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ILLINOIS GENERAL ASSEMBLY

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CLERK'S OFFICE

JUN 27 2007

STATE OF ILLINOIS  
Pollution Control Board

Mr. Tanner Girard, Chairman  
Pollution Control Board  
100 W. Randolph St – Suite 11-500  
Chicago IL 60601

Re: Control of Emissions from Large Combustion Sources (35 Ill. Adm. Code 225) 30  
Ill. Reg. 9281 – 5/19/06 and 30 Ill. Reg. 12705 – 7/28/06

Dear Chairman Girard:

On December 21, 2006 the adopted above-referenced rulemakings appeared in the *Illinois Register*. The adopted Part contains 4 types of errors:

1. JCAR pre-publication technical changes that were not reflected at adoption.
2. PCB 1<sup>st</sup> Notice Changes that were not reflected at adoption.
3. JCAR/PCB agreed 2<sup>nd</sup> Notice Changes that were not reflected at adoption.
4. Changes made by PCB at adoption that were not included in PCB's 1<sup>st</sup> Notice Changes or as part of JCAR/PCB agreements, i.e., changes made outside the IAPA prescribed procedures.

These errors could be corrected in the proposed rulemaking amending Part 225 currently on 1<sup>st</sup> Notice (31 Ill. Reg. 6769). It is common practice to clean up "background" errors during the course of a rulemaking. Attached is a marked up copy of the affected Sections; a copy of PCB's database was used. If we may be of assistance, please contact Deborah Connelly of this staff.

Sincerely

A handwritten signature in cursive script that reads "Vicki Thomas".  
Vicki Thomas  
Executive Director

Mr. Tanner Girard, Chairman  
Pollution Control Board  
100 W. Randolph St – Suite 11-500  
Chicago IL 60601

Con &  
put on  
letterhead

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Vicki Thomas  
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r: vt07

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100 W. Randolph St – Suite 11-500  
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*Con  
6/25*

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JCAR/PCB Agreements

JCAR pre-publication changes

PCB 1<sup>st</sup> Notice changes

PCB added or deleted at adoption

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE B: AIR POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD  
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY  
SOURCES

PART 225  
CONTROL OF EMISSIONS FROM LARGE COMBUSTION SOURCES

~~SUBPART B: CONTROL OF MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC  
GENERATING UNITS~~

Section 225.210 Compliance Requirements

a) Permit Requirements.

The owner or operator of each source with one or more EGUs subject to this Subpart B at the source must apply for a CAAPP permit that addresses the applicable requirements of this Subpart B.

b) Monitoring Requirements.

1) The owner or operator of each source and each EGU at the source must comply with the monitoring requirements of Sections 225.240 through 225.290 of this Subpart B.

2) The compliance of each EGU with the mercury requirements of Sections 225.230 and 225.237 of this Subpart B must be determined by the emissions measurements recorded and reported in accordance with Sections 225.240 through 225.290 of this Subpart B.

c) Mercury Emission Reduction Requirements

The owner or operator of any EGU subject to this Subpart B must comply with applicable requirements for control of mercury emissions pursuant to Section 225.230 or Section 225.237 of this Subpart B.

d) Recordkeeping and Reporting Requirements

Unless otherwise provided, the owner or operator of a source with one or more EGUs at the source must keep on site at the source each of the documents listed in

subsections (d)(1) through (d)(3) of this Section for a period of five years from the date the document is created. This period may be extended, in writing by the Agency, for cause, at any time prior to the end of five years.

- 1) All emissions monitoring information gathered in accordance with Sections 225.240 through 225.290.
  - 2) Copies of all reports, compliance certifications, and other submissions and all records made or required or documents necessary to demonstrate compliance with the requirements of this Subpart B.
  - 3) Copies of all documents used to complete a permit application and any other submission under this Subpart B.
- e) Liability.
- 1) The owner or operator of each source with one or more EGUs must meet the requirements of this Subpart B.
  - 2) Any provision of this Subpart B that applies to a source must also apply to the owner ~~or~~ operator of such source and to the owner or operator of each EGU at the source.
  - 3) Any provision of this Subpart B that applies to an EGU must also apply to the owner or operator of such EGU.
- f) Effect on Other Authorities. No provision of this Subpart B may be construed as exempting or excluding the owner or operator of a source or EGU from compliance with any other provision of an approved State Implementation Plan, a permit, the Act, or the CAA.

