gross electrical output (GWh), which must be kept in the file required pursuant to Section 1.18(a) of Appendix B to this Part.

3) The owner or operator of an EGU must maintain records of the following data for each EGU:

A) Monthly emissions of mercury from the EGU.

B) For an EGU for which the owner or operator is complying by means of Section 225.230(b) or (d) of this Subpart B, records of the monthly allowable emissions of mercury from the EGU.

4) The owner or operator of an EGU that is participating in an Averaging Demonstration pursuant to Section 225.232 of this Subpart B must maintain records identifying all sources and EGUs

covered by the Demonstration for each month and, within 60 days after the end of each calendar month, calculate and record the actual and allowable mercury emissions of the EGU for the month and the applicable 12-month rolling period.

5) The owner or operator of an EGU must maintain the following records related to quality assurance activities conducted for emissions monitoring systems:

A) The results of quarterly assessments conducted pursuant to Section 2.2 of Exhibit B to Appendix B to this Part; and

B) Daily/weekly system integrity checks pursuant to Section 2.6 of Exhibit B to Appendix B to this Part.

~~6) The owner or operator of an EGU must maintain an electronic copy of all electronic submittals to the USEPA pursuant to Section 1.18(f) to Appendix B to this Part.~~

6~~7~~) The owner or operator of an EGU must retain all records required by this Section at the source for a period of five years from the date the document is created unless otherwise provided in the CAAPP permit issued for the source and must make a copy of any record available to the Agency upon request. This period may be extended in writing by the Agency, for cause, at any time prior to the end of five years.

b) Quarterly Reports. The owner or operator of a source with one or more EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter must submit quarterly reports to the Agency as follows:

~~1) These reports must include the following information for operation of the EGUs during the quarter:~~

~~A) The total operating hours of each EGU and the mercury CEMS, as also reported in accordance with Appendix B to this Part.~~

~~B) A discussion of any significant changes in the measures used to control emissions of mercury from the EGUs or the coal supply to the EGUs, including changes in the source of coal.~~

~~C) Summary information on the performance of the mercury CEMS. When the mercury CEMS was not inoperative,~~

~~repaired, or adjusted, except for routine zero and span checks, this must be stated in the report.~~

~~D) If the CEMS downtime was more than 5.0 percent of the total operating time for the EGU: the date and time identifying each period during which the CEMS was inoperative, except for routine zero and span checks; the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with Appendix B to this Part, i.e., the dates and results of the Linearity Tests and any RATAs during the quarter; a listing of any days when a required daily calibration was not performed; and the date and duration of any periods when the CEMS was out-of-control as addressed by Section 225.260.~~

~~E) Recertification testing that has been performed for any CEMS and the status of the results.~~

~~2) The owner or operator must submit each quarterly report to the Agency within 45 days following the end of the calendar quarter covered by the report.~~

1) Source information such as source name, source ID number, and the period covered by the report;

2) A list of all EGU(s) at the source that identifies the applicable Part 225 monitoring and reporting requirements with which each EGU is complying for the reported quarter, including the following EGUs, which are excluded from subsection (b)(3) of this Section:

A) All EGUs using the periodic emissions testing provisions of Section 225.239, 225.233(d)(4), or Section 225.294(c) pursuant to Section 225.294(e)(1)(B) for the quarter.

B) All EGUs using the low mass emissions (LME) excepted monitoring methodology pursuant to Section 1.15(b) of Appendix B to this Part.

3) For only those EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter:

A) An indication of whether the identified EGUs were in compliance with all applicable monitoring, recordkeeping, and reporting requirements of Part 225 for the entire reporting period.

B) The total quarterly operating hours of each EGU.

C) The quarterly CEMS or excepted monitoring system quality-assured monitor operating (QAMO) hours and percentage data availability, determined in accordance with Sections 1.8 (CEMS) or 1.9 (excepted monitoring system) of Appendix B to this Part.

D) The average monthly mercury concentration of the coal combusted in each EGU in parts per million (determined by averaging all analyzed coal samples in the month) and the quarterly total amount of mercury (calculated by multiplying the total amount of coal combusted each month by the average monthly mercury concentration and converting to ounces, then adding together for the quarter) of the coal combusted in each EGU. If the EGU is complying by means of Sections 225.230(a)(1)(A), 225.233(d)(1)(A), 225.233(d)(2)(A), or Section 225.294(c)(1), reporting of the data in this subparagraph D is not required.

E) The quarterly mercury mass emissions (in ounces), determined from the QAMO hours in accordance with Section 4.2 of Exhibit C to Appendix B to this Part. If the EGU is complying by means of Sections 225.230(a)(1)(A), 225.233(d)(1)(A), 225.233(d)(2)(A), or Section 225.294(c)(1), reporting of the data in this subparagraph E is not required.

F) The average monthly and quarterly mercury control efficiency. This is determined by dividing the mercury mass emissions recorded during QAMO hours, calculated each month and quarter, by the total amount of mercury in the coal combusted modified by the monitor availability (total mercury content multiplied by the percent monitor availability, or QAMO hours divided by total hours) for each month and quarter. If the EGU is complying by means of Sections 225.230(a)(1)(A), 225.233(d)(1)(A), 225.233(d)(2)(A), or Section 225.294(c)(1), reporting of the data in this subparagraph F is not required.

G) The average monthly and quarterly mercury emission rate (in lb/GWh) for each EGU, determined in accordance with Section 225.230(a)(2). Only those EGUs complying by means of Sections 225.230(a)(1)(A), 225.233(d)(1)(A),

225.233(d)(2)(A), or Section 225.294(c)(1) are required to report the data in this subparagraph G.

H) The 12-month rolling average control efficiency (percentage) or emission rate (in lb/GWh) for each month in the reporting period, as applicable (or the rolling average control efficiency or emission rate for a lesser number of months if a full 12 months of data is not available). This applicable data is determined according to the following requirements:

i. The 12-month rolling average control efficiency is required for those sources complying by means of Sections 225.230(a)(1)(B), 225.233(d)(1)(B), 225.233(d)(2)(B), 225.294(c)(2), 225.230(b), 225.230(d), 225.232(b)(2), or 225.237(a)(1)(B).

ii. The 12-month rolling average emission rate is required for those sources complying by means of Sections 225.230(a)(1)(A), 225.233(d)(1)(A), 225.233(d)(2)(A), or Section 225.294(c)(1), 225.230(b), 225.230(d), 225.232(b)(1), or 225.237(a)(1)(A).

I) If the CEMS or excepted monitoring system percentage data availability was less than 95.0 percent of the total operating time for the EGU, the date and time identifying each period during which the CEMS was inoperative, except for routine zero and span checks; the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with Appendix B to this Part, i.e., the dates and results of the Linearity Tests and any RATAs during the quarter; a listing of any days when a required daily calibration was not performed; and the date and duration of any periods when the CEMS was unavailable or out-of-control as addressed by Section 225.260.

4) The owner or operator must submit each quarterly report to the Agency within 45 days following the end of the calendar quarter covered by the report.

c) Compliance Certification. The owner or operator of a source with one or more EGUs must submit to the Agency a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the EGUs' emissions are correctly and fully monitored. The certification must state:

1) That the monitoring data submitted were recorded in accordance with the applicable requirements of this Section, Sections 225.240 through 225.270 and Section 225.290 of this Subpart B, and Appendix B to this Part, including the quality assurance procedures and specifications; and

2) For an EGU with add-on mercury emission controls, a flue gas desulfurization system, a selective catalytic reduction system, or a compact hybrid particulate collector system for all hours where mercury data is unavailable or out of control~~missing~~ that:

A) The mercury add-on emission controls, flue gas desulfurization system, selective catalytic reduction system, or compact hybrid particulate collector system was operating within the range of parameters listed in the quality assurance/quality control program pursuant to Exhibit B to Appendix B to this Part; or

B) With regard to a flue gas desulfurization system or a selective catalytic reduction system, quality-assured SO_2 emission data recorded in accordance with ~~Appendix B~~40 CFR 75 ~~to this Part~~ document that the flue gas desulfurization system was operating properly, or quality-assured NO_X emission data recorded in accordance with ~~Appendix B~~40 CFR 75 ~~to this Part~~ document that the selective catalytic reduction system was operating properly, as applicable; and

d) Annual Certification of Compliance.

1) The owner or operator of a source with one or more EGUs subject to this Subpart B must submit to the Agency an Annual Certification of Compliance with this Subpart B no later than May 1 of each year and must address compliance for the previous calendar year. Such certification must be submitted to the Agency, Air Compliance Section, and the Air Regional Field Office.

2) Annual Certifications of Compliance must indicate whether compliance existed for each EGU for each month in the year covered by the Certification and it must certify to that effect. In addition, for each EGU, the owner or operator must provide the following appropriate data as set forth in subsections (d)(2)(A) through (d)(2)(E) of this Section, together with the data set forth in subsection (d)(2)(F) of this Section:

A) If complying with this Subpart B by means of Section 225.230(a)(1)(A) or 225.237(a)(1)(A):

i) ~~Actual~~ Emissions~~emissions~~ rate during QAMO hours, in lb/GWh, for each 12-month rolling period ending in the year covered by the Certification;

ii) ~~Actual~~ Emissions~~emissions~~ during QAMO hours, in lbs, and gross electrical output, in GWh, for each 12-month rolling period ending in the year covered by the Certification; and

iii) ~~Actual~~ Emissions~~emissions~~ during QAMO hours, in lbs, and gross electrical output, in GWh, for each month in the year covered by the Certification and in the previous year.

B) If complying with this Subpart B by means of Section 225.230(a)(1)(B) or 225.237(a)(1)(B):

i) ~~Actual~~ Control~~control~~ efficiency for emissions during QAMO hours for each 12-month rolling period ending in the year covered by the Certification, expressed as a percent;

ii) ~~Actual~~ Emissions~~emissions~~ during QAMO hours, in lbs, and mercury content in the fuel fired in such EGU, in lbs, for each 12-month rolling period ending in the year covered by the Certification; and

iii) ~~Actual~~ Emissions~~emissions~~ during QAMO hours, in lbs, and mercury content in the fuel fired in such EGU, in lbs, for each month in the year covered by the Certification and in the previous year.

C) If complying with this Subpart B by means of Section 225.230(b):

i) ~~Actual~~ Emissions~~emissions~~ and allowable emissions during QAMO hours for each 12-month rolling period ending in the year covered by the Certification; and

ii) ~~Actual~~ Emissions~~emissions~~ and allowable emissions during QAMO hours, and which standard of compliance the owner or operator was utilizing for

each month in the year covered by the Certification and in the previous year.

D) If complying with this Subpart B by means of Section 225.230(d):

i) ~~Actual~~ Emissions~~emissions~~ and allowable emissions during QAMO hours for all EGUs at the source for each 12-month rolling period ending in the year covered by the Certification; and

ii) ~~Actual~~ Emissions~~emissions~~ and allowable emissions during QAMO hours, and which standard of compliance the owner or operator was utilizing for each month in the year covered by the Certification and in the previous year.

E) If complying with this Subpart B by means of Section 225.232:

i) ~~Actual~~ Emissions~~emissions~~ and allowable emissions during QAMO hours for all EGUs at the source in an Averaging Demonstration for each 12-month rolling period ending in the year covered by the Certification; and

ii) ~~Actual~~ Emissions~~emissions~~ and allowable emissions during QAMO hours, with the standard of compliance the owner or operator was utilizing for each EGU at the source in an Averaging Demonstration for each month for all EGUs at the source in an Averaging Demonstration in the year covered by the Certification and in the previous year.

F) Any deviations or exceptions each month and discussion of the reasons for such deviations or exceptions.

3) All Annual Certifications of Compliance required to be submitted must include the following certification by a responsible official:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible

for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

4) The owner or operator of an EGU must submit its first Annual Certification of Compliance to address calendar year 2009 or the calendar year in which the EGU commences commercial operation, whichever is later. Notwithstanding subsection (d)(2) of this Section, in the Annual Certifications of Compliance that are required to be submitted by May 1, 2010, and May 1, 2011, to address calendar years 2009 and 2010, respectively, the owner or operator is not required to provide 12-month rolling data for any period that ends before June 30, 2010.

e) Deviation Reports. For each EGU, the owner or operator must promptly notify the Agency of deviations from requirements of this Subpart B. At a minimum, these notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken.

f) Quality Assurance RATA Reports. The owner or operator of an EGU must submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs monitored at a common stack and each non-EGU pursuant to Section 1.16(b)(2)(B) of Appendix B to this Part, within 45 days after completing a quality assurance RATA.

17. The Agency proposes amending Section 225.292(e) to delete a reference to the CAIR designated representative.

Section 225.292 Applicability of the Combined Pollutant Standard

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e) If an EGU is subject to the requirements of this Section, then the requirements apply to all owners and operators of the EGU, and to the ~~CAIR~~ designated representative for the EGU.

18. First, the Agency proposes amending Section 225.294(e)(1)(B) to correct an error in the Agency's original proposal regarding the frequency of emissions testing for CPS sources utilizing Section 225.239 to demonstrate compliance. While EGUs in the CPS that are complying with the sorbent injection rate requirement must perform emissions testing on a semi-annual basis, if such EGUs opt into either the

0.0080 lb/GWh emission limit or 90% control efficiency requirement early, they must perform quarterly emissions testing. Also, in response to requests for clarification at the December 17, 2008, hearing, the Agency amended subsection (e)(1)(B) to specify which subsections of Section 225.239 are applicable to EGUs in the CPS that utilize emissions testing to demonstrate compliance.

Second, in response to a request on pages 88-89 of the Transcript of the December 17, 2008, hearing, the Agency proposes amending Section 225.294(f) to clarify that EGUs in the CPS may utlilize the averaging provisions set forth in Section 225.232.

Next, the Agency proposes amending Section 225.294(l) to clarify the "sunset date" for the emissions testing alternative in Section 225.239. Also, in response to a request at hearing that the Agency clarify whether references to "CEMS" include sorbent trap monitoring systems as well, the Agency proposes amending subsection (l) to include references to excepted monitoring systems.

Section 225.294 Combined Pollutant Standard: Control Technology Requirements and Emissions Standards for Mercury

a) Control Technology Requirements for Mercury.

1) For each EGU in a CPS group other than an EGU that is addressed by subsection (b) of this Section, the owner or operator of the EGU must install, if not already installed, and properly operate and maintain, by the dates set forth in subsection (a)(2) of this Section, ACI equipment complying with subsections (g), (h), (i), (j), and (k) of this Section, as applicable.

2) By the following dates, for the EGUs listed in subsections (a)(2)(A) and (B), which include hot and cold side ESPs, the owner or operator must install, if not already installed, and begin operating ACI equipment or the Agency must be given written notice that the EGU will be shut down on or before the following dates:

A) Fisk 19, Crawford 7, Crawford 8, Waukegan 7, and Waukegan 8 on or before July 1, 2008; and

B) Powerton 5, Powerton 6, Will County 3, Will County 4, Joliet 6, Joliet 7, and Joliet 8 on or before July 1, 2009.

b) Notwithstanding subsection (a) of this Section, the following EGUs are not required to install ACI equipment because they will be permanently shut down, as addressed by Section 225.297, by the date specified:

1) EGUs that are required to permanently shut down:

A) On or before December 31, 2007, Waukegan 6; and

B) On or before December 31, 2010, Will County 1 and Will County 2.

2) Any other specified EGU that is permanently shut down by December 31, 2010.

c) Beginning on January 1, 2015, and continuing thereafter, and measured on a rolling 12-month basis (the initial period is January 1, 2015, through December 31, 2015, and, then, for every 12-month period thereafter), each specified EGU, except Will County 3, shall achieve one of the following emissions standards:

1) An emissions standard of 0.0080 lbs mercury/GWh gross electrical output; or

2) A minimum 90 percent reduction of input mercury.

d) Beginning on January 1, 2016, and continuing thereafter, Will County 3 shall achieve the mercury emissions standards of subsection (c) of this Section measured on a rolling 12-month basis (the initial period is January 1, 2016, through December 31, 2016, and, then, for every 12-month period thereafter).

e) Compliance with Emission Standards

1) At any time prior to the dates required for compliance in subsections (c) and (d) of this Section, the owner or operator of a specified EGU, upon notice to the Agency, may elect to comply with the emissions standards of subsection (c) of this Section measured on either:

A) a rolling 12-month basis, or;

B) a quarterly ~~semi-annual~~ calendar basis pursuant to the emissions testing requirements in Section 225.239(a)(4), (c), (d), (e), (f)~~(1) and (2)~~, (g), (h)~~(2)~~, ~~and~~ (i)~~(3) and (4),~~ and (j) of this Subpart until June 30, 2012.

2) Once an EGU is subject to the mercury emissions standards of subsection (c) of this Section, it shall not be subject to the requirements of subsections (g), (h), (i), (j) and (k) of this Section.

f) Compliance with the mercury emissions standards or reduction requirement of this Section must be calculated in accordance with Section 225.230(a) or (b), or Section 225.232 until December 31, 2013.

g) For each EGU for which injection of halogenated activated carbon is required by subsection (a)(1) of this Section, the owner or operator of the EGU must inject halogenated activated carbon in an optimum manner, which, except as provided in subsection (h) of this Section, is defined as all of the following:

1) The use of an injection system for effective absorption of mercury, considering the configuration of the EGU and its ductwork;

2) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, Calgon Carbon's FLUEPAC CF Plus, or Calgon Carbon's FLUEPAC MC Plus, or the injection of any other halogenated activated carbon or sorbent that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions; and

3) The injection of sorbent at the following minimum rates, as applicable:

A) For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 2.5 lbs per million actual cubic feet;

B) For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 5.0 lbs per million actual cubic feet;

C) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the rates specified in subsections (g)(3)(A) and (B), based on the blend of coal being fired; or

D) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsection (g)(3)(A), (B), or (C) of this Section on a unit-specific basis, provided that the owner or operator of the EGU has demonstrated that such rate or rates are needed so that carbon injection will not increase particulate matter emissions or opacity so as to threaten noncompliance with applicable requirements for particulate matter or opacity.

4) For purposes of subsection (g)(3) of this Section, the flue gas flow rate must be determined for the point sorbent injection; provided that this flow rate may be assumed to be identical to the stack flow rate if the gas temperatures at the point of injection and the stack are normally within 100º F, or the flue gas flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.

h) The owner or operator of an EGU that seeks to operate an EGU with an activated carbon injection rate or rates that are set on a unit-specific basis pursuant to subsection (g)(3)(D) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the requirements of subsections (h)(1) and (h)(2) of this Section, subject to the limitations of subsections (h)(3) and (h)(4) of this Section:

1) The application must be submitted as an application for a new or revised federally enforceable operation permit for the EGU, and it must include a summary of relevant mercury emissions data for the EGU, the unit-specific injection rate or rates that are proposed, and detailed information to support the proposed injection rate or rates; and

2) This application must be submitted no later than the date that activated carbon must first be injected. For example, the owner or operator of an EGU that must inject activated carbon pursuant to subsection (a)(1) of this Section must apply for unit-specific injection rate or rates by July 1, 2008. Thereafter, the owner or operator may supplement its application; and

3) Any decision of the Agency denying a permit or granting a permit with conditions that set a lower injection rate or rates may be appealed to the Board pursuant to Section 39 of the Act; and

4) The owner or operator of an EGU may operate at the injection rate or rates proposed in its application until a final decision is made on the application including a final decision on any appeal to the Board.

i) During any evaluation of the effectiveness of a listed sorbent, alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (g) of this Section for any system needed to carry out the evaluation, as further provided as follows:

1) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program submitted to the Agency at least 30 days prior to commencement of the evaluation;

2) The duration and scope of the evaluation may not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control techniques, as initially addressed by the owner or operator in a support document submitted with the evaluation program; and

3) The owner or operator of the EGU must submit a report to the Agency no later than 30 days after the conclusion of the evaluation that describes the evaluation conducted and which provides the results of the evaluation; and

4) If the evaluation of alternative control techniques shows less effective control of mercury emissions from the EGU than was achieved with the principal control techniques, the owner or operator of the EGU must resume use of the principal control techniques. If the evaluation of the alternative control technique shows comparable effectiveness to the principal control technique, the owner or operator of the EGU may either continue to use the alternative control technique in a manner that is at least as effective as the principal control technique or it may resume use of the principal control technique. If the evaluation of the alternative control technique shows more effective control of mercury emissions than the control technique, the owner or operator of the EGU must continue to use the alternative control technique in a manner that is more effective than the principal control technique, so long as it continues to be subject to this Section.

j) In addition to complying with the applicable recordkeeping and monitoring requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with Section 225.230(a) by means of the CPS must also comply with the following additional requirements:

1) For the first 36 months that injection of sorbent is required, it must maintain records of the usage of sorbent, the exhaust gas flow rate

from the EGU, and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on a weekly average;

2) After the first 36 months that injection of sorbent is required, it must monitor activated sorbent feed rate to the EGU, flue gas temperature at the point of sorbent injection, and exhaust gas flow rate from the EGU, automatically recording this data and the sorbent carbon feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average; and

3) If a blend of bituminous and subbituminous coal is fired in the EGU, it must keep records of the amount of each type of coal burned and the required injection rate for injection of activated carbon on a weekly basis.

k) In addition to complying with the applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with Section 225.230(a) by means of the CPS must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (j) of this Section.

l) Until June 30, 2012, as~~As~~ an alternative to the CEMS (or excepted monitoring system) monitoring, recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).

19. The Agency proposes amending Appendix B Sections 1.2(a) and (c) to make minor clarifications. Language was added in response to comments by the USEPA to include auxiliary monitors such as auxiliary flow monitors, diluent gas monitors, moisture monitors, or other auxiliary monitors in the equipment performance requirements. Accordingly, the Agency is suggesting the following addition.

a) Primary Equipment Performance Requirements. The owner or operator must ensure that each continuous mercury emission monitoring system and each auxiliary monitoring system required by this Appendix meets the equipment, installation, and performance specifications in Exhibit A to this Appendix and is maintained according to the quality assurance and quality control procedures in Exhibit B to this Appendix.

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c) Primary equipment hourly operating requirements. The owner or operator must ensure that all continuous mercury emission monitoring systems and all auxiliary monitoring systems required by this Appendix are in operation and monitoring unit emissions at all times that the affected unit combusts any fuel except during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to Section 1.5 of this Appendix and Exhibit B to this Appendix, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to Section 1.4 of this Appendix.

20. The Agency proposes amending Appendix B Section 1.4(a), 1.4(a)(2), 1.4(a)(3), and 1.4(a)(4)(c) in response to comments from USEPA.

a) Initial certification approval process. The owner or operator must ensure that each continuous mercury emission monitoring system or auxiliary monitoring system required by this Appendix meets the initial certification requirements of this Section. In addition, whenever the owner or operator installs a continuous mercury emission monitoring system in order to meet the requirements of Sections 1.3 of this Appendix and 40 CFR Sections 75.11 through 75.14 and 75.16 through 75.18, incorporated by reference in Section 225.140, where no continuous emission monitoring system was previously installed, initial certification is required.

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2) Certification application. The owner or operator must apply for certification of each continuous mercury emission monitoring system and, if not previously certified, for each auxiliary monitoring system. The owner or operator must submit the certification application in accordance with 40 CFR 75.60, incorporated by reference in Section 225.140, and each complete certification application must include the information specified in 40 CFR 75.63, incorporated by reference in Section 225.140.

3) Provisional approval of certification (or recertification) applications. Upon the successful completion of the required certification (or recertification) procedures of this Section, each continuous mercury emission monitoring system and each auxiliary monitoring system must be deemed provisionally certified (or recertified) for use for a period not to exceed 120 days following receipt by the Agency of the complete certification (or recertification) application under paragraph (a)(4) of this Section. Data measured and recorded by a provisionally certified (or recertified) continuous emission monitoring system, operated in accordance with the requirements of Exhibit B to this Appendix, will be considered valid quality-assured data (retroactive to the

date and time of provisional certification or recertification), provided that the Agency does not invalidate the provisional certification (or recertification) by issuing a notice of disapproval within 120 days of receipt by the Agency of the complete certification (or recertification) application. Note that when the conditional data validation procedures of paragraph (b)(3) of this Section are used for the initial certification (or recertification) of a continuous emissions monitoring system, the date and time of provisional certification (or recertification) of the CEMS may be earlier than the date and time of completion of the required certification (or recertification) tests.

4) Certification (or recertification) application formal approval process. The Agency will issue a notice of approval or disapproval of the certification (or recertification) application to the owner or operator within 120 days of receipt of the complete certification (or recertification) application. In the event the Agency does not issue such a notice within 120 days of receipt, each continuous emission monitoring system which meets the performance requirements of this part and is included in the certification (or recertification) application will be deemed certified (or recertified) for use under 35 Ill Admin. Code Part 225.

A) Approval notice. If the certification (or recertification) application is complete and shows that each continuous emission monitoring system meets the performance requirements of this part, then the Agency will issue a notice of approval of the certification (or recertification) application within 120 days of receipt.

B) Incomplete application notice. A certification (or recertification) application will be considered complete when all of the applicable information required to be submitted in 40 CFR 75.63, incorporated by reference in Section 225.140, has been received by the Agency. If the certification (or recertification) application is not complete, then the Agency will issue a notice of incompleteness that provides a reasonable timeframe for the designated representative to submit the additional information required to complete the certification (or recertification) application. If the designated representative has not complied with the notice of incompleteness by a specified due date, then the Agency may issue a notice of disapproval specified under paragraph (a)(4)(C) of this Section. The 120-day review period will not begin prior to receipt of a complete application.

C) Disapproval notice. If the certification (or recertification) application shows that any continuous emission monitoring system does not meet the performance requirements of this part, or if the certification (or recertification) application is incomplete and the requirement for disapproval under paragraph (a)(4)(B) of this Section has been met, the Agency must issue a written notice of disapproval of the certification (or recertification) application within 120 days of receipt. By issuing the notice of disapproval, the provisional certification (or recertification) is invalidated by the Agency, and the data measured and recorded by each uncertified continuous emission or opacity monitoring system must not be considered valid quality-assured data as follows: from the hour of the probationary calibration error test that began the initial certification (or recertification) test period (if the conditional data validation procedures of paragraph (b)(3) of this Section were used to retrospectively validate data); or from the date and time of completion of the invalid certification or recertification tests (if the conditional data validation procedures of paragraph (b)(3) of this Section were not used). The owner or operator must follow the procedures for loss of initial certification in paragraph (a)(5) of this Section for each continuous emission ~~or opacity~~ monitoring system which is disapproved for initial certification. For each disapproved recertification, the owner or operator must follow the procedures of paragraph (b)(5) of this Section.

*21. The Agency proposes amending Appendix B Section 1.4(b). The language "*or auxiliary monitoring system*" was added for reasons identical to those given for errata item 19. The language "*continuous mercury emission*" was twice deleted to clarify that all monitors within the monitoring system in the recertification approval process are included in response to comments by the USEPA.*

b) Recertification approval process. Whenever the owner or operator makes a replacement, modification, or change in a certified continuous mercury emission monitoring system or auxiliary monitoring system that may significantly affect the ability of the system to accurately measure or record the gas volumetric flow rate, mercury concentration, percent moisture, or to meet the requirements of Section 1.5 of this Appendix or Exhibit B to this Appendix, the owner or operator must recertify the ~~continuous mercury emission~~ monitoring system, according to the procedures in this paragraph. Examples of changes which require recertification include: replacement of the analyzer; change in location or orientation of the sampling probe or site; and complete replacement of an

existing ~~continuous mercury emission~~ monitoring system. The owner or operator must also recertify the continuous emission monitoring systems for a unit that has recommenced commercial operation following a period of long-term cold storage as defined in Section 225.130. Any change to a flow monitor or gas monitoring system for which a RATA is not necessary will not be considered a recertification event. In addition, changing the polynomial coefficients or K factor(s) of a flow monitor will require a 3-load RATA, but is not considered to be a recertification event; however, records of the polynomial coefficients or K factor(s) currently in use must be maintained on-site in a format suitable for inspection. Changing the coefficient or K factor(s) of a moisture monitoring system will require a RATA, but is not considered to be a recertification event; however, records of the coefficient or K factor(s) currently in use by the moisture monitoring system must be maintained on-site in a format suitable for inspection. In such cases, any other tests that are necessary to ensure continued proper operation of the monitoring system (e.g., 3-load flow RATAs following changes to flow monitor polynomial coefficients, linearity checks, calibration error tests, DAHS verifications, etc.) must be performed as diagnostic tests, rather than as recertification tests. The data validation procedures in paragraph (b)(3) of this Section must be applied to RATAs associated with changes to flow or moisture monitor coefficients, and to linearity checks, 7-day calibration error tests, and cycle time tests, when these are required as diagnostic tests. When the data validation procedures of paragraph (b)(3) of this Section are applied in this manner, replace the word "recertification" with the word "diagnostic."

22. *The Agency proposes amending Appendix B Section 1.4(b)(3)(C). The word "mercury" referring to mercury CEMS was deleted to include all relevant CEMS in the recertification process in response to comments by the USEPA.*

C) Beginning with the hour of commencement of a recertification test period, emission data recorded by the ~~mercury~~ CEMS are considered to be conditionally valid, contingent upon the results of the subsequent recertification tests.

23. *The Agency proposes amending Appendix B Section 1.4(b)(3)(D)(i) in order to include a system integrity check in the recertification process. These checks are defined and called for in 40 CFR 72.2. Language was added in response to comments from USEPA. The system integrity check has been added in several subsequent sections of Appendix B to include it where appropriate.*

i) For a linearity check, <u>a system integrity check</u>, and/or cycle time test, 168 consecutive unit operating hours, as defined in 40 CFR 72.2, incorporated by reference in Section 225.140, or,

for CEMS installed on common stacks or bypass stacks, 168 consecutive stack operating hours, as defined in 40 CFR 72.2;

24. The Agency proposes amending Appendix B Sections 1.4(b)(3)(E), 1.4(b)(3)(F), 1.4(b)(3)(G), and 1.4(b)(3)(G)(i). The word "mercury" before CEMS has been deleted in order to include all relevant CEMS, and for in response to comments from USEPA.

E) All recertification tests must be performed hands-off. No adjustments to the calibration of the ~~mercury~~ CEMS, other than the routine calibration adjustments following daily calibration error tests as described in Section 2.1.3 of Exhibit B to this Appendix, are permitted during the recertification test period. Routine daily calibration error tests must be performed throughout the recertification test period, in accordance with Section 2.1.1 of Exhibit B to this Appendix. The additional calibration error test requirements in Section 2.1.3 of Exhibit B to this Appendix, must also apply during the recertification test period.

F) If all of the required recertification tests and required daily calibration error tests are successfully completed in succession with no failures, and if each recertification test is completed within the time period specified in paragraph (b)(3)(D)(i), (ii), or (iii) of this Section, then all of the conditionally valid emission data recorded by the ~~mercury~~ CEMS will be considered quality assured, from the hour of commencement of the recertification test period until the hour of completion of the required test(s).

