



94TH GENERAL ASSEMBLY

State of Illinois

2005 and 2006

SB2124

Introduced 5/30/2005, 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 equal to or less than 0.6 pounds of mercury per TBtu, or equal to a 90% reduction of mercury from the measured inlet conditions for the affected source, whichever rate is more readily achievable by the affected source, as determined by the owner or operator of the affected source. Provides that if the owner or operator of these emissions sources are unable to comply with this mercury reduction standard through existing control technology the owner or operator 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.

LRB094 12619 RSP 47402 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.

24 "Inlet conditions" means either: (i) The concentration of
25 mercury in the flue gas exiting the combustion source prior to
26 application of any air pollution control device; or (ii) in the
27 case of a fluidized bed combustion unit, the concentration of
28 mercury input to the combustion source based on representative
29 fuel sampling and analysis, as determined by the Agency.

30 "Mercury" means mercury and mercury compounds in either a
31 gaseous or particulate form.

32 "TBtu" means trillion BTU of heat input.

1 (b) On and after July 1, 2008, the owner or operator of an
2 affected source or sources must: (i) meet a mercury emissions
3 rate of equal to or less than 0.6 pounds of mercury per TBtu,
4 or (ii) meet a mercury emissions rate equal to a 90% reduction
5 of mercury from the measured inlet conditions for the affected
6 source, whichever emissions rate is more readily achievable by
7 the affected source, as determined by the owner or operator of
8 the affected source. Compliance with this mercury emission
9 standard shall be demonstrated through stack tests conducted by
10 affected sources in accordance with the provisions of
11 subsection (e) of this Section.

12 (c) If the owner or operator of any affected source
13 properly installs and operates control technology designed to
14 achieve the mercury emissions rate requirement of subsection
15 (b) and the technology fails to achieve the required emission
16 rate, the owner or operator shall notify the Agency of the
17 failure prior to February 1, 2009. The owner or operator of
18 such an affected source shall submit quarterly stack tests from
19 the affected source to the Agency for evaluation and
20 establishment of an alternative emissions limit for that
21 affected source based upon the optimal performance of properly
22 installed and operated control technology. The Agency shall
23 establish the alternative emissions limit for affected sources
24 complying with the requirements of this subsection (c) no later
25 than April 1, 2010.

26 Upon the establishment of an alternative emissions limit
27 for an affected source, the Agency shall incorporate the
28 alternative emissions limit into the CAAPP permit issued
29 pursuant to Section 39.5 of this Act for the affected source.
30 Thereafter, upon any application for renewal of the permit, the
31 Agency shall conduct a review of the affected source's
32 alternative emissions limit and may impose a more stringent
33 alternative emissions limit based upon any new data regarding
34 the demonstrated control capabilities of the type of control
35 technology installed and operated at the affected source.

36 (d) An owner or operator of an affected source complying

1 with the provisions of subsection (c) shall be in compliance
2 with the mercury emissions requirements of subsection (b) for
3 the period beginning July 1, 2008, and ending on the date of
4 the issuance of an alternative emissions limit, unless that
5 owner or operator operates and maintains the affected source,
6 including any associated air pollution control equipment, in a
7 manner inconsistent with good air pollution control practices
8 for the minimization of mercury emissions, as determined by the
9 Agency. In determining whether the owner or operator of the
10 affected source operates and maintains the affected source in a
11 manner consistent with good air pollution control practices for
12 the minimization of mercury emissions, the Agency may review
13 the emissions monitoring results and operating and maintenance
14 procedures of the source and may inspect the affected source.

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

32 If the Agency determines that continuous emission monitors
33 for mercury in flue gases are commercially available and can
34 perform in accordance with National Institute of Technology
35 Standards, or other methodology approved by the United States
36 Environmental Protection Agency, the owner or operator of any

1 affected source shall properly install and operate continuous
2 emission monitors and shall not be required to conduct stack
3 testing on a calendar quarter basis. When reporting compliance
4 with the mercury emissions rate requirement of subsection (b)
5 or (c) of this Section, as applicable, the owner or operator of
6 an affected source shall use an average of the continuous
7 emission monitor data recorded at the affected source during
8 the most recent calendar quarter.

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

15 (g) On or before July 1, 2012, the Agency shall conduct a
16 review of the mercury emission limits applicable to all
17 affected sources in the State. On or after July 1, 2012, the
18 Agency may adopt regulations imposing mercury emission limits
19 that are more stringent than the emissions requirements
20 provided for in subsection (b) or (c) of this Section.

21 (h) The Agency shall have the authority to adopt rules, in
22 accordance with the Illinois Administrative Procedure Act, as
23 the Agency deems necessary for the implementation of this
24 Section."