Section 225.220 Clean Air Act Permit Program (CAAPP) Permit Requirements

- a) Application Requirements.
- 1) Each source with one or more EGUs subject to the requirements of this Subpart B is required to submit a CAAPP permit application that addresses all applicable requirements of this Subpart B, applicable to each EGU at the source.
  - 2) For any EGU that commenced commercial operation:
    - A) on or before December 31, 2008, the owner or operator of ~~that EGU~~ such EGUs must submit an initial permit application or

application for CAAPP permit modification that meets the requirements of this Section on or before December 31, 2008.

- B) after December 31, 2008, the owner or operator of any such EGU must submit an initial CAAPP permit application or application for CAAPP modification that meets the requirements of this Section not later than 180 days before initial startup of the EGU, unless the construction permit issued for the EGU addresses the requirements of this Subpart B.

b) Contents of Permit Applications.

In addition to other information required for a complete application for CAAPP permit or CAAPP permit modification, the application must include the following information:

- 1) The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the U.S. Department of Energy, Energy Information Administration, if applicable.
- 2) Identification of each EGU at the source.
- 3) The intended approach to the monitoring requirements of Sections 225.240 through 225.290 of this Subpart B.
- 4) The intended approach to the mercury emission reduction requirements of Section 225.230 or 225.237 of this Subpart B, as applicable.

c) Permit Contents.

- 1) Each CAAPP permit issued by the Agency for a source with one or more EGUs subject to the requirements of this Subpart B must contain federally enforceable conditions addressing all applicable requirements of this Subpart B, which conditions must be a complete and segregable portion of the source's entire CAAPP permit.
- 2) In addition to conditions related to the applicable requirements of this Subpart B, each such CAAPP permit must also contain the information specified under subsection (b) of this Section.

Section 225.230 Emission Standards for EGUs at Existing Sources

a) Emission Standards.

- 1) 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 ~~lbsHb~~ 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 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 = Actual mercury emissions rate of the EGU for the particular 12-month rolling period, expressed in ~~lbsHb~~/GWh.
- $E_i$  = Actual mercury emissions of the EGU, 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, 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:

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

Where:

- CE = Actual control efficiency for mercury emissions of the EGU for the particular 12-month rolling period, expressed as a percent.
- $E_i$  = Actual mercury emissions of the EGU, 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, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.265 of this Subpart B.

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:

$E_{12}$  = Actual mercury emissions of the EGU for the particular 12-month rolling period.

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

$E_i$  = Actual mercury emissions of the EGU in an individual month in the 12-month rolling period.

$A_i$  = Allowable mercury emissions of the EGU in an individual month in the 12-month rolling period, based on either the input mercury to the unit ( $A_{\text{Input } i}$ ) or the electrical output from the EGU ( $A_{\text{Output } i}$ ), as selected by the owner or operator of the EGU for that given month.

$A_{\text{Input } i}$  = 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.

$A_{\text{Output } i}$  = 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 ~~lbs~~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 40 CFR 75, Subpart I, 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 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 ~~standards~~ 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, 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.

$A_S$  = Sum of the allowable mercury emissions of the EGUs at the source.

$E_i$  = Actual mercury emissions of an individual EGU at the source, as determined in accordance with subsection (b)(2) of this Section.

$A_i$  = Allowable mercury emissions of an individual EGU at the source, 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.

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.
- b) The EGUs at each source covered by a Demonstration must also comply with one of the following emission standards on a source-wide basis for the period covered by the Demonstration:
  - 1) An emission standard of 0.020 ~~lbs~~ mercury/GWh gross electrical output; or
  - 2) A minimum 75 percent reduction of input mercury.
- c) For the purpose of this Section, compliance must be demonstrated using the equations in Section 225.230(a)(2), (a)(3), or (d)(2), as applicable, addressing all EGUs at the sources covered by the Demonstration, rather than by using only the EGUs at one source.
- d) Limitations on Demonstrations.
  - 1) The owners or operators of more than one existing source with EGUs can only participate in Demonstrations that include other existing sources that they own or operate.
  - 2) Single Existing Source Demonstrations
    - A) 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) can only participate in Demonstrations with other such owners or operators of a single existing source of EGUs.

- B) Participation in Demonstrations under this Section by the owner or operator of only a single existing source with EGUs must be authorized through federally enforceable permit conditions for each such source participating in the Demonstration.
- e) A source may be included in only one Demonstration during each rolling 12-month period.
- f) The owner or operator of EGUs using Demonstrations to show compliance with this Subpart B must complete the determination of compliance for each 12-month rolling period no later than 60 days following the end of the period.
- g) If averaging is used to demonstrate compliance with this Subpart B, the effect of a failure to demonstrate compliance will be that the compliance status of each source must be determined under Section 225.230 of this Subpart B as if the sources were not covered by a Demonstration.
- h) For purposes of this Section, if the owner or operator of any source that participates in a Demonstration with an owner or operator of a source that does not maintain the required records, data, and reports for the EGUs at the source, or that does not submit copies of such records, data, or reports to the Agency upon request, then the effect of this failure will be deemed to be a failure to demonstrate compliance and the compliance status of each source must be determined under Section 225.230 of this Subpart B as if the sources were not covered by a Demonstration.

Section 225.233 Multi-Pollutant Standards (MPS)

- a) General.
  - 1) As an alternative to compliance with the ~~emission~~emissions standards of Section 225.230(a), the owner or operator of eligible EGUs may elect for those EGUs to demonstrate compliance pursuant to this Section, which establishes control requirements and standards for emissions of NO<sub>x</sub> and SO<sub>2</sub>, as well as for emissions of mercury.
  - 2) For the purpose of this Section, the following requirements apply:
    - A) An eligible EGU is an EGU that is located in Illinois and which commenced commercial operation on or before December 31, 2004; and

- B) Ownership of an eligible EGU is determined based on direct ownership, by the holding of a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner has the right or authority to submit a CAAPP application on behalf of the EGU.
- 3) The owner **or operator** of one or more EGUs electing to demonstrate compliance with this Subpart B pursuant to this Section must submit an application for a CAAPP permit modification to the Agency, as provided in Section 225.220, that includes the information specified in subsection (b) of this Section and which clearly states the owner's **or operator's** election to demonstrate compliance pursuant to this Section 225.233.
- A) If the owner **or operator** of one or more EGUs elects to demonstrate compliance with this Subpart pursuant to this Section, then all EGUs it owns **or operates** in Illinois as of July 1, 2006, as defined in subsection (a)(2)(B) of this Section, must be thereafter subject to the standards and control requirements of this Section, except as provided in subsection (a)(3)(B). Such EGUs must be referred to as a Multi-Pollutant Standard (MPS) Group.
- B) Notwithstanding the foregoing, the owner **or operator** may exclude from an MPS Group any EGU scheduled for permanent shutdown that the owner **or operator** so designates in its CAAPP application required to be submitted pursuant to subsection (a)(3) of this Section, with compliance for such units to be achieved by means of Section 225.235.
- 4) When an EGU is subject to the requirements of this Section, the requirements apply to all owners or operators of the EGU, and to the designated representative for the EGU.
- b) Notice of Intent.

The owner **or operator** of one or more EGUs that intends to comply with this Subpart B by means of this Section must notify the Agency of its intention by December 31, 2007. The following information must accompany the notification:

- 1) The identification of each EGU that will be complying with this Subpart B by means of the multi-pollutant standards contained in this Section, with evidence that the owner has identified all EGUs that it owned in Illinois as of July 1, 2006 and which commenced commercial operation on or before December 31, 2004;

- 2) If an EGU identified in subsection (b)(1) of this Section is also owned or operated by a person different than the owner submitting the notice of intent, a demonstration that the submitter has the right to commit the EGU or authorization from the responsible official for the EGU accepting the application;
  - 3) The Base Emission Rates for the EGUs, with copies of supporting data and calculations;
  - 4) A summary of the current control devices installed and operating on each EGU and identification of the additional control devices that will likely be needed for ~~the~~ each EGU to comply with emission control requirements of this Section, including identification of each EGU in the MPS group that will be addressed by subsection (c)(1)(B) of this Section, with information showing that the eligibility criteria for this subsection (b) are satisfied; and
  - 5) Identification of each EGU that is scheduled for permanent shut down, as provided by Section 225.235, which will not be part of the MPS Group and which will not be demonstrating compliance with this Subpart B pursuant to this Section.
- c) Control Technology Requirements for Emissions of Mercury.
- 1) Requirements for EGUs in an MPS Group.
    - A) For each EGU in an MPS Group other than an EGU that is addressed by subsection (c)(1)(B) of this Section for the period beginning July 1, 2009 (or December 31, 2009 for an EGU for which an SO<sub>2</sub> scrubber or fabric filter is being installed to be in operation by December 31, 2009), and ending on December 31, 2014 (or such earlier date that the EGU is subject to the mercury emission standard in subsection (d)(1) of this Section), the owner or operator of the EGU must install, to the extent not already installed, and properly operate and maintain one of the following emission control devices:
      - i) A Halogenated Activated Carbon Injection System, complying with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by a Cold-Side Electrostatic Precipitator or Fabric Filter; or
      - ii) If the boiler fires bituminous coal, a Selective Catalytic Reduction (SCR) System and an SO<sub>2</sub> Scrubber.

