

Department of Legislative Services
Maryland General Assembly
2010 Session

FISCAL AND POLICY NOTE

Senate Bill 514 (Senator Lenett)
Education, Health, and Environmental Affairs

**Environment - Permits to Construct or Materially Alter an Incinerator -
Limitations on Issuance**

This bill prohibits the Secretary of the Environment from issuing a permit to construct or materially alter an incinerator, or other specified facilities in conjunction with an incinerator, within three miles of a tributary of the Chesapeake Bay or the property boundary of a school, hospital, nursing home, place of worship, an area zoned for residential use, a public park, or an athletic or recreational area or facility. The bill excludes from the definition of an incinerator a crematorium and an incinerator used solely to dispose of dead animals.

Fiscal Summary

State Effect: Potential impact on the University System of Maryland to the extent that the bill prevents the University of Maryland Medical Center from obtaining any necessary future permits to operate its medical waste incinerator. Any such impact is unknown however.

Local Effect: Local finances related to waste disposal are significantly affected to the extent the bill prohibits existing and proposed incinerators from obtaining the necessary permits to operate. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Meaningful.

Analysis

Bill Summary: Included in the permits that are prohibited from being issued are permits to install, materially alter, or materially extend a water supply system, sewerage system,

refuse disposal system, or controlled hazardous substance facility, in conjunction with the construction of an incinerator.

Current Law: Solid waste acceptance facilities are permitted by the Maryland Department of the Environment (MDE). A solid waste acceptance facility means any sanitary landfill, incinerator, transfer station, or plant whose primary purpose is to dispose of, treat, or process solid waste. Siting and other land use or zoning criteria for proposed solid waste acceptance facilities are the responsibility of local jurisdictions. Applicants obtain local approvals prior to applying to MDE for a permit.

The Secretary of the Environment may not issue a permit to construct or operate a municipal waste incinerator for the disposal of solid waste within one mile of an elementary or secondary school; this includes the issuance of other permits that may be incidental to the construction or operation of an incinerator project.

Background: Generally, there are two types of incinerators: (1) municipal solid waste (MSW) incinerators used for waste disposal and energy generation; and (2) medical waste incinerators used to dispose of hospital wastes.

Incinerators are pervasively regulated under State and federal environmental and public health laws due to their wide-ranging effects on all environmental media and community resources. For example, one MSW incinerator facility may utilize water resources, discharge both air and water pollution, and produce solid and potentially hazardous waste, but another MSW incinerator may generate renewable energy, reduce waste disposal to county landfills, and prevent greenhouse gas emissions related to global climate change. Several agencies, including MDE, the Department of Health and Mental Hygiene, the Public Service Commission, and the Department of Natural Resources' