

**96TH GENERAL ASSEMBLY****State of Illinois****2009 and 2010****SB3227**

Introduced 2/9/2010, by Sen. Martin A. Sandoval

SYNOPSIS AS INTRODUCED:

415 ILCS 5/9.14 new

Amends the Environmental Protection Act. Provides that the owner or operator of certain emissions sources generating electricity in this State through coal combustion must meet a mercury emissions standard. Provides that if the owner or operator of these emissions sources is unable to comply with the standard through existing control technologies, then he or she may apply to the Agency for an alternative emissions limit for the emissions source. Sets forth provisions for establishing the alternative emissions limit. Provides that upon the establishment of the alternative emissions limit for an affected source, the Agency shall incorporate the alternative emissions limit into the CAAPP permit for the affected emissions source. Provides that an owner or operator complying with the provisions for obtaining an alternative emissions limit shall not be in violation of the mercury emissions standard so long as that owner or operator operates and maintains the affected source in a manner consistent with good air pollution control practices for the minimization of mercury emissions and until the owner or operator obtains the alternative emissions limit for the affected source from the Agency. Sets forth certain test methods to be used to demonstrate compliance with the mercury emission rate requirement. Requires the owner or operator of an affected emissions source to report to the Agency the results of the required tests. Provides for Agency review of the mercury standards adopted. Authorizes the Agency to adopt rules as necessary for the implementation of these mercury emission standards.

LRB096 20473 JDS 36128 b

FISCAL NOTE ACT
MAY APPLY

A BILL FOR

1 AN ACT concerning safety.

2 **Be it enacted by the People of the State of Illinois,**
3 **represented in the General Assembly:**

4 Section 5. The Environmental Protection Act is amended by
5 adding Section 9.14 as follows:

6 (415 ILCS 5/9.14 new)

7 Sec. 9.14. Mercury emission standards.

8 (a) As used in this Section:

9 "Affected source" means any emissions source that
10 generates electricity in the State and combusts coal in an
11 amount greater than 10% of its total heat input on a rolling 12
12 month basis.

13 "Alternative emissions limit" means a mercury emissions
14 limit established by the Agency for an affected source.

15 "Calendar quarter" means the period of January 1 to March
16 31, inclusive, April 1 to June 30, inclusive, July 1 to
17 September 30, inclusive, or October 1 to December 31,
18 inclusive.

19 "Fluidized bed combustion unit" means a combustion unit in
20 which fuel is introduced into a layer of solid particles kept
21 in turbulent motion by air that is forced into the layer from
22 below, resulting in a thorough mixing and intimate contact of
23 the fuel and other reactants.

1 "Inlet conditions" means either: (i) The concentration of
2 mercury in the flue gas exiting the combustion source prior to
3 application of any air pollution control device or (ii) in the
4 case of a fluidized bed combustion unit, the concentration of
5 mercury input to the combustion source based on representative
6 fuel sampling and analysis, as determined by the Agency.

7 "Mercury" means mercury and mercury compounds in either a
8 gaseous or particulate form.

9 "TBtu" means trillion BTU of heat input.

10 (b) On and after July 1, 2013, the owner or operator of an
11 affected source or sources must: (i) meet a mercury emissions
12 rate of equal to or less than 0.6 pounds of mercury per TBtu,
13 or (ii) meet a mercury emissions rate equal to a 90% reduction
14 of mercury from the measured inlet conditions for the affected
15 source, whichever emissions rate is more readily achievable by
16 the affected source, as determined by the owner or operator of
17 the affected source. Compliance with this mercury emission
18 standard shall be demonstrated through stack tests conducted by
19 affected sources in accordance with the provisions of
20 subsection (e) of this Section.