B) An owner or operator of an EGU in an MPS Group has two options under this subsection (c). For an MPS Group that contains EGUs smaller than 90 gross MW in capacity, the owner or operator may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section. Or, for an MPS Group that contains EGUs with gross MW capacity of less than 115 MW, the owner or operator may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section, provided that the aggregate gross MW capacity of the designated EGUs does not exceed 4% of the total gross MW capacity of the MPS Group. For any EGU subject to one of these two options, unless the EGU is subject to the emission standards in subsection (d)(2) of this Section, beginning on January 1, 2013, and continuing until such date that the owner or operator of the EGU commits to comply with the mercury emission standard in subsection (d)(2) of this Section, the owner or operator of the EGU must install and properly operate and maintain a Halogenated Activated Carbon Injection System that complies with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by either a Cold-Side Electrostatic Precipitator or Fabric Filter. The use of a properly installed, operated, and maintained Halogenated Activated Carbon Injection System that meets the sorbent injection requirements of subsection (c)(2) of this Section is defined as the “principal control technique.”

2) For each EGU for which injection of halogenated activated carbon is required by subsection (c)(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 (c)(4) of this Section, is defined as all of the following:

- A) The use of an injection system designed for effective absorption of mercury, considering the configuration of the EGU and its ductwork;
- B) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, 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
- C) The injection of sorbent at the following minimum rates, as applicable:

- i) 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;
  - ii) 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 ~~lbs~~ mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 5.0 lbs per million actual cubic feet;
  - iii) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired; or
  - iv) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsections (c)(2)(C)(i), (c)(2)(C)(ii), or (c)(2)(C)(iii) 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.
- D) For the purposes of subsection (c)(2)(C) of this Section, the flue gas flow rate must be determined for the point of 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 100° F, or the flue gas flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.
- 3) 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 (c)(2)(C)(iv) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the requirements of subsections (c)(3)(A) and (c)(3)(B) of this Section, subject to the limitations of subsections (c)(3)(C) and (c)(3)(D) of this Section:
- A) The application must be submitted as an application for a new or revised federally enforceable operating permit for the EGU, and it

must include a summary of relevant mercury emission 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

- B) 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 (c)(1)(A) of this subsection must apply for unit-specific injection rate or rates by July 1, 2009. Thereafter, the owner or operator of the EGU may supplement its application; and
  - C) 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
  - D) 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.
- 4) During any evaluation of the effectiveness of a listed sorbent, an alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (c)(2) of this Section for any system needed to carry out the evaluation, as further provided as follows:
- A) 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;
  - B) 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 technique, as initially addressed by the owner or operator in a support document submitted with the evaluation program;
  - C) 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
  - D) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than was achieved with the principal control technique, the owner or operator of the EGU must resume use of the principal control technique. 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 subsection (c).

5) 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 this Subpart B by means of this Section must also comply with the following additional requirements:

A) 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;

B) 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

C) 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.

6) 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 this Subpart B by means of this Section must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(5) of this Section.

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 ~~lbs~~ 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).
- e) Emission Standards for NO<sub>x</sub> and SO<sub>2</sub>.
- 1) NO<sub>x</sub> 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 NO<sub>x</sub> annual emission rate of no more than 0.11 ~~lbs~~/million Btu or an emission rate equivalent to 52 percent of the Base Annual Rate of NO<sub>x</sub> 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<sub>x</sub> seasonal emission rate of no more than 0.11 ~~lbs~~/million Btu or an emission rate equivalent to 80 percent of the Base Seasonal Rate of NO<sub>x</sub> emissions, whichever is more stringent.
  - 2) SO<sub>2</sub> Emission Standards.

- A) Beginning in calendar year 2013 and continuing in calendar year 2014, for the EGUs in each MPS Group, the owner ~~or~~ operator of the EGUs must comply with an overall SO<sub>2</sub> annual emission rate of 0.33 lbs/million Btu or a rate equivalent to 44 percent of the Base Rate of SO<sub>2</sub> 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 ~~or~~ operator of the EGUs must comply with an overall annual emission rate for SO<sub>2</sub> of 0.25 lbs/million Btu or a rate equivalent to 35 percent of the Base Rate of SO<sub>2</sub> emissions, whichever is more stringent.
- 3) Compliance with the NO<sub>x</sub> and SO<sub>2</sub> 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<sub>x</sub> and SO<sub>2</sub> 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<sub>x</sub> 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<sub>2</sub> 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<sub>x</sub> or SO<sub>2</sub> 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<sub>x</sub> and SO<sub>2</sub> allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510, 40 CFR 72, or subparts AA and AAAA of 40 CFR 96. 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 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<sub>x</sub>, or SO<sub>2</sub>.

