



**H.B. 77**

127th General Assembly  
(As Introduced)

**Reps. R. Hagan, Brady, Koziura, Skindell, Yates, Yuko, Foley**

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**BILL SUMMARY**

- Requires the owners or operators of certain coal-burning electric generation facilities to achieve and maintain a specified mercury emissions limit by December 15, 2009.
- Authorizes the Director of Environmental Protection, under certain circumstances, to extend the deadline for achieving that limit or to exempt a facility from the limit altogether.
- Establishes a penalty for knowingly failing to comply with the required emissions limits of not more than \$10,000 for each day of noncompliance.
- Requires the owner or operator of a generation facility to monitor emissions of the facility and report results to the Director on a quarterly basis.
- Requires the Director to establish an alternative emissions limit for a facility if properly installed and operated control technology fails to achieve the mercury limit established by the bill.
- Requires the Director, not later than July 1, 2014, to conduct a review of mercury emissions limits applicable to all affected generation facilities.
- Authorizes the Director, after December 15, 2014, to adopt rules imposing emissions limits that are more stringent than the emissions rate requirements under the bill or the alternative emissions limits previously established by the Director.

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## CONTENT AND OPERATION

### Overview

The bill requires certain electric generation facilities to achieve and maintain a specified limit on mercury emissions starting December 15, 2009. The bill specifies two standards from which a facility owner or operator can select as the facility's readily achievable emissions limit. By "mercury," the bill means both mercury and mercury compounds in either gaseous or particulate form (R.C. 3704.30(G)). An "affected unit" subject to the bill is any generating facility that burns coal in an amount greater than 10% of its total heat input on a rolling 12-month basis (R.C. 3704.30(A)).

The 2009 deadline can be extended to 2014 for a particular unit if additional limits on nitrogen oxides and sulfur dioxides are agreed to. And, the Director of Environmental Protection (OEPA Director) must prescribe an alternative mercury limit for a facility if properly installed and operated control technology fails to achieve the requisite mercury reduction. Facilities must monitor emissions and report test results to the Director, and fines can be imposed for noncompliance. The Director is authorized to adopt rules necessary for the administration of the bill's provisions (conceivably including the methodology for determining whether a facility is an "affected unit" subject to the bill).

### Emissions limits

(R.C. 3704.05, 3704.30(A), (C), (F), and (H), 3704.31, and 3704.35)

The bill requires the owner or operator of an "affected unit," beginning December 15, 2009, to achieve and maintain either (1) a mercury emissions rate equal to or less than 0.6 pounds of mercury per trillion British thermal units of heat input ("TBtu") or (2) a mercury emissions rate equal to a 90% reduction in the amount of mercury exiting, or, in the case of a "fluidized bed combustion unit," the amount of mercury input to, the combustion source.<sup>1</sup> The owner or operator is to select between those two standards the limit that it determines the most readily achievable. The OEPA Director can allow the owner or operator of two or more affected units that are located at the same facility to average the emissions of those affected units for purposes of compliance.

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<sup>1</sup> "Fluidized bed combustion unit" means a combustion unit in which fuel is introduced into a layer of solid particles kept in turbulent motion by air that is forced into the layer from below, resulting in a thorough mixing and intimate contact of the fuel and other reactants (R.C. 3704.30(E)).

The Director can issue an order exempting an affected unit from the bill's mercury emissions limit if the owner or operator enters into an agreement with the Director by December 15, 2009, to close the facility by December 15, 2014.

The Director also can issue an order extending to December 15, 2014 (but apparently not earlier), the deadline for a particular unit's compliance with the mercury emissions limit. To qualify for such an extension, however, the owner or operator of an affected unit must enter into an agreement with the Director to install and operate (presumably at that unit) air pollution control systems to control additional air pollutants. Specifically, the systems must control (1) the emissions of nitrogen oxides to less than 0.1 pounds per one million British thermal units of heat input ("Btus") for dry bottom boilers and 0.13 pounds per one million Btus for wet bottom boilers and (2) the emissions of sulfur dioxide to less than 0.15 pounds per one million Btus.

### **Alternative emissions limit**

(R.C. 3704.32)

The bill establishes a roughly 13-month compliance grace period for an affected unit, in the sense that the unit's owner or operator cannot be deemed in noncompliance with its applicable mercury emissions limit under the bill if, by the end of that time, it notifies the OEPA Director that properly installed and operated control technology has failed to achieve compliance. (The timelines in this provision of the bill do not provide for this grace period, or the related requirements described below, to be applied to a unit for which the Director extended the mercury emissions limit deadline to 2014.)