21 (c) If the owner or operator of any affected source
22 properly installs and operates control technology designed to
23 achieve the mercury emissions rate requirement of subsection
24 (b) and the technology fails to achieve the required emission
25 rate, the owner or operator shall notify the Agency of the
26 failure prior to February 1, 2014. The owner or operator of

1 such an affected source shall submit quarterly stack tests from
2 the affected source to the Agency for evaluation and
3 establishment of an alternative emissions limit for that
4 affected source based upon the optimal performance of properly
5 installed and operated control technology. The Agency shall
6 establish the alternative emissions limit for affected sources
7 complying with the requirements of this subsection (c) no later
8 than April 1, 2015.

9 Upon the establishment of an alternative emissions limit
10 for an affected source, the Agency shall incorporate the
11 alternative emissions limit into the CAAPP permit issued
12 pursuant to Section 39.5 of this Act for the affected source.
13 Thereafter, upon any application for renewal of the permit, the
14 Agency shall conduct a review of the affected source's
15 alternative emissions limit and may impose a more stringent
16 alternative emissions limit based upon any new data regarding
17 the demonstrated control capabilities of the type of control
18 technology installed and operated at the affected source.

19 (d) An owner or operator of an affected source complying
20 with the provisions of subsection (c) shall be in compliance
21 with the mercury emissions requirements of subsection (b) for
22 the period beginning July 1, 2013, and ending on the date of
23 the issuance of an alternative emissions limit, unless that
24 owner or operator operates and maintains the affected source,
25 including any associated air pollution control equipment, in a
26 manner inconsistent with good air pollution control practices

1 for the minimization of mercury emissions, as determined by the
2 Agency. In determining whether the owner or operator of the
3 affected source operates and maintains the affected source in a
4 manner consistent with good air pollution control practices for
5 the minimization of mercury emissions, the Agency may review
6 the emissions monitoring results and operating and maintenance
7 procedures of the source and may inspect the affected source.

8 (e) Any stack test used to demonstrate compliance with the
9 mercury emissions rate requirements of subsection (b) of this
10 Section or used in the establishment or compliance with an
11 alternative emissions limit pursuant to subsection (c) of this
12 Section, shall be based on the average of the stack tests
13 conducted during the 2 most recent calendar quarters for an
14 affected source and shall be conducted on a calendar quarter
15 basis in accordance with the United States Environmental
16 Protection Agency's Method 29 for the determination of metal
17 emissions from stationary sources, as set forth in 40 CFR 60,
18 Appendix A, as amended from time to time, or any other
19 alternative method approved by the United States Environmental
20 Protection Agency or the Illinois Environmental Protection
21 Agency. Stack tests shall be conducted while combusting coal or
22 coal blends that are representative of the coal or coal blends
23 combusted at the affected source during the calendar quarter
24 represented by the stack test.

25 If the Agency determines that continuous emission monitors
26 for mercury in flue gases are commercially available and can

1 perform in accordance with National Institute of Technology
2 Standards, or other methodology approved by the United States
3 Environmental Protection Agency, the owner or operator of any
4 affected source shall properly install and operate continuous
5 emission monitors and shall not be required to conduct stack
6 testing on a calendar quarter basis. When reporting compliance
7 with the mercury emissions rate requirement of subsection (b)
8 or (c) of this Section, as applicable, the owner or operator of
9 an affected source shall use an average of the continuous
10 emission monitor data recorded at the affected source during
11 the most recent calendar quarter.

12 (f) The owner or operator of any affected source shall, for
13 each calendar quarter, report to the Agency the results of any
14 stack test or average of the continuous emission monitor data,
15 as applicable, used to demonstrate compliance with the
16 provisions of this subsection. The reports shall be submitted
17 on forms as may be prescribed by the Agency.

18 (g) On or before July 1, 2017, the Agency shall conduct a
19 review of the mercury emission limits applicable to all
20 affected sources in the State. On or after July 1, 2017, the
21 Agency may adopt regulations imposing mercury emission limits
22 that are more stringent than the emissions requirements
23 provided for in subsection (b) or (c) of this Section.

24 (h) The Agency shall have the authority to adopt rules, in
25 accordance with the Illinois Administrative Procedure Act, as
26 the Agency deems necessary for the implementation of this

1 Section.