Section 225.235      Units Scheduled for Permanent Shut Down

- a) The emission standards of Section 225.230(a) are not applicable to an EGU that will be permanently shut down as described in this Section.:
  - 1) The owner or operator of an EGU that relies on this Section must complete the following actions before June 30, 2009:

- A) Have notified the Agency that it is planning to permanently shut down the EGU by the applicable date specified in subsection (a)(3) or (4) of this Section. This notification must include a description of the actions that have already been taken to allow the shut down of the EGU and a description of the future actions that must be accomplished to complete the shut down of the EGU, with the anticipated schedule for those actions and the anticipated date of permanent shut down of the unit.
  - B) Have applied for a construction permit or be actively pursuing a federally enforceable agreement that requires the EGU to be permanently shut down in accordance with this Section.
  - C) Have applied for revisions to the operating permits for the EGU to include provisions that terminate the authorization to operate the unit in accordance with this Section.
- 2) The owner or operator of an EGU that relies on this Section must, before June 30, 2010, complete the following actions:
- A) Have obtained a construction permit or entered into a federally enforceable agreement as described in subsection (a)(1)(B) of this Section; or
  - B) Have obtained revised operating permits in accordance with subsection (a)(1)(C) of this Section.
- 3) The plan for permanent shut down of the EGU must provide for the EGU to be permanently shut down by no later than the applicable date specified below:
- A) If the owner or operator of the EGU is not constructing a new EGU or other generating unit to specifically replace the existing EGU, by December 31, 2010.
  - B) If the owner or operator of the EGU is constructing a new EGU or other generating unit to specifically replace the existing EGU, by December 31, 2011.
- 4) The owner or operator of the EGU must permanently shut down the EGU by the date specified in subsection (a)(3) of this Section, unless the owner or operator submits a demonstration to the Agency before the specified date showing that circumstances beyond its reasonable control (such as protracted delays in construction activity, unanticipated outage of another EGU, or protracted shakedown of a replacement unit) have occurred that

interfere with the plan for permanent shut down of the EGU, in which case the Agency may accept the demonstration as substantiated and extend the date for shut down of the EGU as follows:

- A) If the owner or operator of the EGU is not constructing a new EGU or other generating unit to specifically replace the existing EGU, for up to one year, i.e., permanent shut down of the EGU to occur by no later than December 31, 2011; or
  - B) If the owner or operator of the EGU is constructing a new EGU or other generating unit to specifically replace the existing EGU, for up to 18 months, i.e., permanent shutdown of the EGU to occur by no later than June 30, 2013; provided, however, that after December 31, 2012, the existing EGU must only operate as a back-up unit to address periods when the new generating units are not in service.
- b) Notwithstanding Sections 225.230 and 225.232, any EGU that is not required to comply with Section 225.230 pursuant to this Section must not be included when determining whether any other EGUs at the source or other sources are in compliance with Section 225.230.
- c) If an EGU, for which the owner or operator of the source has relied upon this Section in lieu of complying with Section 225.230(a) is not permanently shut down as required by this Section, the EGU must be considered to be a new EGU subject to the emission standards in Section 225.237(a) beginning in the month after the EGU was required to be permanently shut down, in addition to any other penalties that may be imposed for failure to permanently shut down the EGU in accordance with this Section.

Section 225.237 Emission Standards for New Sources with EGUs

- a) Standards.
- 1) The owner or operator of a source with one or more EGUs, but that previously had not had any EGUs that commenced commercial operation before January 1, 2009, must comply with one of the following emission standards for each EGU on a rolling 12-month basis:
    - A) An emission standard of 0.0080 ~~lbs/lb~~ mercury/GWh gross electrical output; or
    - B) A minimum 90 percent reduction of input mercury.
  - 2) For this purpose, compliance may be demonstrated using the equations in Section 225.230(a)(2), (a)(3), or (b)(2).

- 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 test for the mercury emission standard under 40 CFR 60.45a also commences. The CEMS 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.

