HB 1169

Department of Legislative Services

Maryland General Assembly
2005 Session

FISCAL AND POLICY NOTE

House Bill 1169 (Delegate Hubbard, *et al.*)
Economic Matters

Environment - Air Quality - Reducing Emissions of Four Pollutants from Power Plants

This bill establishes specified limits on emissions of nitrogen oxides (NO_x), sulfur dioxide (SO_2), mercury, and carbon dioxide (CO_2) from specified power plants. The limits take effect in 2011. The Maryland Department of the Environment (MDE) must adopt regulations by December 31, 2005. Beginning December 1, 2006, affected facilities must submit annual reports regarding emissions and compliance to MDE, the Department of Natural Resources (DNR), and the Public Service Commission (PSC). MDE must review the information. The bill establishes enforcement provisions. The bill also establishes a Clean Air Fund within MDE to be used to offset the costs of upgrading technology in industries other than the electricity generation industry.

The bill takes effect June 1, 2005.

Fiscal Summary

State Effect: Special fund expenditure increase of at least $46,700 in FY 2006 for MDE to develop regulations. Future year estimates are annualized, adjusted for inflation, and reflect ongoing review costs in MDE and DNR. Special fund revenues to the new fund could increase; special fund expenditures would increase correspondingly.

(in dollars)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
SF Revenue	-	-	-	-	-
SF Expenditure	46,700	85,500	89,100	93,000	97,100
Net Effect	($46,700)	($85,500)	($89,100)	($93,000)	($97,100)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: The criminal penalty provisions of this bill are not expected to significantly affect local expenditures.

Small Business Effect: None. The bill would not directly affect small businesses.

Analysis

Bill Summary: Effective January 1, 2011, the bill establishes specified limits on emissions of NO_x, SO_2, mercury, and CO_2. Effective January 1, 2021, additional limits on CO_2 are established. Emissions of CO_2 in excess of the limits may be offset by reductions at another affected facility, vegetative sequestration measures, or reductions achieved in states participating in the Regional Greenhouse Gas Initiative (RGGI) as part of the cap-and-trade program of that initiative, under specified conditions. The bill may not be construed to affect emissions requirements, standards, or limitations imposed on electricity generators by any other provision of law that would result in emissions reductions in addition to those required under the bill. An affected facility may determine how best to achieve the collective emissions requirements.

Beginning December 1, 2006, a person who owns, leases, operates, or controls an affected facility must submit an annual report to MDE, DNR, and PSC. The report must include emissions performance results, the number of pounds of NO_x, SO_2, mercury, and CO_2 emitted during the previous calendar year from the affected facility, a current compliance plan, and any other information requested by MDE. MDE must review the information submitted by affected facilities to determine whether the actual and proposed modifications and permit and construction schedules are adequate to achieve the bill's emissions requirements. MDE must make these determinations publicly available on an annual basis.

In addition to any other applicable enforcement provisions, the bill establishes criminal and civil penalty provisions. A person who violates any of the bill's provisions is guilty of a misdemeanor and on conviction is subject, for a first offense, to a fine of up to $25,000 or imprisonment for up to one year, or both. For subsequent convictions, a person is subject to a fine of up to $50,000 or imprisonment for up to two years, or both. The bill establishes a three-year statute of limitations. MDE is authorized to bring a civil action against violators to seek a penalty of up to $25,000 for each violation, an injunction, or both. For both the criminal and civil penalty provisions, each day is a separate violation.

The special fund established by the bill would consist of criminal and civil penalties imposed under the bill, money appropriated in the State budget, and any other money from any other source accepted for the benefit of the fund. Any investment earnings must be credited to the fund.

Current Law: MDE's Air and Radiation Management Administration operates the State's air pollution control programs under the framework established by the federal Clean Air Act (CAA). CAA requires all areas of the country to achieve specific air quality standards. MDE's air management program, among other things, monitors ambient air pollution levels, develops plans to maintain air quality standards, develops and enforces regulations to control air emissions, and provides technical assistance to businesses attempting to comply with CAA requirements.

The Maryland Clean Air Fund consists of all application fees, permit fees, renewal fees, and funds collected by MDE under the State's ambient air quality control and asbestos provisions, as well as any civil or administrative penalty or any fine imposed by a court under those provisions. MDE must use the fund for activities related to identifying, monitoring, and regulating air pollution in the State, including program development, and for providing grants to local governments.

Current law provides for civil and criminal penalties for specified violations of the State's ambient air quality control laws. A three-year statute of limitations exists for a criminal prosecution.

Background: Air pollutants comprise anywhere from a quarter to a third of the total nitrogen load entering the Chesapeake Bay each year; according to the Chesapeake Bay Foundation (CBF), coal-fired power plants are the largest contributor. Efforts to reduce the atmospheric deposition of nutrients into the bay are being undertaken as part of the State's commitments under the Chesapeake 2000 Agreement.

