**Section 225.234 Temporary Technology-Based Standard for EGUs at Existing Sources**

a) General.

1) At a source with EGUs that commenced commercial operation on or before December 31, 2008, for an EGU that meets the eligibility criteria in subsection (b) of this Section, the owner or operator of the EGU may temporarily comply with the requirements of this Section through June 30, 2015, as an alternative to compliance with the mercury emission standards in Section 225.230, as 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 during the period that is operating pursuant to this Section.

3) The owner or operator of an EGU that is complying with this Subpart B by means of the temporary alternative emission standards of this Section is not excused from any of the applicable monitoring, recordkeeping, and reporting requirements set forth in Sections 225.240 through 225.290.

4) Until June 30, 2012, as an alternative to the CEMS (or an 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).

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 equipped and operated with the air pollution control equipment or systems that include injection of halogenated activated carbon and either a cold-side electrostatic precipitator or a fabric filter.

2) The owner or operator of the EGU is injecting halogenated activated carbon in an optimum manner for control of mercury emissions, which must include injection of Alstom, Norit, Sorbent Technologies, Calgon Carbon's FLUEPAC CF Plus, Calgon Carbon's FLUEPAC MC Plus, or other halogenated activated carbon that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions, at least at the following rates set forth in subsections (b)(2)(A) through (b)(2)(D) of this Section, unless other provisions for injection of halogenated activated carbon are established in a federally enforceable operating permit issued for the EGU, using an injection system designed for effective absorption of mercury, considering the configuration of the EGU and its ductwork. For the purposes of this subsection (b)(2), the flue gas flow rate shall be the flow rate in the stack for all units except for those equipped with activated carbon injection prior to a hot-side electrostatic precipitator; for units equipped with activated carbon injection prior to a hot-side electrostatic precipitator, the flue gas flow rate shall be the gas flow rate at the inlet to the hot-side electrostatic precipitator, which shall be determined as the stack flow rate adjusted through the use of Charles' Law for the differences in gas temperatures in the stack and at the inlet to the electrostatic precipitator (Vesp = Vstack x Tesp/Tstack, where V = gas flow rate in acf and T = gas temperature in Kelvin or Rankine).

A) For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet.

B) For an EGU firing bituminous coal, 10.0 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 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 above to the extent that the owner or operator of the EGU demonstrates that such rate or rates are needed so that carbon injection would not increase particulate matter emissions or opacity so as to threaten compliance with applicable regulatory requirements for particulate matter or opacity.

3) The total capacity of the EGUs that operate pursuant to this Section does not exceed the applicable of the following values:

A) For the owner or operator of more than one existing source with EGUs, 25 percent of the total rated capacity, in MW, of all the EGUs at the existing sources that it owns or operates, other than any EGUs operating pursuant to Section 225.235 of this Subpart 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.

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 pursuant to 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 monitoring and recordkeeping

requirements in Sections 225.240 through 225.290 or Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), and i(3) and (4), the owner or operator of an EGU operating pursuant to this Section must also:

A) Through December 31, 2012, it must maintain records of the usage of activated carbon, the flue gas flow rate from the EGU (and, if the unit is equipped with activated carbon injection prior to a hot-side electrostatic precipitator, flue gas temperature at the inlet of the hot-side electrostatic precipitator and in the stack), and the activated carbon feed rate, in pounds per million actual cubic feet of flue gas, on a weekly average.

B) Beginning January 1, 2013, it must monitor activated carbon feed rate to the EGU, gas flow rate in the stack, and, if the unit is equipped with activated carbon injection prior to a hot-side electrostatic precipitator, flue gas temperature at the inlet of the hot-side electrostatic precipitator and in the stack. It must, automatically record this data and the activated carbon feed rate, in pounds per million actual cubic feet of flue gas, on an hourly average.

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

3) Notification and Reporting Requirements.

In addition to complying with all applicable reporting requirements in Sections 225.240 through 225.290 or Section 225.239(f)(1), (f)(2), and (j)(1), 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:

i) The EGU will no longer be eligible to operate under this Section due to a change in operation;

ii) 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

iii) Operation under this Section will be terminated.

B) Quarterly reports for the recordkeeping and monitoring or emissions testing 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 on which compliance with Section 225.230 of this Subpart B would otherwise have to be demonstrated. For example, the owner or operator of an EGU that is applying to operate the EGU pursuant to this Section on June 30, 2010, when compliance with applicable mercury emission standards must be first demonstrated, must apply by March 31, 2010 to operate under this Section.

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:

i) If it operated the EGU pursuant to this Section 225.234 during the period of June 2010 through December 2012 and it seeks to operate the EGU pursuant to this Section 225.234 during the period from January 2013 through June 2015.

ii) 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 activated carbon that is expected to reduce the level of control of mercury emissions.

2) Contents of Application.

An application to operate an EGU pursuant to this Section 225.234 must be submitted as an application for a new or revised federally enforceable operating permit for the EGU, and it must include the following documents and 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 225.230(a) 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 carbon 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 under this Section to improve control of mercury emissions. This plan must address measures such as evaluation of alternative forms or sources of activated carbon, changes to the injection system, changes to operation of the unit that affect the effectiveness of mercury absorption and collection, changes to the particulate matter control device to improve performance, 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, together 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 need not 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, 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 owner 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 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 control 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.

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)