G) If a required recertification test is failed or aborted due to a problem with the ~~mercury~~ CEMS, or if a daily calibration error test is failed during a recertification test period, data validation must be done as follows:

i) If any required recertification test is failed, it must be repeated. If any recertification test other than a 7-day calibration error test is failed or aborted due to a problem with the ~~mercury~~ CEMS, the original recertification test period is ended, and a new recertification test period must be commenced with a probationary calibration error test. The tests that are required in the new recertification test period

will include any tests that were required for the initial recertification event which were not successfully completed and any recertification or diagnostic tests that are required as a result of changes made to the monitoring system to correct the problems that caused the failure of the recertification test. For a 2- or 3-load flow RATA, if the relative accuracy test is passed at one or more load levels, but is failed at a subsequent load level, provided that the problem that caused the RATA failure is corrected without re-linearizing the instrument, the length of the new recertification test period must be equal to the number of unit operating hours remaining in the original recertification test period, as of the hour of failure of the RATA. However, if re-linearization of the flow monitor is required after a flow RATA is failed at a particular load level, then a subsequent 3-load RATA is required, and the new recertification test period must be 720 consecutive unit (or stack) operating hours. The new recertification test sequence must not be commenced until all necessary maintenance activities, adjustments, linearizations, and reprogramming of the CEMS have been completed;

25. *The Agency proposes amending Appendix B Section 1.4(b)(3)(G)(ii) in order to include a system integrity check in the recertification process, and in response to comments from USEPA.*

ii) If a linearity check, RATA, system integrity check, or cycle time test is failed or aborted due to a problem with the mercury CEMS, all conditionally valid emission data recorded by the CEMS are invalidated, from the hour of commencement of the recertification test period to the hour in which the test is failed or aborted, except for the case in which a multiple-load flow RATA is passed at one or more load levels, failed at a subsequent load level, and the problem that caused the RATA failure is corrected without re-linearizing the instrument. In that case, data invalidation will be prospective, from the hour of failure of the RATA until the

commencement of the new recertification test period. Data from the CEMS remain invalid until the hour in which a new recertification test period is commenced, following corrective action, and a probationary calibration error test is passed, at which time the conditionally valid status of emission data from the CEMS begins again;

26. *The Agency proposes amending Appendix B Section 1.4(b)(3)(G)(iv). The word "twice" was deleted to correct an error in the language. A daily calibration error test is failed when the results of the test exceed the performance specifications, not by exceeding twice the specification. The reference to Section 3 of Exhibit A was also changed to Section 2.1.4 of Exhibit B to correct an erroneous reference to the specification.*

iv) If a daily calibration error test is failed during a recertification test period (i.e., the results of the test exceed ~~twice~~ the applicable performance specification in Section ~~3~~2.1.4 of Exhibit B~~A~~ to this Appendix), the CEMS is out-of-control as of the hour in which the calibration error test is failed. Emission data from the CEMS will be invalidated prospectively from the hour of the failed calibration error test until the hour of completion of a subsequent successful calibration error test following corrective action, at which time the conditionally valid status of data from the monitoring system resumes. Failure to perform a required daily calibration error test during a recertification test period will also cause data from the CEMS to be invalidated prospectively, from the hour in which the calibration error test was due until the hour of completion of a subsequent successful calibration error test. Whenever a calibration error test is failed or missed during a recertification test period, no further recertification tests must be performed until the required subsequent calibration error test has been passed, re-establishing the conditionally valid status of data from the monitoring system. If a calibration error test failure occurs while a linearity check or RATA is still in progress, the linearity check or RATA must be re-started.

27. *The Agency proposes amending Appendix B Section 1.4(b)(3)(G)(v) to reflect the appropriate technical specifications and conditions for when trial gas injections*

and trial RATA runs are permissible. Changes reflect specific comments and suggested changes recommended in comments from USEPA.

(v) Trial gas injections and trial RATA runs are permissible during the recertification test period, prior to commencing a linearity check or RATA, for the purpose of optimizing the performance of the CEMS. The results of such gas injections and trial runs must not affect the status of previously-recorded conditionally valid data or result in termination of the recertification test period, provided that they meet the following specifications and conditions~~:~~ ~~f~~For diluent gas injections, the stable, ending monitor response is within ±5 percent ~~or within 5 ppm~~ of the tag value of the reference gas~~;~~ ~~f~~for 0.5% CO_2 or O_2. For Hg vapor injections, the stable, ending monitor response is within ± 10 percent of the value of the reference gas or 0.8 µg/scm. For RATA trial runs, the average reference method reading and the average CEMS reading for the run differ by no more than ~~+-~~ ±10% of the average reference method value (for flow, diluent gas, and moisture monitors), or ± 20% of the average reference method value (for mercury monitors), or differ by no more than 1.0% CO_2 or $O2$~~,+-15 ppm~~, ~~or~~ 1.5% H_2O, or ~~+-0.02 lb/mmBtu~~ 1.0µg/scm from the average reference method value, as applicable~~;~~. No ~~no~~ adjustments to the calibration of the CEMS ~~are~~shall be made following the trial injection(s) or run(s), other than the adjustments permitted under Section 2.1.3 of Exhibit B to this Appendix and the CEMS is not repaired, re-linearized or reprogrammed (e.g., changing flow monitor polynomial coefficients, linearity constants, or K-factors) after the trial injection(s) or run(s).

28. *The Agency proposes amending Appendix B Section 1.4(b)(3)(H) to include the system integrity check in response to comments from USEPA.*

H) If any required recertification test is not completed within its allotted time period, data validation must be done as follows. For a late linearity test, RATA, system integrity check, or cycle time test that is passed on the first attempt, data from the monitoring system will be invalidated from the hour of expiration of the recertification test period until

the hour of completion of the late test. For a late 7-day calibration error test, whether or not it is passed on the first attempt, data from the monitoring system will also be invalidated from the hour of expiration of the recertification test period until the hour of completion of the late test. For a late linearity test, RATA, system integrity check, or cycle time test that is failed on the first attempt or aborted on the first attempt due to a problem with the monitor, all conditionally valid data from the monitoring system will be considered invalid back to the hour of the first probationary calibration error test which initiated the recertification test period. Data from the monitoring system will remain invalid until the hour of successful completion of the late recertification test and any additional recertification or diagnostic tests that are required as a result of changes made to the monitoring system to correct problems that caused failure of the late recertification test.

29. *The Agency proposes amending Appendix B Section 1.4(b)(3)(I) in order to delete inappropriate references to electronic reporting. The Agency will not be requiring electronic reporting.*

I) If any required recertification test of a monitoring system has not been completed by the end of a calendar quarter and if data contained in the quarterly report are conditionally valid pending the results of test(s) to be completed in a subsequent quarter, the owner or operator must indicate this by means of a ~~suitable conditionally valid data flag in the electronic quarterly report, and~~ notification within the quarterly ~~pursuant to 225.290(b)(1)(E),~~ report for that quarter. The owner or operator must resubmit the report for that quarter if the required recertification test is subsequently failed. If any required recertification test is not completed by the end of a particular calendar quarter but is completed no later than 30 days after the end of that quarter (i.e., prior to the deadline for submitting the quarterly report under 40 CFR 75.64, incorporated by reference in Section 225.140), the test data and results may be submitted with the earlier quarterly report even though the test date(s) are from the next calendar quarter. In such instances, if the recertification test(s) are passed in accordance with the provisions of paragraph (b)(3) of this Section, conditionally valid data may be reported as quality-assured~~, in lieu of reporting a conditional data flag. In addition, if the owner or operator uses a conditionally valid data flag in any of the four~~

~~quarterly reports for a given year, the owner or operator must indicate the final status of the conditionally valid data (i.e., resolved or unresolved) in the annual compliance certification report required under 40 CFR 72.90 for that year.~~. The Agency may invalidate any conditionally valid data that remains unresolved at the end of a particular calendar year.

30. *The Agency proposes amending Appendix B Section 1.4(b)(4) to delete the word "mercury." This is in response to comments from USEPA.*

4) Recertification application. The designated representative must apply for recertification of each continuous ~~mercury~~ emission monitoring system. The owner or operator must submit the recertification application in accordance with 40 CFR 75.60, incorporated by reference in Section 225.140, and each complete recertification application must include the information specified in 40 CFR 75.63, incorporated by reference in Section 225.140.

31. *The Agency proposes amending Appendix B Section 1.4(c) to delete the word "mercury." This is consistent with the deletion in errata item 22. The language "or components" becomes redundant when all other references to the monitoring systems have been made more general by not specifically referencing continuous mercury emission monitors.*

c) Initial certification and recertification procedures. Prior to the applicable deadline in 35 Ill Admin. Code 225.240(b), the owner or operator must conduct initial certification tests and in accordance with 40 CFR 75.63, incorporated by reference in Section 225.140, the designated representative must submit an application to demonstrate that the continuous emission monitoring system and components thereof meet the specifications in Exhibit A to this Appendix. The owner or operator must compare reference method values with output from the automated data acquisition and handling system that is part of the continuous ~~mercury~~ emission monitoring system being tested. Except as otherwise specified in paragraphs (b)(1), (d), and (e) of this Section, and in Sections 6.3.1 and 6.3.2 of Exhibit A to this Appendix, the owner or operator must perform the following tests for initial certification or recertification of continuous emission monitoring systems ~~or components~~ according to the requirements of Exhibit B to this Appendix:

32. *The Agency proposes deleting current Appendix B Section 1.4(c)(1)(D) to remove references to bias testing. Bias testing will not be required for certification, recertification, or calibration in the proposed rule amendments. Sections 1.4(c)(1)(E) and (F) have been re-lettered and are now Sections (D) and (E) respectively.*

1) For each mercury concentration monitoring system:

A) A 7-day calibration error test;

B) A linearity check, for mercury monitors, perform this check with elemental mercury standards;

C) A relative accuracy test audit must be done on a µg/scm basis;

~~D) A bias test;~~

~~E~~D) A cycle time test;

~~F~~E) For mercury monitors a 3-level system integrity check, using a NIST-traceable source of oxidized mercury, as described in Section 6.2 of Exhibit A to this Appendix. This test is not required for a mercury monitor that does not have a converter.

33. The Agency proposes amending Appendix B Section 1.4(c)(2)(B) to eliminate references to level rather than to load only. All EGUs have load, and the references to levels apply only to non-EGU sources. This elimination is in response to USEPA comments.

B) Relative accuracy test audits, as follows:

i) A single-load ~~(or single-level)~~ RATA at the normal load ~~(or level)~~, as defined in Section 6.5.2.1(d) of Exhibit A to this Appendix, for a flow monitor installed on a peaking unit or bypass stack, or for a flow monitor exempted from multiple-~~level~~load RATA testing under Section 6.5.2(e) of Exhibit A to this Appendix;

ii) For all other flow monitors, a RATA at each of the three load levels ~~(or operating levels)~~ corresponding to the three flue gas velocities described in Section 6.5.2(a) of Exhibit A to this Appendix;

34. The Agency proposes deleting Appendix B Sections 1.4(c)(2)(C) and (D) to remove references to bias testing for reasons identical to those given for errata item 32.

~~C) A bias test for the single-load (or single-level) flow RATA described in paragraph (c)(2)(B)(i) of this Section; and~~

~~D) A bias test (or bias tests) for the 3-level flow RATA described in paragraph (c)(2)(B)(ii) of this Section, at the following load or operational level(s):~~

~~i) At each load level designated as normal under Section 6.5.2.1(d) of Exhibit A to this Appendix, for units that produce electrical or thermal output, or~~

~~ii) At the operational level identified as normal in Section 6.5.2.1(d) of Exhibit A to this Appendix, for units that do not produce electrical or thermal output.~~

35. The Agency proposes amending Appendix B Section 1.4(c)(7) to eliminate a reference to bias testing. Language was deleted for the reasons identical to errata item 32.

7) For each sorbent trap monitoring system, perform a RATA, on a µg/dscm basis~~, and a bias test~~.

36. The Agency proposes amending Appendix B section 1.4(c)(9)(A) to delete subsection ii. Language was removed in response to USEPA comments stating that the absence of cyclonic flow is not essential to the testing. Subsection i has been included in A due to the deletion of ii.

9) The owner or operator must provide adequate facilities for initial certification or recertification testing that include:

A) Sampling ports adequate for test methods applicable to such facility, such that~~:~~

~~i)~~ ~~V~~volumetric flow rate, pollutant concentration, and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

~~ii) A stack or duct free of cyclonic flow during performance tests is available, as demonstrated by applicable test methods and procedures.~~

37. The Agency proposes amending Appendix B Section 1.4(d)(1) to correct a minor error in syntax.

1) Redundant backups. The owner or operator of an optional redundant backup CEMS must comply with all the requirements for initial certification and recertification according to the procedures specified in paragraphs (a), (b), and (c) of this Section. The owner or operator must operate the redundant backup CEMS during all periods of unit operation, except for periods of calibration, quality assurance, maintenance, or repair. The owner or operator must perform upon the redundant backup CEMS all quality assurance and quality control procedures specified in Exhibit B to this Appendix, except that the daily assessments in Section 2.1 of Exhibit B to this Appendix are optional for days on which the redundant backup CEMS is not used to report emission data under this Part~~part~~. For any day on which a redundant backup CEMS is used to report emission data, the system must meet all of the applicable daily assessment criteria in Exhibit B to this Appendix.

38. The Agency proposes amending Appendix B Section 1.4(d)(2)(F) and (G) to delete references to electronic data submission. Language was deleted for reasons identical to errata item 29.

F) Each regular non-redundant backup CEMS must be represented in the monitoring plan required under Section 1.10 of this Appendix as a separate monitoring system, with unique system and component identification numbers. When like-kind replacement non-redundant backup analyzers are used, the owner or operator must represent each like-kind replacement analyzer used during a particular calendar quarter in the monitoring plan required under Section 1.10 of this Appendix as a component of a primary monitoring system. The owner or operator must also assign a unique component identification number to each like-kind replacement analyzer, beginning with the letters "LK" (e.g., "LK1," "LK2," etc.) and must specify the manufacturer, model and serial number of the like-kind replacement analyzer. This information may be added, deleted or updated as necessary, from quarter to quarter. The owner or operator must also report data from the like-kind replacement analyzer using the system identification number of the primary monitoring system and the assigned component identification number of the like-kind replacement analyzer. ~~For the purposes of the electronic quarterly report required under 40 CFR 75.64, incorporated by reference in Section 225.140, the owner or operator may manually enter the appropriate component identification~~

~~number(s) of any like-kind replacement analyzer(s) used for data reporting during the quarter.~~

G) When reporting data from a certified regular non-redundant backup CEMS, use a method of determination (MODC) code of "02." When reporting data from a like-kind replacement non-redundant backup analyzer, use a MODC of "17" (see Table 4a under Section 1.11 of this Appendix). ~~For the purposes of the electronic quarterly report required under 40 CFR 75.64, incorporated by reference in Section 225.140, the owner or operator may manually enter the required MODC of "17" for a like-kind replacement analyzer.~~

39. The Agency proposes amending Appendix B, Section 1.4(d)(2)(H) to correct an erroneous reference. The Agency also proposes amending subsection (e) of this Section to add the letter "a" that was inadvertently left out of a sentence.

H) For non-redundant backup mercury CEMS and sorbent trap monitoring systems, and for like-kind replacement mercury analyzers, the following provisions apply in addition to, or, in some cases, in lieu of, the general requirements in paragraphs (d)(2)(A) through (d)(2)(G~~H~~) of this Section:

e) Certification/recertification procedures for either peaking unit or by-pass stack/duct continuous emission monitoring systems. The owner or operator of either a peaking unit or a by-pass stack/duct continuous emission monitoring system must comply with all the requirements for certification or recertification according to the procedures specified in paragraphs (a), (b), and (c) of this Section, except as follows: the owner or operator need only perform one Nine-run relative accuracy test audit for certification or recertification of a flow monitor installed on the by-pass stack/duct or on the stack/duct used only by affected peaking unit(s). The relative accuracy test audit must be performed during normal operation of the peaking unit(s) or the by-pass stack/duct.

40. The Agency proposes amending Appendix B Section 1.6 to include more accurate references to the appendices to 40 CFR 60. This amendment is in response to comments from USEPA.

Section 1.6 Reference test methods

a) The owner or operator must use the following methods, which are found in appendi~~x~~ces A-1 through A-8 to 40 CFR 60, incorporated by reference in Section 225.140, or have been published by ASTM, to conduct the following tests: monitoring system tests for certification or recertification

of continuous mercury emission monitoring systems; the emission tests required under Section 1.15(c) and (d) of this Appendix; and required quality assurance and quality control tests:

1) Methods 1 or 1A in appendix A-1 to 40 CFR 60 are the reference methods for selection of sampling site and sample traverses.

2) Method 2 or its allowable alternatives, as provided in appendix A-1 to 40 CFR 60, incorporated by reference in Section 225.140, except for Methods 2B and 2E, are the reference methods for determination of volumetric flow.

3) Methods 3, 3A, or 3B in appendix A-2 to 40 CFR 60 are the reference methods for the determination of the dry molecular weight O_2 and CO_2 concentrations in the emissions.

4) Method 4 in appendix A-3 to 40 CFR 60 (either the standard procedure described in Section 8.1 of the method or the moisture approximation procedure described in Section 8.2 of the method) must be used to correct pollutant concentrations from a dry basis to a wet basis (or from a wet basis to a dry basis) and must be used when relative accuracy test audits of continuous moisture monitoring systems are conducted. For the purpose of determining the stack gas molecular weight, however, the alternative wet bulb-dry bulb technique for approximating the stack gas moisture content described in Section 2.2 of Method 4 may be used in lieu of the procedures in Sections 8.1 and 8.2 of the method.

5) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (incorporated by reference under Section 225.140) is the reference method for determining mercury concentration.

A) Alternatively, Method 29 in appendix A-8 to 40 CFR 60, incorporated by reference in Section 225.140, may be used, with these caveats: The procedures for preparation of mercury standards and sample analysis in Sections 13.4.1.1 through 13.4.1.3 ASTM D6784-02 (incorporated by reference under Section 225.140) must be followed

instead of the procedures in Sections 7.5.33 and 11.1.3 of Method 29 in appendix A-8 to 40 CFR 60, and the QA/QC procedures in Section 13.4.2 of ASTM D6784-02 (incorporated by reference under Section 225.140) must be performed instead of the procedures in Section 9.2.3 of Method 29 in appendix A-8 to 40 CFR 60. The tester may also opt to use the sample recovery and preparation procedures in ASTM D6784-02 (incorporated by reference under Section 225.140) instead of the Method 29 in appendix A-8 to 40 CFR 60 procedures, as follows: Sections 8.2.8 and 8.2.9.1 of Method 29 in appendix A-8 to 40 CFR 60 may be replaced with Sections 13.2.9.1 through 13.2.9.3 of ASTM D6784-02 (incorporated by reference under Section 225.140); Sections 8.2.9.2 and 8.2.9.3 of Method 29 in appendix A-8 to 40 CFR 60 may be replaced with Sections 13.2.10.1 through 13.2.10.4 of ASTM D6784-02 (incorporated by reference under Section 225.140); Section 8.3.4 of Method 29 in appendix A-8 to 40 CFR 60 may be replaced with Section 13.3.4 or 13.3.6 of ASTM D6784-02 (as appropriate) (incorporated by reference under Section 225.140); and Section 8.3.5 of Method 29 in appendix A-8 to 40 CFR 60 may be replaced with Section 13.3.5 or 13.3.6 of ASTM D6784-02 (as appropriate) (incorporated by reference under Section 225.140).

B) Whenever ASTM D6784-02 (incorporated by reference under Section 225.140) or Method 29 in appendix A-8 to 40 CFR 60, incorporated by reference in Section 225.140, is used, paired sampling trains are required. To validate a RATA run or an emission test run, the relative deviation (RD), calculated according to Section 11.6 of Exhibit D to this Appendix, must not exceed 10 percent, when the average concentration is greater than 1.0 $\mu g/m^3$. If the average concentration is less than or equal to 1.0 $\mu g/m^3$, the RD must not exceed 20 percent. The RD results are also acceptable if the absolute difference between the mercury concentrations measured by the paired trains does not exceed 0.03 $\mu g/m^3$. If the RD criterion is met, the run is valid. For each valid run, average the

mercury concentrations measured by the two trains (vapor phase, only).

C) Two additional reference methods in appendix A-8 to 40 CFR 60 that may be used to measure mercury concentration are: Method 30A, "Determination of Total Vapor Phase Mercury Emissions from Stationary Sources (Instrumental Analyzer Procedure)" and Method 30B, "Determination of Total Vapor Phase Mercury Emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps".

D) When Method 29 in appendix A-8 to 40 CFR 60, incorporated by reference in Section 225.140, or ASTM D6784- 02 (incorporated by reference under Section 225.140) is used for the mercury emission testing required under Section 1.15(c) and (d) of this Appendix, locate the reference method test points according to Section 8.1 of Method 30A, and if mercury stratification testing is part of the test protocol, follow the procedures in Sections 8.1.3 through 8.1.3.5 of Method 30A.

b) The owner or operator may use any of the following methods, which are found in appendix A to 40 CFR 60, incorporated by reference in Section 225.140, or have been published by ASTM, as a reference method backup monitoring system to provide quality-assured monitor data:

1) Method 3A in appendix A-2 to 40 CFR 60 for determining O_2 or CO_2 concentration;

2) Method 2 in appendix A-1 to 40 CFR 60, or its allowable alternatives, as provided in appendix A to 40 CFR 60, incorporated by reference in Section 225.140, except for Methods 2B and 2E, for determining volumetric flow. The sample point(s) for reference methods must be located according to the provisions of Section 6.5.4 of Exhibit A to this Appendix.

3) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (incorporated by reference under Section 225.140) for determining mercury concentration;

4) Method 29 in appendix A-8 to 40 CFR 60, incorporated by reference in Section 225.140, for determining mercury concentration;

5) Method 30A in appendix A-8 to 40 CFR 60 for determining mercury concentration; and

6) Method 30B in appendix A-8 to 40 CFR 60 for determining mercury concentration.

c) Instrumental EPA Reference Method 3A in appendices ~~appendix~~ A-2 ~~and A-4~~ of 40 CFR 60, incorporated by reference in Section 225.140, must be conducted using calibration gases as defined in Section 5 of Exhibit A to this Appendix. Otherwise, performance tests must be conducted and data reduced in accordance with the test methods and procedures of this part unless the Agency:

1) Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

2) Approves the use of an equivalent method; or

3) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

41. The Agency proposes amending Appendix B Section 1.7 to eliminate reference to bias testing.

Section 1.7 Out-of-control periods ~~and system bias testing~~

42. The Agency proposes amending Appendix B Section 1.7 to include language specifying what an out of control period is for a weekly system integrity check. Language was added as 1.7(a)(4) in response to USEPA comments and for reasons similar to errata item 23.

4) For weekly system integrity checks, an out-of-control period occurs when the error exceeds the applicable specification in Exhibit A to this Appendix.

43. The Agency proposes amending Appendix B Section 1.7(d) to remove references to bias testing. See errata item 32.

~~d) When the bias test indicates that a flow monitor, a diluent monitoring system, a mercury concentration monitoring system or a sorbent trap monitoring system is biased low (i.e., the arithmetic mean of the differences between the reference method value and the monitor or~~

~~monitoring system measurements in a relative accuracy test audit exceed the bias statistic in Section 7 of Exhibit A to this Appendix), the owner or operator must adjust the monitor or continuous emission monitoring system to eliminate the cause of bias such that it passes the bias test.~~

44. The Agency proposes amending Appendix B Section 1.8(a)(1) Equation 8. Add the language "or stack" in the numerator and denominator of the equation for a minor clarification.

$$\text{Percent monitor data availability} = \frac{\text{Total unit or stack operating hours for which quality-assured data was recorded for the calendar quarter}}{\text{Total unit or stack operating hours for the calendar quarter}} \times 100 \quad \text{(Eq. 8)}$$

45. The Agency proposes deleting Appendix B Section 1.10(c) to eliminate references to electronic data submission. See errata item 29.

~~c) Contents of monitoring plan for specific situations. The following additional information must be included in the monitoring plan for the specific situations described. For each monitoring system recertification, maintenance, or other event, the designated representative must include the following additional information in electronic format in the monitoring plan:~~

~~1) Component/system identification code;~~

~~2) Event code or code for required test;~~

~~3) Event begin date and hour;~~

~~4) Conditionally valid data period begin date and hour (if applicable);~~

~~5) Date and hour that last test is successfully completed; and~~

~~6) Indicator of whether conditionally valid data were reported at the end of the quarter.~~

46. The Agency proposes re-lettering Appendix B Section 1.10(d) due to the prior deletion of Section 1.10(c). Also, language was added to require electronic storage of data and to make the data available to the Agency upon request.

c~~d~~) Contents of the mercury monitoring plan. The requirements of paragraph (d) of this Section must be met on and after July 1, 2009. Each monitoring plan must contain the information in paragraph (d)(1) of this Section in

electronic format and the information in paragraph (d)(2) of this Section in hardcopy format. Electronic storage of all monitoring plan information, including the hardcopy portions, is permissible provided that a paper copy of the ~~information~~ entire monitoring plan can be furnished upon request for audit purposes.

1) ~~Electronic~~The following information must be retained on site in electronic storage and furnished to the Agency in hardcopy, upon request for audit purposes.

47. The Agency proposes amending Appendix B Section 1.10(a)(1)(B) to include moisture as a monitored parameter. Prior omission of moisture as a parameter was an oversight.

B) For each monitored parameter (i.e., mercury concentration, diluent concentration, moisture, or flow) at each monitoring location, specify the monitoring methodology for the parameter. If the unmonitored bypass stack approach is used for a particular parameter, indicate this by means of an appropriate code. Provide the activation date/hour, and deactivation date/hour (if applicable) for each monitoring methodology.

48. The Agency proposes deleting Appendix B Section 1.10(a)(1)(E)(vii). The references to default high range value only apply to SO_2 and NO_x, and are inappropriate for this section. The deletion was made in response to USEPA comments. A period was added to 1.10(a)(1)(E)(vi) to correct grammar.

vi) Effective date/hour, and (if applicable) inactivation date/hour of each span value~~;~~.

~~vii) The default high range value (if applicable) and the maximum allowable low range value for this option.~~

49. The Agency proposes amending Appendix B Section 1.10(a)(2)(B) to correct an erroneous reference.

B) Description of site locations for each monitoring component in the continuous emission monitoring systems, including schematic diagrams and engineering drawings specified in 40 CFR 75.53(g~~e~~)(2)(iv) and (g~~e~~)(2)(v), incorporated by reference in Section 225.140, and any other documentation that demonstrates each monitor location meets the appropriate siting criteria.

50. The Agency proposes amending Appendix B Section 1.10(a)(2)(D) to correct an erroneous reference.

D) For units monitored by a continuous emission monitoring system, a schematic diagram identifying entire gas handling system from boiler to stack for all affected units, using identification numbers for units, monitoring systems and components, and stacks corresponding to the identification numbers provided in paragraphs (c~~d~~)(1)(A) and (c~~d~~)(1)(C) of this Section. The schematic diagram must depict stack height and the height of any monitor locations. Comprehensive and/or separate schematic diagrams must be used to describe groups of units using a common stack.

51. The Agency proposes amending Appendix B Section 1.11(a)(5) to require hardcopy submission of monitoring plans submitted to the Agency.

5) The current monitoring plan as specified in Section 1.10 of this Appendix, beginning with the initial hardcopy submission to the Agency required by 40 CFR 75.62, incorporated by reference in Section 225.140; and

52. The Agency proposes amending Appendix B Section 1.11(b)(3) through (7) so that sources are required to submit hourly gross load or steam load, and not both. Subsequent subsections were renumbered appropriately. Deletion of language in (b)(4) and (7) was in response to USEPA comments and better reflects a revision to 40 CFR Part 75.

3) Hourly gross unit load (rounded to nearest MWge), or

~~4)~~ ~~S~~steam load in 1000 lbs/hr at stated temperatures and pressures, rounded to the nearest 1000 lbs/hr;

4~~5~~) Operating load range corresponding to hourly gross load of 1 to 10, except for units using a common stack, which may use up to 20 load ranges for stack gas~~or fuel~~ flow rate, as specified in the monitoring plan;

5~~6~~) Hourly heat input rate (mmBtu/hr, rounded to the nearest tenth);

6~~7~~) Identification code for formula used for heat input, as provided in Section 1.10 of this Appendix; and

7~~8~~) For Mercury CEMS units only, F-factor for heat input calculation ~~and indication of whether the diluent cap was used for heat input calculations for the hour~~.

53. The Agency proposes amending Appendix B Section 1.11(e)(1)(C) to remove an erroneous reference to sorbent trap systems. Section (e) deals only with CEMS monitoring, while (f) addresses sorbent trap systems. Also, amend 1.11(e)(1)(D) to use Codes 1-54, as Code 55 has been deleted in errata item 36.

C) Hourly mercury concentration (µg/scm, rounded to the nearest tenth); ~~For a particular pair of sorbent traps, this will be the flow-proportional average concentration for the data collection period;~~

D) Method of determination for hourly mercury concentration using Codes 1-54~~55~~ in Table 4a of this Section; and

54. The Agency proposes amending Appendix B Section 1.11(f)(8) Table 4a to remove Code 55. Code 55 was removed from the table to remove a reference to data substitution. Missing data procedures were removed in the initial filing of this rulemaking.

Table 4a.--
Codes for Method of Emissions and Flow Determination

Code	Hourly emissions/flow measurement or estimation method
1	Certified primary emission/flow monitoring system.
2	Certified backup emission/flow monitoring system.
3	Approved alternative monitoring system.
4	Reference method:
17	Like-kind replacement non-redundant backup analyzer.
32	Hourly Hg concentration determined from analysis of a single trap_multiplied by a factor of 1.111 when one of the paired traps is invalidated or damaged (See Exhibit D A~~ppendix K~~, section 8).
33	Hourly Hg concentration determined from the trap resulting in the higher Hg concentration when the relative deviation criterion for the paired traps is not met (See Exhibit D ~~Appendix K~~, section 8).
40	Fuel specific default value (or prorated default value) used for the hour.
54	Other quality assured methodologies approved through petition. These hours are included in missing data lookback and are treated as unavailable hours for percent monitor

availability calculations.
~~55 .... Other substitute data approved through petition. These hours are not included in missing data lookback and are treated as unavailable hours for percent monitor availability calculations.~~

55. The Agency proposes amending, in response to USEPA comments, Appendix B Section 1.13(a) to include a requirement that EGUs use "calibration gas" to calibrate and certify applicable equipment.

a) *Continuous emission monitoring systems.* The owner or operator must record the applicable information in this Section for each certified monitor or certified monitoring system (including certified backup monitors) measuring and recording emissions or flow from an affected unit. Further, the owner or operator must verify (e.g., by means of a certificate or data from the cylinder gas vendor or CEMS vendor) that only "calibration gas" (as defined in 40 CFR 72.2, incorporated by reference in Section 225.140 and in Exhibit A to this Appendix) is used for all required calibration error test, linearity checks, and system integrity checks.

56. The Agency proposes amending Appendix B Section 1.13(a)(1). System integrity checks are performed weekly, not daily. Language was changed in response to USEPA comments.

1) For each flow monitor, mercury monitor, or diluent gas monitor (including wet- and dry-basis O_2 monitors used to determine percent moisture), the owner or operator must record the following for all daily and 7-day calibration error tests, all ~~daily~~weekly system integrity checks, and all off-line calibration demonstrations, including any follow-up tests after corrective action:

57. The Agency proposes amending Appendix B Section 1.13(a)(1)(F) to include language necessary for system integrity checks. Measurement error, not calibration error, is appropriate for system integrity checks. Language was added in response to USEPA comments.

F) Percent calibration or measurement error (rounded to the nearest tenth of a percent) (flag if using alternative performance specification for low emitters or differential pressure flow monitors);

58. The Agency proposes amending Appendix B Section 1.13(a)(1)(I), (J), and (K). Language was removed because more general reference to calibration gasses has been added in 1.13(a). Subsections (J) and (K) have been appropriately re-lettered.

~~I) For 7-day calibration tests for certification or recertification, a certification from the cylinder gas vendor or CEMS vendor that calibration gas, as defined in 40 CFR 72.2, incorporated by reference in Section 225.140, and Exhibit A to this Appendix, was used to conduct calibration error testing;~~

I~~J~~) Description of any adjustments, corrective actions, or maintenance prior to a passed test or following a failed test; and

J~~K~~) Indication of whether the unit is off-line or on-line.

59. *The Agency proposes amending Appendix B Section 1.13(a)(3)(H) to include language for measurement error. Language was added for reasons identical to errata item 39.*

H) Linearity error or measurement error at each of the reference gas concentrations (rounded to nearest tenth of a percent) (flag if using alternative performance specification);

60. *The Agency proposes amending, in response to USEPA comments, Appendix B Section 1.13(a)(5)(B)(xii) to remove language that applies only to non-EGUs. Non-EGUs are not affected by this rule.*

xii) Average gross unit load, expressed as a total gross unit load, rounded to the nearest MWe, or as steam load, rounded to the nearest thousand lb/hr)~~, except for units that do not produce electrical or thermal output~~; and

61. *The Agency proposes amending Appendix B Section 1.13(a)(5)(C)(v) to remove language that applies only to non-EGUs. This was in response to comments from the USEPA.*

v) Relative accuracy test results, as specified in Equation A–10 in Exhibit A to this Appendix. For multi-~~level~~load flow monitor tests the relative accuracy test results must be recorded at each load ~~(or operating)~~ level tested. Each load ~~(or operating)~~ level must be expressed as a total gross unit load, rounded to the nearest MWe, or as steam load, rounded to the nearest thousand lb/hr~~, or as otherwise specified by the Agency, for units that do not produce electrical or thermal output~~;

62. The Agency proposes amending Appendix B Section 1.13(a)(5)(C)(vi) to remove references to bias testing. See errata item 32.

~~vi) Bias test results as specified in Section 7.4.4 in Exhibit A to this Appendix; and~~

63. The Agency proposes amending Appendix B Section 1.13(a)(5)(E) for a minor rewording. Language was changed in response to USEPA comments.

E) For flow monitors, the equation used to ~~linearize~~characterize the flow monitor and the numerical values of the polynomial coefficients or K factor(s) of that equation.