Specifically, the bill requires an owner or operator to notify the Director by February 1, 2011, if properly installed and operated control technology that is designed to achieve the applicable mercury emissions limit fails to do so. Upon notification and based on the result of required tests performed between February 1, 2011, and April 1, 2012, the Director must establish an alternative emissions limit for that affected unit. It must be established by April 1, 2012, and be based on the control technology's optimized performance.

For purposes of the bill, the owner or operator of the affected unit is deemed to have complied with the bill's emissions limit if, during the period from December 15, 2009, to the date the alternative emissions limit was established, the owner or operator operated and maintained the affected unit in a manner consistent with good air pollution control practices to minimize mercury emissions. The Director is required to provide guidelines for what constitutes such practices. To determine if the practices are being followed, the Director can inspect the unit and review the emissions monitoring results and the owner's or operator's operating and maintenance procedures.

The Director must incorporate an affected unit's alternative emissions limit into the unit's Title V permit and review the limit whenever a renewal is sought for the permit.<sup>2</sup> During the review process, the Director may impose a more stringent alternative emissions limit based on any new data regarding the demonstrated control capabilities of the control technology.

### **Testing and enforcement**

(R.C. 3704.05(J), 3704.30(D), and 3704.33; and R.C. 3704.99(B), not in the bill)

A fine of not more than \$10,000 can be imposed on an owner or operator of an affected unit for each day of the unit's noncompliance with its applicable mercury emissions limit under the bill within the timetable established under the bill or under a deadline extension agreement authorized under the bill. That fine also can be imposed for each day of each noncompliance with the nitrogen oxide and sulfur dioxide emissions limits established under such an extension agreement, or for each day of noncompliance with an exemption agreement authorized under the bill.<sup>3</sup>

The owner or operator of an affected unit must demonstrate compliance with the bill's mercury emissions limit or with any alternative emissions limit established for the unit by the Director. (There are no similar, express compliance requirements in the bill for nitrogen oxide and sulfur dioxide limits applicable under an extension agreement.)

Mercury emissions compliance must be demonstrated by averaging stack tests conducted during the two most recent calendar quarters. The tests must be conducted on the unit in accordance with (1) the U.S. Environmental Protection Agency's (USEPA) Method 29 for the determination of metal emissions from stationary sources or (2) any other alternative method approved by USEPA or the OEPA Director. The stack tests must be conducted while the affected unit is burning coal or coal blends representative of the coal or coal blends used during the applicable calendar quarters.

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<sup>2</sup> The Director is responsible for the development and administration of a federally approvable "Title V" permit program and must take all necessary and appropriate action to implement, through the issuance of Title V permits, applicable requirements of the Federal Clean Air Act. Title V permits generally are required for power plants and other major sources of air pollution. (R.C. 3704.036, not in the bill.)

<sup>3</sup> The bill might benefit from clarification regarding whether a failure to comply with an exemption agreement (that is, a failure to close a unit by the specified deadline) also would subject an owner or operator for the affected unit to potential fines for noncompliance with the bill's mercury emissions limit.

The bill requires the owner or operator of an affected unit, in certain instances, to install and operate continuous emission monitors for mercury in flue gases in lieu of conducting stack tests. The OEPA Director must first determine that those monitors are commercially available and can perform in accordance with standards established by the National Institute of Technology Standards, or with other methodology approved by USEPA. Upon such a determination by the Director, the owner or operator of an affected unit must properly install and operate the continuous emission monitors and is no longer required to conduct stack testing. To demonstrate compliance with the bill's mercury emissions limit or with an alternative emissions limit established by the Director, the owner or operator of an affected unit must use an average of the continuous emission monitor data recorded at the unit during the most recent calendar quarter.

Quarterly, the owner or operator of an affected unit must report to the Director the results of any stack test or the average of the continuous emission monitor data, as applicable.

**Review of emissions limits**

(R.C. 3704.34)

The bill requires the Director, not later than July 1, 2014, to conduct a review of the mercury emissions limits that are applicable to all affected units. The results of the review must be made available to the public upon request.

On or after December 15, 2014, the Director may adopt rules imposing mercury emissions limits that are more stringent than the bill's two, mutually exclusive limits. (The bill does not specify any findings the Director must make regarding the need for more stringent limits, for example, findings based on the required, one-time review described above.) The bill also authorizes the Director to adopt mercury limits (presumably, although not clearly, applicable to all units) that are more stringent than an alternative emissions limit the Director established for a particular affected unit.

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**HISTORY**

ACTION	DATE
Introduced	02-27-07

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