#### Section 225.238 Temporary Technology-Based Standard for New Sources with EGUs

- a) General.
  - 1) At a source with EGUs that previously had not had any EGUs that commenced commercial operation before January 1, 2009, for an EGU that meets the eligibility criteria in subsection (b) of this Section, as an alternative to compliance with the mercury emission standards in Section 225.237, the owner or operator of the EGU may temporarily comply with the requirements of this Section, through December 31, 2018, as further provided in subsections (c), (d), and (e) of this Section.
  - 2) An EGU that is complying with the emission control requirements of this Subpart B by operating pursuant to this Section may not be included in a compliance demonstration involving other EGUs at the source during the period that the temporary ~~technology based~~ technology-based standard is in effect.
  - 3) The owner or operator of an EGU that is complying with this Subpart B pursuant to this Section is not excused from applicable monitoring, recordkeeping, and reporting requirements of Sections 225.240 through 225.290.
- b) Eligibility. To be eligible to operate an EGU pursuant to this Section, the following criteria must be met for the EGU:
  - 1) The EGU is subject to Best Available Control Technology (BACT) for emissions of sulfur dioxide, nitrogen oxides, and particulate matter, and the EGU is equipped and operated with the air pollution control equipment or systems specified below, as applicable to the category of EGU:
    - A) For coal-fired boilers, injection of sorbent or other mercury control technique (e.g., reagent) approved by the Agency.
    - B) For an EGU firing fuel gas produced by coal gasification, processing of the raw fuel gas prior to combustion for removal of

mercury with a system using a sorbent or other mercury control technique approved by the Agency.

- 2) For an EGU for which injection of a sorbent or other mercury control technique is required pursuant to subsection (b)(1) of this Section, the owner or operator of the EGU is injecting sorbent or other mercury control technique in an optimum manner for control of mercury emissions, which must include injection of Alstom, Norit, Sorbent Technologies, or other sorbent or other mercury control technique that the owner or operator of the EGU demonstrates to have similar or better effectiveness for control of mercury emissions, at least at the rate set forth in the appropriate of subsections (b)(2)(A) through (b)(2)(C) of this Section, unless other provisions for injection of sorbent or other mercury control technique are established in a federally enforceable operating permit issued for the EGU, with an injection system designed for effective absorption of mercury. For the purposes of this subsection (b)(2), the flue gas flow rate must be determined for the point of sorbent injection or other mercury control technique (provided, however, 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 100° F), or the flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.
    - A) For an EGU firing subbituminous coal, 5.0 pounds per million actual cubic feet.
    - B) For an EGU firing bituminous coal, 10.0 pounds 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 above rates, based on the blend of coal being fired.
    - D) A rate or rates set on a unit-specific basis that are lower than the rate specified in subsections (b)(2)(A), (B), and (C) of this Section, to the extent that the owner or operator of the EGU demonstrates that such rate or rates are needed so that sorbent injection or other mercury control technique would not increase particulate matter emissions or opacity so as to threaten compliance with applicable regulatory requirements for particulate matter or opacity or cause a safety issue.
- c) Compliance Requirements .
- 1) Emission Control Requirements. The owner or operator of an EGU that is operating pursuant to this Section must continue to maintain and operate



the EGU to comply with the criteria for eligibility for operation under this Section, except during an evaluation of the current sorbent, alternative sorbents, or other techniques to control mercury emissions, as provided by subsection (e) of this Section.

- 2) **Monitoring and Recordkeeping Requirements.** In addition to complying with all applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of a new EGU operating pursuant to this Section must also:
  - A) Monitor sorbent feed rate to the EGU, flue gas temperature at the point of sorbent injection or other mercury control technique, and exhaust gas flow rate from the EGU, automatically recording this data and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average.
  - B) If a blend of bituminous and subbituminous coal is fired in the EGU, maintain records of the amount of each type of coal burned and the required injection rate for injection of sorbent, on a weekly basis.
  - C) If a mercury control technique other than sorbent injection is approved by the Agency, monitor appropriate parameter for that control technique as specified by the Agency.
  
- 3) **Notification and Reporting Requirements.** In addition to complying with all applicable reporting requirements of Sections 225.240 through 225.290, the owner or operator of an EGU operating pursuant to this Section must also submit the following notifications and reports to the Agency:
  - A) Written notification prior to the month in which any of the following events will occur: the EGU will no longer be eligible to operate under this Section due to a change in operation; the type of coal fired in the EGU will change; the mercury emission standard with which the owner or operator is attempting to comply for the EGU will change; or operation under this Section will be terminated.
  - B) Quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(2) of this Section.
  - C) Annual reports detailing activities conducted for the EGU to further improve control of mercury emissions, including the measures taken during the past year and activities planned for the current year.