64. The Agency proposes amending Appendix B Section 1.13(a)(7)(D) to make a minor clarification that 3A is a reference method.

D) For each RATA using Reference Method ~~or~~3A in appendix A to 40 CFR 60, incorporated by reference in Section 225.140, to determine, CO_2, or O_2concentration:

65. The Agency proposes amending, in response to USEPA comments, Appendix B Section 1.13(a)(7)(G)(vi) through (x) to remove the "m" from the abbreviation of gram, as a "g" is the preferred and accepted abbreviation.

vi) Particle-bound mercury collected by the filter, blank, and probe rinse (µg~~m~~);

vii) Oxidized mercury collected by the KCl impingers (µg~~m~~);

viii) Elemental mercury collected in the HNO_3/H_2O_2 impinger and in the $KMnO_4/H_2SO_4$ impingers (µg~~m~~);

ix) Total mercury, including particle-bound mercury (µg~~m~~); and

x) Total mercury, excluding particle-bound mercury (µg~~m~~)

66. The Agency proposes amending Appendix B Section 1.13(a)(10)(B) and (C) to remove unnecessary references to testing of SO_2 and NO_x equipment.

B) For each reference method test run using Method ~~6C, 7E, or~~ 3A in appendix A to 40 CFR 60, incorporated by reference in Section 225.140, to determine ~~SO_2, NO_x,~~CO_2, or O_2 concentration:

i) Unit or stack identification number;

ii) The reference method system and component identification numbers;

iii) Run number;

iv) Run start date and hour;

v) Run end date and hour;

vi) The data in paragraphs (a)(7)(D)(ii) through (ix) and (xii) through (xv); and (vii) Stack gas density adjustment factor (if applicable).

C) For each reference method test run using Method ~~6C, 7E, or~~ 3A in appendix A to 40 CFR 60, incorporated by reference in Section 225.140, to determine ~~SO_2, NO_x,~~CO_2, or O_2 concentration:

67. The Agency proposes deleting Appendix B Section 1.13(a)(12)(A)(vi). Language was removed because it applies only to SO_2 monitor RATA exemptions. Subsection (vii) and (viii) have been re-numbered appropriately.

~~vi) Year to date hours of usage of fuel other than very low sulfur fuel;~~

vi~~i~~) Year to date hours of non-redundant back-up CEMS usage at the unit/stack; and

vii~~i~~) Quarter and year.

68. The Agency proposes amending Appendix B Sections 1.13(a)(12)(C) and (D). 1.13(a)(12)(C) was deleted because it refers only to fuel flow meters. Coal-fired units do not use fuel flow meters. Paragraph D has been re-lettered appropriately. Also, language applying only to non-EGUs was removed for reasons identical to errata item 33.

~~C) For a fuel flowmeter accuracy test extension:~~

~~i) Component-system identification code;~~

~~ii) Date of last accuracy test;~~

~~iii) Accuracy test expiration date without extension;~~

~~iv) Accuracy test expiration date with extension;~~

~~v) Type of extension; and~~

~~vi) Quarter and year.~~

C~~D~~) For a single-load ~~(or single-level)~~ flow RATA claim:

i) Monitoring system identification code;

ii) Ending date of last annual flow RATA;

iii) The relative frequency (percentage) of unit or stack operation at each load ~~(or operating)~~ level (low, mid, and high) since the previous annual flow RATA, to the nearest 0.1 percent;

iv) End date of the historical load ~~(or operating level)~~ data collection period; and

v) Indication of the load ~~(or operating)~~ level (low, mid or high) claimed for the single-load flow RATA.

69. The Agency proposes amending Appendix B Section 1.13(d) to remove a reference to missing data procedures. See errata item 36.

d) *DAHS Verification.* For each DAHS (~~missing data and~~ formula) verification that is required for initial certification, recertification, or for certain diagnostic testing of a monitoring system, record the date and hour that the DAHS verification is successfully completed. (This requirement only applies to units that report monitoring plan data in accordance with Section 1.10(d) of this Appendix.)

70. The Agency proposes amending Appendix B Section 1.14(a) to replace the general language "such a program" with the more specific "Part 225." Replaced language was unnecessarily vague.

a) Applicability. The owner or operator of a unit must comply with the requirements of this Appendix to the extent that compliance is required by Part 225. For purposes of this Appendix, the term "affected unit" means any coal-fired unit (as defined in 40 CFR 72.2, incorporated by reference)

that is subject to Part 225. The term "non-affected unit" means any unit that is not subject to ~~such a program~~Part 225, the term "permitting authority" means the Agency, and the term "designated representative" means the responsible party under Part 225.

71. The Agency proposes amending Appendix B Section 1.15(d)(1) to remove language referring to electronic submission of data. See errata item 29.

1) The results of the mercury emission testing performed under paragraph (c) of this Section must be submitted as a certification application to the permitting authority, no later than 45 days after the testing is completed. The calculations demonstrating that the unit emits 464 ounces (or less) per year of mercury must also be provided, and the default mercury concentration that will be used for reporting under Section 1.18 of this Appendix must be specified in ~~both~~ the ~~electronic and~~ hard copy portions of the monitoring plan for the unit. The methodology is considered to be provisionally certified as of the date and hour of completion of the mercury emission testing.

72. The Agency proposes amending Appendix B Section 1.15(d)(4)(C) for a minor rewording.

C) Thereafter, retesting ~~must~~ will be required either semiannually or annually (i.e., by the end of the second or fourth QA operating quarter following the quarter of the previous test), depending on the results of the previous test. To determine whether the next retest is due within two or four QA operating quarters, substitute the highest mercury concentration from the current test or 0.50 µg/scm (whichever is greater) into the equation in paragraph (c)(2) of this Section. If the estimated annual mercury mass emissions exceeds 144 ounces, the next test is due within two QA operating quarters. If the estimated annual mercury mass emissions is 144 ounces or less, the next test is due within four QA operating quarters.

73. The Agency proposes amending Appendix B Section 1.18(c)(3) to correct an erroneous reference.

3) Contents of the monitoring plan. Each monitoring plan must contain the information in Section 1.10(c~~d~~)(1) of this Appendix in electronic format and the information in Section 1.10(c~~d~~)(2) in hardcopy format.

74. The Agency proposes amending Appendix B Section 1.18(e) to remove references

to electronic data submission. See errata item 29.

e) Monitoring plan reporting.

~~1) Electronic submission. The designated representative for an affected unit must submit to the Agency and USEPA, or an alternate Agency designee if one is specified, a complete, electronic, up-to-date monitoring plan file in a format specified by the Agency for each affected unit or group of units monitored at a common stack and each non-affected unit under Section 1.16(b)(2)(B) of this Appendix, as follows: No later than 21 days prior to the commencement of initial certification testing; at the time of a certification or recertification application submission; and whenever an update of the electronic monitoring plan is required, either under Section 1.10 of this Appendix or elsewhere in this Appendix.~~

~~2) Hardcopy submission.~~ The designated representative of an affected unit must submit all of the hardcopy information required under Section 1.10 of this Appendix, for each affected unit or group of units monitored at a common stack and each non-affected unit under Section 1.16(b)(2)(B) of this Appendix, to the Agency prior to initial certification. Thereafter, the designated representative must submit hardcopy information only if that portion of the monitoring plan is revised. The designated representative must submit the required hardcopy information as follows: no later than 21 days prior to the commencement of initial certification testing; with any certification or recertification application, if a hardcopy monitoring plan change is associated with the recertification event; and within 30 days of any other event with which a hardcopy monitoring plan change is associated, pursuant to Section 1.10(b) of this Appendix. ~~Electronic submittal of all monitoring plan information, including hardcopy portions, is permissible provided that a paper copy of the hardcopy portions can be furnished upon request.~~

75. The Agency proposes amending Section 1.18(f) to include requirements for submitting quarterly reports in the appropriate manner, and to remove references to electronic data submission consistent with errata item 29.

f) Quarterly reports. <u>EGUs using CEMS or excepted monitoring systems must submit quarterly reports pursuant to the requirements in Section 225.290(b).</u>

~~1) Electronic submission. Electronic quarterly reports must be submitted, beginning with the calendar quarter containing the~~

~~compliance date in Section 1.14(b) of this Appendix, unless otherwise specified in 35 Ill. Admin. Code Part 225. The designated representative for an affected unit must report the data and information in this paragraph (f)(1) and the applicable compliance certification information in paragraph (f)(2) of this Section to the Agency and USEPA, or an alternate Agency designee if one is specified, quarterly in a format specified by the Agency, except as otherwise provided in 40 CFR 75.64(a), incorporated by reference in Section 225.140, for units in long-term cold storage. Each electronic report must be submitted to the Agency within 45 days following the end of each calendar quarter. Except as otherwise provided in 40 CFR 75.64(a)(4) and (a)(5), incorporated by reference in Section 225.140, each electronic report must include the date of report generation and the following information for each affected unit or group of units monitored at a common stack:~~

~~A) The facility information in 40 CFR 75.64(a)(3), incorporated by reference in Section 225.140; and~~

~~B) The information and hourly data required in paragraphs (a) and (b) of this Section, except for:~~

~~i) Descriptions of adjustments, corrective action, and maintenance;~~

~~ii) Information which is incompatible with electronic reporting (e.g., field data sheets, lab analyses, quality control plan);~~

~~iii) For units with flue gas desulfurization systems or with add-on mercury emission controls, the parametric information in Section 1.12 of this Appendix;~~

~~iv) Information required by Section 1.11(d) of this Appendix concerning the causes of any missing data periods and the actions taken to cure such causes;~~

~~v) Hardcopy monitoring plan information required by Section 1.10 of this Appendix and hardcopy test data and results required by Section 1.13 of this Appendix;~~

~~vi) Records of flow polynomial equations and~~

~~numerical values required by Section 1.13(a)(5)(E) of this Appendix;~~

~~vii) Stratification test results required as part of the RATA supplementary records under Section 1.13(a)(7) of this Appendix;~~

~~viii) Data and results of RATAs that are aborted or invalidated due to problems with the reference method or operational problems with the unit and data and results of linearity checks that are aborted or invalidated due to operational problems with the unit;~~

~~ix) Supplementary RATA information required under Section 1.13(a)(7) of this Appendix, except that: the applicable data elements under Section 1.13(a)(7)(B)(i) through (xx) of this Appendix and under Section 1.13(a)(7)(C)(i) through (xiii) of this Appendix must be reported for flow RATAs at circular or rectangular stacks (or ducts) in which angular compensation for yaw and/or pitch angles is used (i.e., Method 2F or 2G in appendices A-1 and A-2 to 40 CFR 60, incorporated by reference in Section 225.140), with or without wall effects adjustments; the applicable data elements under Section 1.13(a)(7)(B)(i) through (xx) of this Appendix and under Section 1.13(a)(7)(C)(i) through (xiii) of this Appendix must be reported for any flow RATA run at a circular stack in which Method 2 in appendices A-1 and A-2 to 40 CFR 60, incorporated by reference in Section 225.140, is used and a wall effects adjustment factor is determined by direct measurement; the data under Section 1.13(a)(7)(B)(xx) of this Appendix must be reported for all flow RATAs at circular stacks in which Method 2 in appendices A-1 and A-2 to 40 CFR 60, incorporated by reference in Section 225.140, is used and a default wall effects adjustment factor is applied; and the data under Section 1.13(a)(7)(I)(i) through (vi) must be reported for all flow RATAs at rectangular stacks or ducts in which Method 2 in appendices A-1 and A-2 to 40 CFR 60, incorporated by reference in Section 225.140, is used and a wall effects adjustment factor is applied.~~

x) For units using sorbent trap monitoring systems, the hourly gas flow meter readings taken between the initial and final meter readings for the data collection period; and

C) Ounces of mercury emitted during quarter and cumulative ounces of mercury emitted in the year-to-date (rounded to the nearest thousandth); and

D) Unit or stack operating hours for quarter, cumulative unit or stack operating hours for year-to-date; and

E) Reporting period heat input (if applicable) and cumulative, year-to-date heat input.

2) Compliance certification.

A) The designated representative must certify that the monitoring plan information in each quarterly electronic report (i.e., component and system identification codes, formulas, etc.) represent current operating conditions for the affected unit(s)

B) The designated representative must submit and sign a compliance certification in support of each quarterly emissions monitoring report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification must state that:

i) The monitoring data submitted were recorded in accordance with the applicable requirements of this Appendix, including the quality assurance procedures and specifications; and

ii) With regard to a unit with an FGD system or with add-on mercury emission controls, that for all hours where mercury data is missing in accordance with Section 1.13(b) of this Appendix, the add-on emission controls were operating within the range of parameters listed in the quality-assurance plan for the unit (or that quality-assured SO_2 CEMS data were available to document proper operation of the emission controls).

~~3) Additional reporting requirements. The designated representative must also comply with all of the quarterly reporting requirements in 40 CFR 75.64(d), (f), and (g), incorporated by reference in Section 225.140.~~

76. The Agency proposes amending Exhibit A, Section 2.1 to reflect language in Exhibit A, Section 2.1.3.4, which provides that Section 2.1 does not apply to mercury monitoring systems.

2.1 Instrument Span and Range

In implementing Sections 2.1.1 through 2.1.2 of this Exhibit, set the measurement range for each parameter (CO_2, O_2, or flow rate) high enough to prevent full-scale exceedances from occurring, yet low enough to ensure good measurement accuracy and to maintain a high signal-to-noise ratio. To meet these objectives, select the range such that the majority of the readings obtained during typical unit operation are kept, to the extent practicable, between 20.0 and 80.0 percent of the full-scale range of the instrument. These guidelines do not apply to mercury monitoring systems.

77. The Agency proposes amending Exhibit A, Section 2.1.1. In response to a request at the December 17, 2008, hearing, the Agency proposes deleting electronic recordkeeping and/or reporting requirements where appropriate.

2.1.1 CO_2 and O_2 Monitors

For an O_2 monitor (including O_2 monitors used to measure CO_2 emissions or percentage moisture), select a span value between 15.0 and 25.0 percent O_2. For a CO_2 monitor installed on a boiler, select a span value between 14.0 and 20.0 percent CO_2. For a CO_2 monitor installed on a combustion turbine, an alternative span value between 6.0 and 14.0 percent CO_2 may be used. An alternative CO_2 span value below 6.0 percent may be used if an appropriate technical justification is included in the hardcopy monitoring plan. An alternative O_2 span value below 15.0 percent O_2 may be used if an appropriate technical justification is included in the monitoring plan (e.g., O_2 concentrations above a certain level create an unsafe operating condition). Select the full-scale range of the instrument to be consistent with Section 2.1 of this Exhibit and to be greater than or equal to the span value. Select the calibration gas concentrations for the daily calibration error tests and linearity checks in accordance with Section 5.1 of this Exhibit, as percentages of the span value. For O_2 monitors with span values >=21.0 percent O_2, purified instrument air containing 20.9 percent O_2 may be used as the high-level calibration material. If a dual-range or autoranging diluent analyzer is installed, the analyzer may be represented in the monitoring plan as a single component~~, using a special component type code specified by the USEPA to satisfy the requirements of 40 CFR 75.53(e)(1)(iv)(D), incorporated by reference in Section 225.140~~.

78. In response to a comment received from USEPA, the Agency proposes amending

Exhibit A, Section 2.1.2.1 to delete portions regarding units that do not produce electrical or thermal output, as such units are not subject to the Agency's proposed rule.

2.1.2.1 Maximum Potential Velocity and Flow Rate

For this purpose, determine the span value of the flow monitor using the following procedure. Calculate the maximum potential velocity (MPV) using Equation A-3a or A-3b or determine the MPV (wet basis) from velocity traverse testing using Reference Method 2 (or its allowable alternatives) in appendix A to 40 CFR 60, incorporated by reference in Section 225.140. If using test values, use the highest average velocity (determined from the Method 2 traverses) measured at or near the maximum unit operating load ~~(or, for units that do not produce electrical or thermal output, at the normal process operating conditions corresponding to the maximum stack gas flow rate)~~. Express the MPV in units of wet standard feet per minute (fpm). For the purpose of providing substitute data during periods of missing flow rate data in accordance with Sec 75.31 and 75.33 of 40 CFR Part 75 and as required elsewhere in this part, calculate the maximum potential stack gas flow rate (MPF) in units of standard cubic feet per hour (scfh), as the product of the MPV (in units of wet, standard fpm) times 60, times the cross-sectional area of the stack or duct (in ft^2) at the flow monitor location.

