**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 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.

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

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, Calgon Carbon’s FLUEPAC CF Plus, Calgon Carbon's FLUEPAC MC Plus,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 shall be the gas 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 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 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 a new EGU operating pursuant to this Section must also:

A) Monitor sorbent 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 sorbent feed rate, in pounds per million actual cubic feet of flue 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 or Section 225.239(f)(1) and (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: 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 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 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 under 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 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.

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