- d) Applications to Operate under the Technology-Based Standard.
- 1) Application Deadlines.
    - A) The owner or operator of an EGU that is seeking to operate the EGU pursuant to this Section must submit an application to the Agency no later than three months prior to the date that compliance with Section 225.237 would otherwise have to be demonstrated.
    - B) Unless the Agency finds that the EGU is not eligible to operate pursuant to this Section or that the application for operation pursuant to this Section does not meet the requirements of subsection (d)(2) of this Section, the owner or operator of the EGU is authorized to operate the EGU pursuant to this Section beginning 60 days after receipt of the application by the Agency.
    - C) The owner or operator of an EGU operating pursuant to this Section must reapply to operate pursuant to this Section if it is planning a physical change to or a change in the method of operation of the EGU, control equipment, or practices for injection of sorbent or other mercury control technique that is expected to reduce the level of control of mercury emissions.
  - 2) Contents of Application. An application to operate pursuant to this Section must be submitted as an application for a new or revised federally enforceable operating permit for the new EGU, and it must include the following information:
    - A) A formal request to operate pursuant to this Section showing that the EGU is eligible to operate pursuant to this Section and describing the reason for the request, the measures that have been taken for control of mercury emissions, and factors preventing more effective control of mercury emissions from the EGU.
    - B) The applicable mercury emission standard in Section 225.237 with which the owner or operator of the EGU is attempting to comply and a summary of relevant mercury emission data for the EGU.
    - C) If a unit-specific rate or rates for sorbent injection or other mercury control technique injection are proposed pursuant to subsection (b)(2) of this Section, detailed information to support the proposed injection rates.

- D) An action plan describing the measures that will be taken while operating pursuant to this Section to improve control of mercury emissions. This plan must address measures such as evaluation of alternative forms or sources of sorbent or other mercury control technique, changes to the injection system, changes to operation of the unit that affect the effectiveness of mercury absorption and collection, and changes to other emission control devices. For each measure contained in the plan, the plan must provide a detailed description of the specific actions that are planned, the reason that the measure is being pursued and the range of improvement in control of mercury that is expected, and the factors that affect the timing for carrying out the measure, with the current schedule for the measure.
- e) Evaluation of Alternative Control Techniques for Mercury Emissions.
- 1) During an evaluation of the effectiveness of the current sorbent, alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU operating pursuant to this Section does not need to comply with the eligibility criteria for operation pursuant to this Section as needed to carry out an evaluation of the practicality and effectiveness of such technique, further subject to the following limitations:
    - A) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program that it has submitted to the Agency at least 30 days prior to beginning the evaluation.
    - B) The duration and scope of the formal evaluation program must not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control technique, as initially addressed by the owner or operator in a support document that it has submitted with the formal evaluation program pursuant to subsection (e)(1)(A) of this Section.
    - C) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment to be constructed as part of the evaluation of the alternative control technique.
    - D) The owner or operator of the EGU must submit a report to the Agency no later than 90 days after the conclusion of the formal evaluation program describing the evaluation that was conducted and providing the results of the formal evaluation program.

- 2) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than was achieved with the prior control technique, the owner or operator of the EGU must resume use of the prior control technique. If the evaluation of the alternative control technique shows comparable effectiveness, the owner or operator of the EGU may either continue to use the alternative control technique in an optimum manner or resume use of the prior control technique. If the evaluation of the alternative control technique shows more effective control of mercury emissions, the owner or operator of the EGU must continue to use the alternative control technique in an optimum manner, if it continues to operate pursuant to this Section.

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 40 CFR 75.15, incorporated by reference in Section 225.140) 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 40 CFR 75.81(b), incorporated by reference in Section 225.140, 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 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 40 CFR 75.80(d), incorporated by reference in Section 225.140, 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 40 CFR 75.80(d).
  - 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 40 CFR 75.15, 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 40 CFR 75.21 or Appendix B to 40 CFR 75, each incorporated by reference in Section 225.140, the owner or operator of an EGU must recertify the monitoring