79. In response to a request at the December 17, 2008, hearing that the Agency delete remaining references to bias adjustment factor if appropriate, the Agency proposes deleting Exhibit A, Sections 3.4, 3.4.1, and 3.4.2, and renumbering Section 3.5 accordingly.

~~3.4 Bias~~

~~3.4.1 Flow Monitors~~

~~Flow monitors must not be biased low as determined by the test procedure in Section 7.4 of this Exhibit. The bias specification applies to all flow monitors including those measuring an average gas velocity of 10.0 fps or less.~~

~~3.4.2 Mercury Monitoring Systems~~

~~Mercury concentration monitoring systems and sorbent trap monitoring systems must not be biased low as determined by the test procedure in Section 7.4 of this Exhibit.~~

3.4~~5~~ Cycle Time

The cycle time for mercury concentration monitors, oxygen monitors used to determine percent moisture, and any other monitoring component of a continuous emission monitoring system that is required to perform a cycle time test must not exceed 15 minutes.

80. The Agency proposes amending Exhibit A, Section 6.3.2 by changing the date in subsection (a) to July 1, 2009, in order to be consistent with dates in Part 225.

6.3.2 Flow Monitor 7-day Calibration Error Test

Flow monitors installed on peaking units (as defined in 40 CFR 72.2, incorporated by reference in Section 225.140) are exempted from the 7-day calibration error test requirements of this part. In all other cases, perform the 7-day calibration error test of a flow monitor, when required for certification, recertification or diagnostic testing, according to the following procedures. Introduce the reference signal corresponding to the values specified in Section 2.2.2.1 of this Exhibit to the probe tip (or equivalent), or to the transducer. During the 7-day certification test period, conduct the calibration error test while the unit is operating once each unit operating day (as close to 24-hour intervals as practicable). In the event that unit outages occur after the commencement of the test, the 7 consecutive operating days need not be 7 consecutive calendar days. Record the flow monitor responses by means of the data acquisition and handling system. Calculate the calibration error using Equation A-6 of this Exhibit. Do not perform any corrective maintenance, repair, or replacement upon the flow monitor during the 7-day test period other than that required in the quality assurance/quality control plan required by Exhibit B to this Appendix. Do not make adjustments between the zero and high reference level measurements on any day during the 7-day test. If the flow monitor operates within the calibration error performance specification (i.e., less than or equal to 3.0 percent error each day and requiring no corrective maintenance, repair, or replacement during the 7-day test period), the flow monitor passes the calibration error test. Record all maintenance activities and the magnitude of any adjustments. Record output readings from the data acquisition and handling system before and after all adjustments. Record and report all calibration error test results using the unadjusted flow rate measured in the calibration error test prior to resetting the calibration. Record all adjustments made during the 7-day period at the time the adjustment is made, and report them in the certification or recertification application. The status of emissions data from a flow monitor prior to and during a 7-day calibration error test period must be determined as follows:

(a) For initial certification, data from the monitor are considered invalid until all certification tests, including the 7-day calibration error test, have been successfully completed, unless the conditional data validation procedures in Section 1.4(b)(3) of this Appendix are used. When the procedures in Section 1.4(b)(3) of this Appendix are followed, the words "initial certification" apply instead of "recertification," and complete all of the initial certification tests by July~~January~~ 1, 2009, rather than within the time periods specified in Section 1.4(b)(3)(D) of this Appendix for the individual tests.

(b) When a 7-day calibration error test is required as a diagnostic test or for recertification, use the data validation procedures in Section 1.4(b)(3).

$$CE = \frac{|R - A|}{S} \times 100 \qquad \text{(Equation A-6)}$$

where:

CE = Calibration error as a percentage of span.

R = Low or high level reference value specified in Section 2.2.2.1 of this Exhibit.

A = Actual flow monitor response to the reference value.

S = Flow monitor calibration span value as determined under Section 2.1.2.2 of this Exhibit.

81. The Agency proposes amending Exhibit A, Section 6.4 to change references to January 1, 2009, to July 1, 2009, in order to be consistent with dates in Part 225.

6.4 Cycle Time Test

Perform cycle time tests for each pollutant concentration monitor and continuous emission monitoring system while the unit is operating, according to the following procedures. Use a zero-level and a high-level calibration gas (as defined in Section 5.2 of this Exhibit) alternately. For mercury monitors, the calibration gas used for this test may either be the elemental or oxidized form of mercury. To determine the downscale cycle time, measure the concentration of the flue gas emissions until the response stabilizes. Record the stable emissions value. Inject a zero-level concentration calibration gas into the probe tip (or injection port leading to the calibration cell, for in situ systems with no probe). Record the time of the zero gas injection, using the data acquisition and handling system (DAHS). Next, allow the monitor to measure the concentration of the zero gas until the response stabilizes. Record the stable ending calibration gas reading. Determine the downscale cycle time as the time it takes for 95.0 percent of the step change to be achieved between the stable stack emissions value and the stable ending zero gas reading. Then repeat the procedure, starting with stable stack emissions and injecting the high-level gas, to determine the upscale cycle time, which is the time it takes for 95.0 percent of the step change to be achieved between the stable stack emissions value and the stable ending high-level gas reading. Use the following criteria to assess when a stable reading of stack emissions or calibration gas concentration has been attained. A stable value is equivalent to a reading with a change of less than 2.0 percent of the span value for 2 minutes, or a reading with a change of less than 6.0 percent from the measured average concentration over 6 minutes. Alternatively, the reading is considered stable if it changes by no more than 0.5 ppm, 0.5 $\mu g/m^3$ (for mercury) for two minutes. (Owners or operators of systems which do not record data in 1-minute or 3-minute intervals may petition the Agency for alternative stabilization criteria). For monitors or monitoring systems that perform a series of operations (such as purge, sample, and analyze), time the injections of the calibration gases so they will

produce the longest possible cycle time. Refer to Figures 6a and 6b in this Exhibit for example calculations of upscale and downscale cycle times. Report the slower of the two cycle times (upscale or downscale) as the cycle time for the analyzer. On and after July~~January~~ 1, 2009, record the cycle time for each component analyzer separately. For time-shared systems, perform the cycle time tests at each probe locations that will be polled within the same 15-minute period during monitoring system operations. To determine the cycle time for time-shared systems, at each monitoring location, report the sum of the cycle time observed at that monitoring location plus the sum of the time required for all purge cycles (as determined by the continuous emission monitoring system manufacturer) at each of the probe locations of the time-shared systems. For monitors with dual ranges, report the test results for each range separately. Cycle time test results are acceptable for monitor or monitoring system certification, recertification or diagnostic testing if none of the cycle times exceed 15 minutes. The status of emissions data from a monitor prior to and during a cycle time test period must be determined as follows:

(a) For initial certification, data from the monitor are considered invalid until all certification tests, including the cycle time test, have been successfully completed, unless the conditional data validation procedures in Section 1.4(b)(3) of this Appendix are used. When the procedures in Section 1.4(b)(3) of this Appendix are followed, the words "initial certification" apply instead of "recertification," and complete all of the initial certification tests by July~~January~~ 1, 2009, rather than within the time periods specified in Section 1.4(b)(3)(D) of this Appendix for the individual tests.

(b) When a cycle time test is required as a diagnostic test or for recertification, use the data validation procedures in Section 1.4(b)(3) of this Appendix.

82. *In response to a request at the December 17, 2008, hearing that the Agency delete remaining references to bias adjustment factor if appropriate, the Agency proposes deleting the reference to bias tests in the title of Exhibit A, Section 6.5.*

6.5 Relative Accuracy ~~and Bias Tests~~ (General Procedures)

83. *In response to a comment received from USEPA, the Agency proposes deleting subsection (e) of Exhibit A, Section 6.5.2, as units that do not produce electrical or thermal output are not subject to the Agency's proposed rule.*

6.5.2 Flow Monitor RATAs (Special Considerations)

(a) Except as otherwise provided in paragraph (b) ~~or (e)~~ of this Section, perform relative accuracy test audits for the initial certification of each flow monitor at three different exhaust gas velocities (low, mid, and high), corresponding to three different load levels or operating levels within the range of operation, as defined in Section 6.5.2.1 of this Exhibit. For a common stack/duct, the three different exhaust gas

velocities may be obtained from frequently used unit/load or operating level combinations for the units exhausting to the common stack. Select the three exhaust gas velocities such that the audit points at adjacent load or operating levels (i.e., low and mid or mid and high), in megawatts (or in thousands of lb/hr of steam production or in ft/sec, as applicable), are separated by no less than 25.0 percent of the range of operation, as defined in Section 6.5.2.1 of this Exhibit.

(b) For flow monitors on bypass stacks/ducts and peaking units, the flow monitor relative accuracy test audits for initial certification and recertification must be single-load tests, performed at the normal load, as defined in Section 6.5.2.1(d) of this Exhibit.

(c) Flow monitor recertification RATAs must be done at three load level(s) (or three operating levels), unless otherwise specified in paragraph (b) ~~or (e)~~ of this Section or unless otherwise specified or approved by the Agency.

(d) The semiannual and annual quality assurance flow monitor RATAs required under Exhibit B to this Appendix must be done at the load level(s) (or operating levels) specified in Section 2.3.1.3 of Exhibit B to this Appendix.

~~(e) For flow monitors installed on units that do not produce electrical or thermal output, the flow RATAs for initial certification or recertification may be done at fewer than three operating levels, if:~~

~~(1) The owner or operator provides a technical justification in the hardcopy portion of the monitoring plan for the unit required under 40 CFR 75.53(e)(2), incorporated by reference in Section 225.140, demonstrating that the unit operates at only one level or two levels during normal operation (excluding unit startup and shutdown). Appropriate documentation and data must be provided to support the claim of single-level or two-level operation; and~~

~~(2) The justification provided in paragraph (e)(1) of this Section is deemed to be acceptable by the permitting authority.~~

84. In response to a comment received from USEPA, the Agency proposes amending Exhibit A, Section 6.5.2.1 to delete portions of the Section concerning units that do not produce electrical or thermal output, as such units are not subject to the Agency's proposed rule.

6.5.2.1 Range of Operation and Normal Load (or Operating) Level(s)

(a) The owner or operator must determine the upper and lower boundaries of the "range of operation" as follows for each unit (or combination of units, for common stack configurations):

~~(1)~~ For affected units that produce electrical output (in megawatts) or thermal output (in klb/hr of steam production or mmBtu/hr), the lower boundary of the range of operation of a unit must be the minimum safe, stable loads for any of the units discharging through the stack. Alternatively, for a group of frequently-operated units that serve a common stack, the sum of the minimum safe, stable loads for the individual units may be used as the lower boundary of the range of operation. The upper boundary of the range of operation of a unit must be the maximum sustainable load. The "maximum sustainable load" is the higher of either: the nameplate or rated capacity of the unit, less any physical or regulatory limitations or other deratings; or the highest sustainable load, based on at least four quarters of representative historical operating data. For common stacks, the maximum sustainable load is the sum of all of the maximum sustainable loads of the individual units discharging through the stack, unless this load is unattainable in practice, in which case use the highest sustainable combined load for the units that discharge through the stack. Based on at least four quarters of representative historical operating data. The load values for the unit(s) must be expressed either in units of megawatts of thousands of lb/hr of steam load or mmBtu/hr of thermal output.~~; or~~

~~(2) For affected units that do not produce electrical or thermal output, the lower boundary of the range of operation must be the minimum expected flue gas velocity (in ft/sec) during normal, stable operation of the unit. The upper boundary of the range of operation must be the maximum potential flue gas velocity (in ft/sec) as defined in Section 2.1.2.1 of this Exhibit. The minimum expected and maximum potential velocities may be derived from the results of reference method testing or by using Equation A-3a or A-3b (as applicable) in Section 2.1.2.1 of this Exhibit. If Equation A-3a or A-3b is used to determine the minimum expected velocity, replace the word "maximum" with the word "minimum" in the definitions of "MPV," "Hf," "$\%O_{2d}$," and "$\%H_20$," and replace the word "minimum" with the word "maximum" in the definition of "CO_{2d}." Alternatively, 0.0 ft/sec may be used as the lower boundary of the range of operation.~~

(b) The operating levels for relative accuracy test audits will, except for peaking units, be defined as follows: the "low" operating level will be the first 30.0 percent of the range of operation; the "mid" operating level will be the middle portion (>30.0 percent, but <=60.0 percent) of the range of operation; and the "high" operating level will be the upper end (>60.0 percent) of the range of operation. For example, if the upper and lower boundaries of the range of operation are 100 and 1100 megawatts, respectively, then the low, mid, and high operating levels would be 100 to 400 megawatts, 400 to 700 megawatts, and 700 to 1100 megawatts, respectively.

(c) ~~Units that do not produce electrical or thermal output are exempted from the requirements of this paragraph, (c).~~ The owner or operator must identify, for each affected unit or common stack, the "normal" load level or levels (low, mid or high), based on the operating history of the unit(s). To identify the normal load level(s), the owner or operator must, at a minimum, determine the relative number of operating hours at each of the three load levels, low, mid and high over the past four

representative operating quarters. The owner or operator must determine, to the nearest 0.1 percent, the percentage of the time that each load level (low, mid, high) has been used during that time period. A summary of the data used for this determination and the calculated results must be kept on-site in a format suitable for inspection. For new units or newly-affected units, the data analysis in this paragraph may be based on fewer than four quarters of data if fewer than four representative quarters of historical load data are available. Or, if no historical load data are available, the owner or operator may designate the normal load based on the expected or projected manner of operating the unit. However, in either case, once four quarters of representative data become available, the historical load analysis must be repeated.

(d) Determination of normal load (or operating level)

~~(1)~~ Based on the analysis of the historical load data described in paragraph (c) of this Section, the owner or operator must, for units that produce electrical or thermal output, designate the most frequently used load level as the normal load level for the unit (or combination of units, for common stacks). The owner or operator may also designate the second most frequently used load level as an additional normal load level for the unit or stack. If the manner of operation of the unit changes significantly, such that the designated normal load(s) or the two most frequently used load levels change, the owner or operator must repeat the historical load analysis and must redesignate the normal load(s) and the two most frequently used load levels, as appropriate. A minimum of two representative quarters of historical load data are required to document that a change in the manner of unit operation has occurred. Update the electronic monitoring plan whenever the normal load level(s) and the two most frequently-used load levels are redesignated.

~~(2) For units that do not produce electrical or thermal output, the normal operating level(s) must be determined using sound engineering judgment, based on knowledge of the unit and operating experience with the industrial process.~~

(e) The owner or operator must report the upper and lower boundaries of the range of operation for each unit (or combination of units, for common stacks), in units of megawatts or thousands of lb/hr or mmBtu/hr of steam production or ft/sec (as applicable), in the electronic monitoring plan required under Section 1.10 of this Appendix.

85. *The Agency proposes amending Exhibit A, Section 6.5.2.2 to delete a reference to Section 6.5.2(e). The Agency is proposing to delete Section 6.5.2(e).*

6.5.2.2 Multi-Load (or Multi-Level) Flow RATA Results

For each multi-load (or multi-level) flow RATA, calculate the flow monitor relative accuracy at each operating level. If a flow monitor relative accuracy test is failed or aborted due to a problem with the monitor on any level of a 2-level (or 3-level) relative accuracy test audit, the RATA must be repeated at that load (or operating)

level. However, the entire 2-level (or 3-level) relative accuracy test audit does not have to be repeated unless the flow monitor polynomial coefficients or K-factor(s) are changed, in which case a 3- level RATA is required ~~(or, a 2-level RATA, for units demonstrated to operate at only two levels, under Section 6.5.2(e) of this Exhibit)~~.