CBF advises that smog and soot in Maryland cause an estimated 20,000 asthma attacks and 900 premature deaths each year. Smog also leads to the onset of asthma. According to CBF, Maryland's seven oldest power plants are responsible for approximately 86% of the NO_x and SO_2 from Maryland's electric utility industry.

Power plants are also Maryland's top source of mercury pollution, responsible for more than 50% of the State's total mercury emissions. Mercury accumulates in the tissues of aquatic life; mercury pollution has led to several fish consumption advisories in the State.

According to CBF, power plants are also responsible for 40% of CO_2 emissions, which are linked to global warming.

Under CAA, the U.S. Environmental Protection Agency (EPA) sets and enforces air pollutant limits on sources such as power plants to help protect against adverse health and environmental effects. EPA is currently developing regulations addressing air emissions from power plants. MDE advises that pollution transport from other regions results in approximately 70% of Maryland's air quality problems and that a regional or national program is needed for Maryland to meet federal air quality standards. Emissions data from the 2003 blackout support the argument that regional transport is a major contributor to Maryland's air quality problems.

RGGI is a collaborative effort among nine northeastern states committed to developing a model rule for a binding CO_2 cap-and-trade reduction program for electric generating units. The initiative seeks to complete the model rule before summer 2005. Once the model rule is complete, RGGI member states will adopt their respective state regulations to implement the multi-state trading program.

According to MDE, the federal government is investing significant resources in research initiatives for clean coal technology projects to reduce power plant emissions, including CO_2, over the next decade. Constellation Energy and Mirant also advise that they, too, are investing significant resources to address air pollution concerns.

Several states have proposed and/or established emissions reduction requirements for power plants.

State Fiscal Effect:

Maryland Department of the Environment

Special fund expenditures could increase by at least $46,675 in fiscal 2006, which accounts for an October 1, 2005 start-up date. This estimate reflects the cost of hiring one public health engineer to review other states' regulations, develop regulations pursuant to the bill, and, in future years, to review information submitted by facilities. It includes salary, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Salary and Fringe Benefits	$43,897
Equipment/Operating Expenses	2,777
Total FY 2006 MDE Expenditures	**$46,675**

MDE advises that it would likely not be able to adopt regulations by December 31, 2005, due to the bill's requirement that it ensure that RGGI states' regulations be consistent in terms of CO_2 trading and tracking. Once a model rule is developed, RGGI states will need time to promulgate their regulations.

Future year expenditures reflect: (1) a full salary with 4.6% annual increases and 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.

Special fund revenues to the new Clean Air fund established by the bill could increase as a result of any penalties imposed under the bill or any other funds appropriated or donated to the fund. Any such increase cannot be reliably estimated at this time. Special fund expenditures to offset costs to upgrade technology that will reduce air pollution in industries other than the electricity generation industry would increase correspondingly.

Department of Natural Resources

Special fund expenditures could increase by $25,000 annually beginning in fiscal 2007 for contractual services to handle DNR's review of information submitted by affected facilities. This estimate assumes that MDE would request DNR's assistance in that review.

Other Agencies

PSC could handle the bill's requirements with existing budgeted resources.

Additional Comments: Meeting the bill's emission requirements could impose significant costs on affected facilities. Based on information provided by MDE, Constellation Energy, Allegany Energy, and Mirant, costs could exceed $2 billion in capital expenditures and almost $200 million in annual operating and maintenance costs just to meet the bill's NO_x, SO_2, and mercury reductions. In addition, the bill's CO_2 reductions could impose significant costs; according to MDE, at this time, the impacts of participation in a multi-state cap-and-trade program are unclear. Accordingly, Maryland-specific emissions standards would likely make Maryland electricity more expensive and, therefore, less competitive in the regional market. Consumers would likely bear the burden of any price increase.

Legislative Services notes that the name of the special fund established by the bill, the Clean Air Fund, could create confusion because MDE already administers the Maryland Clean Air Fund, which is commonly referred to as the Clean Air Fund.

Additional Information

Prior Introductions: Similar legislation was introduced as HB 1172 of 2004 and HB 380 of 2003. HB 1172 of 2004 received an unfavorable report by the House Economic Matters Committee. HB 380 of 2003 was referred to the House Environmental Matters Committee and the House Economic Matters Committee but was subsequently withdrawn.

Cross File: None.

Information Source(s): Maryland Department of the Environment, Department of Natural Resources, Public Service Commission, Chesapeake Bay Foundation, Constellation Energy, Allegany Energy, Mirant, Department of Legislative Services

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Analysis by: Lesley G. Cook

Direct Inquiries to:
(410) 946-5510
(301) 970-5510