system in accordance with 40 CFR 75.20(b), incorporated by reference in Section 225.140. 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 40 CFR 75.15, whose accuracy is potentially affected by the change, all in accordance with 40 CFR 75.20(b). 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 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 40 CFR 75.20(b)(5) 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 to the Agency, USEPA Region 5, and the Administrator of the USEPA written notice of the dates of certification testing, 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 40 CFR 75.20(a)(3), incorporated by reference in Section 225.140. 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 40 CFR 75, 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 40 CFR 75 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 40 CFR 75, 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 40 CFR 75, 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 40 CFR 75.20(a)(3)). 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 substitute the following values for each disapproved monitoring system and for each hour of EGU operation during the period of invalid data specified pursuant to 40 CFR 75.20(a)(4)(iii) or 75.21(e), continuing until the applicable date and hour specified pursuant to 40 CFR 75.20(a)(5)(i), each incorporated by reference in Section 225.140. For a disapproved mercury pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of mercury and the maximum potential flow rate, as defined in sections 2.1.7.1 and 2.1.4.1 of Appendix A to 40 CFR 75, incorporated by reference in Section 225.140. For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO<sub>2</sub> concentration or the minimum potential O<sub>2</sub> concentration (as applicable), as defined in Sections 2.1.5, 2.1.3.1, and 2.1.3.2 of Appendix A to 40 CFR 75, incorporated by reference in Section 225.140. For a disapproved excepted monitoring system (sorbet trap monitoring system) pursuant to 40 CFR 75.15 and disapproved flow monitor, respectively, the maximum potential concentration of mercury and maximum potential flow rate, as defined in sections 2.1.7.1 and 2.1.4.1 of Appendix A to 40 CFR 75, incorporated by reference in section 225.140.

ii) 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.

- iii) 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 40 CFR 75 and the applicable quality assurance and quality control requirements of 40 CFR 75.21 and Appendix B to 40 CFR 75 are fully met, the monitoring system will be exempt from the initial certification requirements of this Section.
  - 2) The recertification provisions of this Section will 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 40 CFR 75.81(b). The owner or operator that has elected to use the mercury-low-mass-emissions-excepted methodology for a qualified EGU pursuant to 40 CFR 75.81(b) must meet the applicable certification and recertification requirements in 40 CFR 75.81(c) through (f), incorporated by reference in Section 225.140.
- 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.

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 40 CFR 75.84, incorporated by reference in Section 225.140.
  - 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)(2) 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 (lbs/trillion Btu) and the daily and monthly input mercury (lbs), which must be kept in the file **required** pursuant to 40 CFR 75.84(a).
  - 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) 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 40 CFR 75.84(a).
- 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 Appendix B of 40 CFR 75, incorporated by reference in Section 225.140; and
  - B) Daily/weekly system integrity checks pursuant to section 2.6 of Appendix B of 40 CFR 75, incorporated by reference in Section 225.140.

- 6) The owner or operator of an EGU must maintain an electronic copy of all electronic submittals to the USEPA pursuant to 40 CFR 75.84(f), incorporated by reference in Section 225.140.
  - 7) The owner or operator of an EGU must retain all records required by this Section at the source 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.
- b) Quarterly Reports. The owner or operator of a source with one or more EGUs 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 40 CFR 75, incorporated by reference in Section 225.140.
    - 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 40 CFR 75, 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.
  - 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.
- 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 ~~225.290~~, Sections 225.240 through 225.270 ~~and Section 225.290~~ of this Subpart B, and 40 CFR 75, 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 and for all hours where mercury data are substituted in accordance with 40 CFR 75.34(a)(1):
    - A) That:
      - i) 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 Appendix B to 40 CFR 75; or
      - ii) With regard to a flue gas desulfurization system or a selective catalytic reduction system, quality-assured SO<sub>2</sub> emission data recorded in accordance with 40 CFR 75 document that the flue gas desulfurization system was operating properly, or quality-assured NO<sub>x</sub> emission data recorded in accordance with 40 CFR 75 document that the selective catalytic reduction system was operating properly, as applicable; and
    - B) The substitute data values do not systematically underestimate mercury emissions.
- 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 and Enforcement 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 rate, in lb/GWh, for each 12-month rolling period ending in the year covered by the Certification;
  - ii) Actual emissions, 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, 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 efficiency for emissions for each 12-month rolling period ending in the year covered by the Certification, expressed as a percent;
  - ii) Actual emissions, 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, 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 and allowable emissions for each 12-month rolling period ending in the year covered by the Certification; and
  - ii) Actual emissions and allowable emissions, 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 and allowable emissions for all EGUs at the source for each 12-month rolling period ending in the year covered by the Certification; and
    - ii) Actual emissions and allowable emissions, 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 and allowable emissions 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 and allowable emissions, 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, data substitutions, or exceptions each month and discussion of the reasons for such deviations, data substitutions, 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 **§**. 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 40 CFR 75.82(b)(2)(ii), incorporated by reference in Section 225.140, within 45 days after completing a quality assurance RATA.