86. *In response to a request at the December 17, 2008, hearing that the Agency delete remaining references to bias adjustment factor if appropriate, the Agency proposes deleting Exhibit A, Sections 7.4, 7.4.1, 7.4.2, 7.4.3, and 7.4.4.*

~~7.4 Bias Test~~

~~Test the following relative accuracy test audit data sets for bias: flow monitors; mercury concentration monitoring systems, and sorbent trap monitoring systems, using the procedures outlined in Sections 7.4.1 through 7.4.4 of this Exhibit. For multiple-load flow RATAs, perform a bias test at each load level designated as normal under Section 6.5.2.1 of this Exhibit.~~

~~7.4.1 Arithmetic Mean~~

~~Calculate the arithmetic mean of the difference, "d", of the data set using Equation A-7 of this Exhibit. To calculate bias for a flow monitor, "d" is, for each paired data point, the difference between the flow rate values (in scfh) obtained from the reference method and the monitor. To calculate bias for a mercury monitoring system when using the Ontario Hydro Method or Method 29 in appendix A-8 to 40 CFR 60, incorporated by reference in Section 225.140, "d" is, for each data point, the difference between the average mercury concentration value (in $\mu g/m^3$) from the paired Ontario Hydro or Method 29 in appendix A-8 to 40 CFR 60 sampling trains and the concentration measured by the monitoring system. For sorbent trap monitoring systems, use the average mercury concentration measured by the paired traps in the calculation of "d".~~

~~7.4.2 Standard Deviation~~

~~Calculate the standard deviation, S_d, of the data set using Equation A-8.~~

~~7.4.3 Confidence Coefficient~~

~~Calculate the confidence coefficient, cc, of the data set using Equation A-9.~~

~~7.4.4 Bias Test~~

~~If, for the relative accuracy test audit data set being tested, the mean difference, d, is less than or equal to the absolute value of the confidence coefficient, $|cc|$, the monitor or monitoring system has passed the bias test. If the mean difference, d, is greater than the absolute value of the confidence coefficient, $|cc|$, the monitor or monitoring system has failed to meet the bias test requirement.~~

87. *In response to a comment received from USEPA, the Agency proposes amending Exhibit A, Section 7.6 to delete portions of the Section concerning units that do not produce electrical or thermal output, as such units are not subject to the Agency's proposed rule.*

7.6 Flow-to-Load Test Exemptions

~~(a)~~ For complex stack configurations (e.g., when the effluent from a unit is divided and discharges through multiple stacks in such a manner that the flow rate in the individual stacks cannot be correlated with unit load), the owner or operator may petition the USEPA under 40 CFR 75.66, incorporated by reference in Section 225.140, for an exemption from the requirements of Section 7.7 to Appendix A to 40 CFR Part 75 and Section 2.2.5 of Exhibit B to Appendix B. The petition must include sufficient information and data to demonstrate that a flow-to-load or gross heat rate evaluation is infeasible for the complex stack configuration.

~~(b) Units that do not produce electrical output (in megawatts) or thermal output (in klb of steam per hour) are exempted from the flow-to-load ratio test requirements of Section 7.5 of this Exhibit and Section 2.2.5 of Exhibit B to Appendix B.~~

88. *In response to a comment received from USEPA, the Agency proposes amending Section 2.3.1.3(b) of Exhibit B to remove references to Section 6.5.2(e) of Exhibit A. Section 6.5.2(e) concerns EGUs not producing electricity.*

2.3.1.3 RATA Load (or Operating) Levels and Additional RATA Requirements

(a) For CO_2 or O_2 diluent monitors used to determine heat input, mercury concentration monitoring systems, sorbent trap monitoring systems, moisture monitoring systems, the required semiannual or annual RATA tests must be done at the load level (or operating level) designated as normal under Section 6.5.2.1(d) of Exhibit A to this Appendix. If two load levels (or operating levels) are designated as normal, the required RATA(s) may be done at either load level (or operating level).

(b) For flow monitors installed and bypass stacks~~, and for flow monitors that qualify to perform only single-level RATAs under Section 6.5.2(e) of Exhibit A to this Appendix,~~ all required semiannual or annual relative accuracy test audits must be single-load (or single-level) audits at the normal load (or operating level), as defined in Section 6.5.2.1(d) of Exhibit A to this Appendix.

(c) For all other flow monitors, the RATAs must be performed as follows:

(1) An annual 2-load (or 2-level) flow RATA must be done at the two most frequently used load levels (or operating levels), as determined under Section

6.5.2.1(d) of Exhibit A to this Appendix~~, or (if applicable) at the operating levels determined under Section 6.5.2(e) of Exhibit A to this Appendix~~. Alternatively, a 3-load (or 3-level) flow RATA at the low, mid, and high load levels (or operating levels), as defined under Section 6.5.2.1(b) of Exhibit A to this Appendix, may be performed in lieu of the 2-load (or 2-level) annual RATA.

(2) If the flow monitor is on a semiannual RATA frequency, 2-load (or 2-level) flow RATAs and single-load (or single-level) flow RATAs at the normal load level (or normal operating level) may be performed alternately.

(3) A single-load (or single-level) annual flow RATA may be performed in lieu of the 2-load (or 2-level) RATA if the results of an historical load data analysis show that in the time period extending from the ending date of the last annual flow RATA to a date that is no more than 21 days prior to the date of the current annual flow RATA, the unit (or combination of units, for a common stack) has operated at a single load level (or operating level) (low, mid, or high), for >=85.0 percent of the time. Alternatively, a flow monitor may qualify for a single-load (or single-level) RATA if the 85.0 percent criterion is met in the time period extending from the beginning of the quarter in which the last annual flow RATA was performed through the end of the calendar quarter preceding the quarter of current annual flow RATA.

(4) A 3-load (or 3-level) RATA, at the low-, mid-, and high-load levels (or operating levels), as determined under Section 6.5.2.1 of Exhibit A to this Appendix, must be performed at least once every twenty consecutive calendar quarters, except for flow monitors that are exempted from 3-load (or 3-level) RATA testing under Section 6.5.2(b) ~~or 6.5.2(e)~~ of Exhibit A to this Appendix.

(5) A 3-load (or 3-level) RATA is required whenever a flow monitor is re-linearized, i.e., when its polynomial coefficients or K factor(s) are changed, except for flow monitors that are exempted from 3-load (or 3-level) RATA testing under Section 6.5.2(b) ~~or 6.5.2(e)~~ of Exhibit A to this Appendix. For monitors so exempted under Section 6.5.2(b), a single-load flow RATA is required. ~~For monitors so exempted under Section 6.5.2(e), either a single-level RATA or a 2-level RATA is required, depending on the number of operating levels documented in the monitoring plan for the unit.~~

(6) For all multi-level flow audits, the audit points at adjacent load levels or at adjacent operating levels (e.g., mid and high) must be separated by no less than 25.0 percent of the "range of operation," as defined in Section 6.5.2.1 of Exhibit A to this Appendix.

(d) A RATA of a moisture monitoring system must be performed whenever the coefficient, K factor or mathematical algorithm determined under Section 6.5.6 of Exhibit A to this Appendix is changed.

89. In response to a request at hearing on December 17, 2008, the Agency proposes

removing subsection 2.3.2(h) and (i) of Exhibit B, as they concern bias tests.

2.3.2 Data Validation

***

~~(h) Each time that a hands-off RATA of a mercury concentration monitoring system, a sorbent trap monitoring system, or a flow monitor is passed, perform a bias test in accordance with Section 7.4.4 of Exhibit A to this Appendix.~~

~~(i) Failure of the bias test does not result in the monitoring system being out-of-control.~~

90. In response to a comment received from USEPA, the Agency proposes amending Footnote 2 in Figure 1 to Exhibit B to remove references to Section 6.5.2(e) to Exhibit A. Section 6.5.2(e) concerns EGUs not producing electricity.

[FN2] For flow monitors installed on peaking units, bypass stacks~~, or units that qualify for single-level RATA testing under Section 6.5.2(e) of this part,~~ conduct all RATAs at a single, normal load (or operating level). For other flow monitors, conduct annual RATAs at two load levels (or operating levels). Alternating single-load and 2-load (or single-level and 2-level) RATAs may be done if a monitor is on a semiannual frequency. A single-load (or single-level) RATA may be done in lieu of a 2-load (or 2-level) RATA if, since the last annual flow RATA, the unit has operated at one load level (or operating level) for >=85.0 percent of the time. A 3-level RATA is required at least once every five calendar years and whenever a flow monitor is re-linearized, except for flow monitors exempted from 3-level RATA testing under Section 6.5.2(b) ~~or 6.5.2(e)~~ of Exhibit A to this Appendix.

91. In response to a request at hearing on December 17, 2008, the Agency proposes to amend Section 4.1.1 of Exhibit C to remove references to bias adjustment factors from the equation. Similarly, the Agency suggests amending Section 4.1.2 of Exhibit C to remove references to Bias Adjustment Factors from the equation. Finally, the Agency proposes amending Section 4.3 of Exhibit C to place the "4.3" on its own line. The formatting in the original proposal was incorrect.

4. Procedures for Mercury Mass Emissions.

4.1

Use the procedures in this Section to calculate the hourly mercury mass emissions (in ounces) at each monitored location, for the affected unit or group of units that discharge through a common stack.

4.1.1

To determine the hourly mercury mass emissions when using a mercury concentration monitoring system that measures on a wet basis and a flow monitor, use the following equation:

$M_h = KC_hQ_ht_h$ (Equation F-28)

Where:

M_h = Mercury mass emissions for the hour, rounded off to three decimal places, (ounces).

K = Units conversion constant, 9.978 x 10^{-10} oz-scm/µg-scf

C_h = Hourly mercury concentration, wet basis~~, adjusted for bias if the bias test procedures in Exhibit A to this Appendix show that a bias adjustment factor is necessary,~~ (µg/wscm).

Q_h = Hourly stack gas volumetric flow rate~~, adjusted for bias, where the bias test procedures in Exhibit A to this Appendix shows a bias adjustment factor is necessary~~, (scfh)

t_h = Unit or stack operating time, as defined in 40 CFR 72.2, (hr)

4.1.2

To determine the hourly mercury mass emissions when using a mercury concentration monitoring system that measures on a dry basis or a sorbent trap monitoring system and a flow monitor, use the following equation:

$M_h = KC_hQ_ht_h\left(1 - B_{ws}\right)$ (Equation F-29)

Where:

M_h = mercury mass emissions for the hour, rounded off to three decimal places, (ounces).

K = Units conversion constant, 9.978 x 10^{-10} oz-scm/<<mu>>g-scf

C_h = Hourly mercury concentration, dry basis~~, adjusted for bias if the bias test procedures in Exhibit A to this Appendix show that a bias adjustment factor is necessary,~~ (µg/dscm). For sorbent trap systems, a single value of C_h (i.e., a flow-

proportional average concentration for the data collection period), is applied to each hour in the data collection period, for a particular pair of traps.

Q_h = Hourly stack gas volumetric flow rate~~, adjusted for bias, where the bias test procedures in Exhibit A to this Appendix shows a bias adjustment factor is necessary,~~ (scfh).

B_{ws} = Moisture fraction of the stack gas, expressed as a decimal (equal to $\%H_2 0$ 100)

t_h = Unit or stack operating time, as defined in 40 CFR 72.2, (hr)

4.3

~~4.3~~ If heat input rate monitoring is required, follow the applicable procedures for heat input apportionment and summation in Sections 2.3, 2.4 and 2.5 of this Exhibit.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

Charles E. Matoesian
Assistant Counsel

Dana Vetterhoffer
Assistant Counsel

DATED:_____

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* * * * * PC #1 * * * * * *

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL –
COMPLIANCE SECTION
P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

FOR APPLICANT'S USE

Revision #: _____
Date: _____ / _____ / _____
Page _____ of _____
Source Designation:
_____

	FOR AGENCY USE ONLY
MERCURY MONITORING REPORTING FORM	ID NUMBER:
	PERMIT #:
THIS FORM IS USED TO REPORT AND CERTIFY COMPLIANCE OF A SOURCE AND SPECIFIC ELECTRICAL GENERATING UNITS ("EGU") WITH ALL APPLICABLE CEMS AND EXCEPTED MONITORING SYSTEM MONITORING DURING A REPORTING PERIOD.	DATE:

SOURCE INFORMATION	
1) SOURCE NAME:	
2) DATE FORM PREPARED:	3) SOURCE ID NO.

GENERAL INFORMATION
4) PERIOD COVERED BY THIS REPORT: FROM: _____ / _____ / _____ TO: _____ / _____ / _____
5) NAME AND PHONE NUMBER OF PERSON TO CONTACT FOR QUESTIONS REGARDING THIS REPORT:
NAME: _____ TITLE:_____
PHONE#: (_____) _____-_____ EXT:_____

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

	PAGE _____	**FOR APPLICANT'S USE** _____
	Printed on Recycled Paper 450-CAAPP	

6) LIST ALL EGU(S) AT THE SOURCE (IF ADDITIONAL SPACE IS NEEDED FOR ITEM 6, ATTACH AND LABEL AS EXHIBIT 450-A) AND IDENTIFY THE APPLICABLE 35 ILL ADM. CODE PART 225 REQUIREMENT(S) FOR EACH EGU FOR WHICH THIS FORM IS BEING USED TO REPORT AND CERTIFY COMPLIANCE WITH: Note: EGUs using periodic emissions testing (including LME EGUs) will be listed here, but excluded from the emissions table (pg 3)

COMPLIANCE OF ELECTRICAL GENERATING UNITS DURING REPORTING PERIOD	
7) WERE THOSE EGUS, WHICH ARE USING A MONITORING SYSTEM, IN ITEM 6 IN COMPLIANCE WITH ALL APPLICABLE MONITORING AND RECORDKEEPING REQUIREMENTS FOR THE ENTIRE REPORTING PERIOD?	☐ YES ☐ NO
8) FOR AN EGU WHERE MERCURY DATA WAS UNAVAILABLE OR OUT OF CONTROL, WERE THE ADD-ON MERCURY EMISSION CONTROLS, A FGD SYSTEM, A SCR SYSTEM, OR A COMPACT HYBRID PARTICULATE COLLECTOR SYSTEM OPERATING WITHIN ESTABLISHED PARAMETERS?	☐ YES ☐ NO
IF NO, THEN COMPLETE AND SUBMIT FORM CAAPP-405 – "EXCESS EMISSSIONS, MONITORING EQUIPMENT DOWNTIME, AND MISCELLANEOUS REPORTING FORM."	

SIGNATURE BLOCK		
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. REPORTS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.		
9) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY OF THOSE PERSONS WITH PRIMARY RESPONSIBILITY FOR ENSURING THAT ALL OF THE EGUS' EMISSIONS ARE CORRECTLY AND FULLY MONITORED, THE STATEMENTS AND INFORMATION CONTAINED IN THIS REPORT ARE TRUE, ACCURATE, AND COMPLETE.		
AUTHORIZED SIGNATURE:		
BY:	_____	_____
	AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
	_____	_____ / _____ / _____
	TYPED OR PRINTED NAME OF SIGNATORY	DATE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- COMPLIANCE SECTION
P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

FOR APPLICANT'S USE

Revision #: ______________
Date: _____ / _____ / _____
Page _________ of ________
Source Designation:
____

QUARTERLY AND MONTHLY MERCURY EMISSIONS DATA[1]

EGU or STACK ID[2]	EGU Quarterly Operating Hours (hrs/quarter)	CEMS Quarterly Operating Hours (hrs/quarter)	CEMS Quarterly Data Availability (%)	Avg. Monthly Hg Coal Concentration[3][8] (ppm)	Total Hg Content of Coal Fired in EGU [4][8] (oz./quarter)	Monitored Quarterly Hg Emitted[5] (oz./quarter)	Avg. Monthly and Quarterly Hg Control[6][8] (%)	Avg. Monthly and Quarterly Hg Emission Rate[7] (lb/GWh)	12-Month Rolling Avg. Control or Emission Rate[8][9] (% or lb/GWh)
				1			1	1	1
				2			2	2	2
				3			3	3	3
							Q	Q	
				1			1	1	1
				2			2	2	2
				3			3	3	3
							Q	Q	
				1			1	1	1
				2			2	2	2
				3			3	3	3
							Q	Q	
				1			1	1	1
				2			2	2	2
				3			3	3	3
							Q	Q	

Notes:
1. Specific records pursuant to 35 Ill Adm. Code Part 225 may be requested by the Agency to support the information provided here. EGUs using periodic emissions testing should be excluded.
2. If EGUs share a common stack, list Stack ID and associated EGUs.
3. Determined by averaging all analyzed coal samples in the month.
4. Multiply the average monthly coal concentration by the amount of coal used each month, then add together for the quarter.
5. The amount of mercury emitted during the CEMS quality-assured monitor operating hours.
6. Calculated using the emissions data available during CEMS quality-assured monitor operating hours and total Hg content of coal modified by data availability percentage.
7. During the CEMS quality-assured monitor operating hours.
8. As applicable, according to method of calculation (Hg emission rate or Hg reduction standard-see Section 225.290(b)(3)(H)).
9. Or a lesser number of continuous months if a full 12 months of data is not available.

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	**R09-10**
AMENDMENTS TO 35 ILL. ADM.	)	
CODE 225: CONTROL OF EMISSIONS	)	**(Rulemaking – Air)**
FROM LARGE COMBUSTION SOURCES	)	

MOTION FOR WAIVER OF REQUIREMENTS

NOW COMES Proponent, the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), by its attorney, Charles E. Matoesian, and pursuant to 35 Ill. Adm. Code and 101.500, 102.110, 102.402, moves that the Illinois Pollution Control Board ("Board") waive certain requirements, namely that the Illinois EPA submit copies of the documents in which are incorporated by reference. In support of its Motion, Illinois EPA states as follows:

Section 5-75(a) of the Illinois Administrative Procedure Act ("IAPA") provides in relevant part that an agency may incorporate by reference the regulations, standards and guidelines of an agency of the United States or a nationally recognized organization or association without publishing the incorporated material in full. 5 ILCS 100/5-75(a). Further, Section 5-75(b) of the IAPA provides in relevant part that the agency adopting a rule or regulation under the IAPA shall maintain a copy of the referenced rule, regulation, standard or guideline in at least one of its principal offices and shall make it available to the public upon request. 5 ILCS 100/5-75(b). In this submittal the Illinois EPA amended the incorporations by reference section and in doing so added the following documents:

> Appendices A-1 through A-8, Subpart A, and Performance Specifications 2 and 3 of Appendix B of 40 CFR Part 60 (2005).
>
> 40 CFR Part 75 (2006).
>
> ASTM D6722-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis.

First, the Illinois EPA requests that the Board waive the normal copy requirements of Section 102.200 of the Board's procedural rules and allow Illinois EPA to file only the original of the American Society for Testing and Materials ("ASTM") Standards that are incorporated by reference. The ASTM standards are copyright protected. The Illinois EPA is subject to additional fees in order to provide the Board with a copy. Accordingly, the Illinois EPA has incurred costs, and to keep these costs at a minimum, the Illinois EPA requests that the Board waive the requirement stated above. Attached with the ASTM standards being filed is a copy of the License Agreement utilized by ASTM. The Illinois EPA directs the Board's attention to that document so that the Board may conform its handling of the standards consistent with that Agreement.

Secondly, the Illinois EPA requests that it not be required to submit copies of the Code of Federal Regulations that have been incorporated by reference in this proposed submittal. The Illinois EPA's request is consistent with the Illinois Administrative Procedure Act, 5 ILCS 100/1-1 *et seq*., and reasonable in light of the fact that these documents are quite lengthy and are readily available.

WHEREFORE, for the reasons set forth above, Illinois EPA requests that the Board waive the copy requirement and allow Illinois EPA to file only the original of the American Society for Testing and Materials ("ASTM") Standard that is incorporated by reference. The Illinois EPA also requests that the Board waive the requirements that the Agency file the Code of Federal Regulations incorporated by reference above.

Respectfully submitted,
ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: _____
Charles E. Matoesian
Assistant Counsel
Division of Legal Counsel

DATED: January 14, 2009

1021 N. Grand Ave., East
P.O. Box 19276
Springfield, Illinois 62794-9276
217.782.5544
217.782.9143 (TDD)

STATE OF ILLINOIS)
) **SS**
COUNTY OF SANGAMON)
)

CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state that I have served electronically the attached the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S POST-HEARING COMMENTS TO THE DECEMBER 17, 2008, HEARING ON THE PROPOSAL FOR AMENDING 35 ILL. ADM. CODE 225, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S SECOND ERRATA SHEET TO ITS PROPOSAL TO AMEND 35 ILL. ADM. CODE 225 and MOTION FOR WAIVER OF REQUIREMENTS, upon the following person:

John Therriault, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601

and mailing it by first-class mail from Springfield, Illinois, with sufficient postage affixed to the following persons:

SEE ATTACHED SERVICE LIST

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY,

_____
Charles E. Matoesian
Assistant Counsel
Division of Legal Counsel

Dated: January 14, 2009

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R09-10 Service List

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ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

January 13, 2009

Tim Fox, Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601

Re: In the Matter of: Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources, R09-10

Mr. Fox.

Attached please find the ASTM Standard which accompanies the Illinois Environmental Protection Agency's Post-Hearing Comments, which will be electronically filed shortly.

Sincerely,

Charles E. Matoesian
Assistant Counsel
Illinois Environmental Protection Agency

Originally Approved 28 April 1999

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As amended by the ASTM International Board of Directors, October 28, 2003.

Designation: D 6722 – 01

Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis[1]

This standard is issued under the fixed designation D 6722; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 These test methods cover procedures to determine the total mercury content in a sample of coal or coal combustion residue.

1.2 The values stated in SI units are regarded as the standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

D 121 Terminology of Coal and Coke[2]

D 2013 Method of Preparing Coal Samples for Analyses[2]

D 3173 Test Method for Moisture in the Analysis Sample of Coal and Coke[2]

D 3180 Practice for Calculating Coal and Coke Analyses from As-Determined to Different Bases[2]

D 4621 Guide for Accountability and Quality Control in the Coal Analysis Laboratory[2]

D 5142 Test Methods for the Proximate Analysis of the Analysis Sample of Coal and Coke by Instrumental Procedures[2]

IEEE/ASTM SI 10 Standard for Use of the International System of Units (SI): The Modern Metric System[3]

3. Terminology

3.1 For definitions of terms used in this standard, refer to Terminology D 121.

4. Summary of Test Method

4.1 Controlled heating of the analysis sample in oxygen is used to liberate mercury. The sample is heated to dryness in the instrument and then thermally and chemically decomposed. The decomposition products are carried by flowing oxygen to the catalytic section of the furnace, where oxidation is completed and halogens as well as nitrogen and sulfur oxides are trapped. The remaining decomposition products are carried to a gold amalgamator that selectively traps mercury. After the system is flushed with oxygen to remove any remaining decomposition products, the amalgamator is rapidly heated, releasing mercury vapor. Flowing oxygen carries the mercury vapor through absorbance cells positioned in the light path of single wavelength atomic absorption spectrophotometer. Absorbance peak height or peak area, as a function of mercury concentration, is measured at 253.7 nm.

NOTE 1—Mercury and mercury salts can be volatized at low temperatures. Precautions against inadvertent mercury loss should be taken when using this method.

5. Significance and Use

5.1 The emission of mercury during coal combustion can be an environmental concern.

5.2 When representative test portions are analyzed according to this procedure, the total mercury is representative of concentrations in the sample.

6. Apparatus

6.1 There are several configurations of the instrumental components that can be used satisfactorily for this test method. Functionally, the instrument shall have the following components: drying compartment, decomposition tube, catalyst tube, gold amalgamator, amalgamator furnace, measuring cuvettes, mercury lamp, and detector. The following requirements are specified for all approved instruments. (Note 2).

NOTE 2—The approval of an instrument with respect to these functions is paramount to this test method, since such approval tacitly provides approval of both the materials and the procedures used with the system to provide these functions.

6.1.1 The instrument shall be capable of drying the sample once it is weighed and introduced.

[1] This test method is under the jurisdiction of ASTM Committee D05 on Coal and Coke and is the direct responsibility of Subcommittee D05.29 on Major Elements in Ash and Trace Elements of Coal.

Current edition approved October 10, 2001. Published December 2001.

[2] *Annual Book of ASTM Standards*, Vol 05.06.

[3] *Annual Book of ASTM Standards*, Vol 14.02.

6.1.2 The instrument shall have a decomposition tube which shall be operated at a temperature high enough to completely decompose the sample. The suggested operating temperature is 800°C.

6.1.3 The catalyst in the catalytic tube shall be capable of completing the oxidation of the sample and trapping halogens as well as nitrogen and sulfur oxides. The suggested operating temperature of the catalytic tube is 550°C.

6.1.4 The instrument shall contain a gold amalgamator fixed to an inert material and shall be capable of trapping all mercury.

6.1.5 The amalgamator shall contain a furnace capable of rapidly heating the amalgamator to release all trapped mercury.

6.1.6 The instrument shall have a absorption cell with measuring cuvettes through which the elemental mercury released from the gold amalgamator flows. The cell shall be heated to avoid any condensation of water or other decomposition products.

6.1.7 The light source for the atomic absorption process shall be a low pressure mercury lamp.

6.1.8 A narrow bandpass interference filter or monochromator, capable of isolating the 253.65 nm mercury line, shall be used.

6.1.9 The system may contain a computer for controlling the various operations of the apparatus, for recording data, and for reporting results.

6.2 *Analytical Balance*, with a sensitivity of 0.1 mg.

6.3 *Sample Combustion Boats*, made of nickel and convenient size suitable for use in the instrument being used.

7. Sample

7.1 Prepare the analysis sample of coal in accordance with Method D 2013 by pulverizing the material to pass a 250-mm (No. 60) sieve.

7.2 Analyze separate test portions for moisture content in accordance with Test Method D 3173 or Test Methods D 5142.

8. Reagents

8.1 *Oxygen*—High purity oxygen, as specified by the instrument manufacturer, shall be used.

8.2 *Certified Reference Materials (CRMs)*—Use Certified Reference Material (CRM) coals with dry-basis mercury values for which confidence limits are issued by a recognized certifying agency such as the National Institute of Standards and Technology (NIST). It is recommended that the user verify the value with the certifying agency before using the CRM coal for quality control purposes.

8.3 All CRMs, reference coals, or calibrating agents must have precision values of less than or equal to method repeatability. Such CRMS, reference coals, or calibrating agents must be stable with respect to moisture and be pulverized to pass 100 % through a 250 μm (No. 60) USA Standard Sieve. CRMs, reference coals, or calibrating agents must be mixed thoroughly before each use.

9. Instrument Preparation

9.1 Assemble the instrumental system in accordance with the manufacturer's instructions. Follow the instrument manufacturer's recommended procedure to optimize the performance of the instrument.

9.2 *Adjustment of Response of Measurement System*—Weigh an appropriate test portion of certified reference material (CRM), calibrating agent, or reference coal. Analyze the test portion (see 9.1). Repeat this procedure. Adjust instrument response, as recommended by the manufacturer, until the absence of drift is indicated.

9.3 *Calibration*—Select coal CRMs or other calibrating agents and materials specified by the manufacturer that have certified mercury values in the range of samples to be analyzed. Three such CRMs or calibrating agents are recommended for each range of mercury values to be tested. When possible, two of the CRMs or calibrating agents shall bracket the range of mercury to be tested, with the third falling within the range.

9.3.1 All coal CRMs should be in accordance with 8.2 and shall be supplied by or have traceability to an internationally recognized certifying organization. **CAUTION:** An indicated problem with linearity of the instrument during calibration can result from contamination of the CRM or calibrating agent as the container becomes depleted. It is therefore recommended that the CRM or calibrating agent be discarded when less than five grams remain in the container.

9.3.2 *Calibration Procedure*—Analyze, as samples, portions of a CRM, reference coal, or calibrating agent chosen to represent the level of mercury in the samples to be tested. Use the "as-determined" mercury values for calibration. These values must have been calculated previously from the certified "dry basis" mercury values and residual moisture determined using either Test Methods D 3173 or D 5142. Continue analyzing until the results from five consecutive determinations fall within the repeatability interval of these test methods. Calibrate the instrument according to the manufacturer's instructions using these values. Analyze, as samples, two CRM reference coals or calibrating agents that bracket the range of values to be tested. The results obtained for these samples much be within the stated precision limits of the CRM, reference coal, or calibrating agent or the calibration procedure must be repeated. Records for all calibrations must be in accordance with Guide D 4621.

9.3.3 *Periodic Calibration Verification and Recalibration*—In accordance with Guide D 4621, analyze a control sample on a periodic basis. Results obtained for the control sample must be within established limits, or all results obtained since the last successful control check must be rejected and the calibration procedure repeated.

10. Procedure

10.1 Analyze a test specimen of the analysis sample in accordance with the manufacturer's instructions.

11. Calculation

11.1 Calculate the concentration of mercury, on the appropriate sample basis, as follows:

$$A = \frac{(B \times C)}{D} \times 100 \quad (1)$$

where:

A = mg/Kg of the analyte,
B = detector response for that analyte,
C = unit mass per detector response established for the analyte during calibration, and
D = mass of test specimen, g.

The calculations can be provided automatically by the instrumental system used for these methods.

12. Report

12.1 Report results from the mercury determination on any of the several common bases that differ solely with respect to moisture. Procedures for converting the as-determined concentrations to the other bases are specified in Practice D 3180.

13. Precision and Bias

13.1 *Precision*—The precision of this test method for the determination of mercury in coal, is shown in Table 1. The precision characterized by the repeatability (S_r, r) and reproducibility (S_R, R) is described in Table A1.1 in Annex A1.

13.1.1 *Repeatability Limit (r)*—The value below which the absolute difference between two test results of separate and consecutive test determinations, carried out on the same sample in the same laboratory by the same operator using the same apparatus on samples taken at random from a single quantity of homogeneous material, may be expected to occur with a probability of approximately 95 %.

13.1.2 *Reproducibility Limit (R)*—The value below which the absolute difference between two test results, carried out in different laboratories using samples taken at random from a single quantity of material that is as homogeneous as possible, may be expected to occur with a probability of approximately 95 %.

TABLE 1 Concentration Range and Limits for Repeatability and Reproducibility for Mercury in Coal

	Concentration Range, ppm	Repeatability Limit *r*	Reproducibility Limit *R*
Hg	0.017 – 0.586	0.008 + 0.06 $\bar{x}$	0.007 + 0.13 $\bar{x}$

13.2 *Bias*—Certified Reference Materials NIST 1630a, NIST 2692b, and SARM 20 were included in the interlaboratory study to ascertain possible bias between reference material values and those determined by this method. A comparison of the NIST and SARM values and those obtained in the interlaboratory study are given in Table 2.

NOTE 3—Whenever possible, the analysis of several reference materials, spanning the concentration range of interest, is the most meaningful way to investigate measurement bias. When a matrix match is possible the uncertainty in sample measurements can be equated to that observed in measurement of the Certified Reference Material (CRM). When such a match is not possible, but a CRM with a related matrix is available, the test sample uncertainty may be related to those observed when measuring the CRM. Different methods of measurement of a property may not be capable of equal repeatability. Accordingly, instances could arise where the method of measurement has greater variability than that or those used in certification of the CRM.

13.3 An interlaboratory study, designed consistent with Practice E 691, was conducted in 2000. Eight labs participated. The details of the study and supporting data are given in ASTM Research Report RR:D-5 1026 filed at ASTM headquarters.

TABLE 2 Comparison of Certified Values for NIST 1630a, NIST 2692b, and SARM 20 with Interlaboratory Study Values for Total Mercury in Coal

Reference CRM Level	RR Value, ppm	CRM Value, ppm	Bias, ppm	Significant (95% Confidence)
NIST 1630a	0.0912	0.0938	–0.0026	no
NIST 2692b	0.124	0.1333	–0.0093	yes
SARM 20	0.25	0.25	0	no

ANNEX

(Mandatory Information)

A1. PRECISION STATISTICS

A1.1 The precision of this test method, characterized by repeatability (S_r, r) and reproducibility (S_R, R) has been determined for the following materials as listed in Table A1.1.

A1.2 *Repeatability Standard Deviation (S_r)*—The standard deviation of test results obtained under repeatability conditions.

A1.3 *Reproducibility Standard Deviation (S_R)*—The standard deviation of test results obtained under reproducibility conditions.

TABLE A1.1 Repeatability (S_r, r) and Reproducibility (S_R, R) Parameters Used for Calculation of Precision Statement

Material	Average	S_r	S_R	r	R
hvCb Arizona	0.017393	0.002358	0.002930	0.006602	0.008203
hvAb NIST 2692b	0.124464	0.003669	0.007333	0.010274	0.020533
hvCb SARM 20	0.249750	0.006167	0.015203	0.017268	0.042568
FGD A-1	0.585786	0.019241	0.031515	0.053875	0.088241
FGD A-2	0.318536	0.004404	0.014187	0.012330	0.039725
HvAb Pennsylvania	0.114357	0.004501	0.007793	0.012604	0.021821
hvBb Ohio	0.116679	0.004924	0.007548	0.013788	0.021135
hvBb Colorado	0.033107	0.005618	0.007377	0.015730	0.020655
sub A Wyoming	0.074857	0.006189	0.006189	0.017331	0.017331
lig A Texas	0.101214	0.008171	0.008171	0.022878	0.022878
hvAb NIST 1630a	0.091250	0.005386	0.005386	0.015082	0.015082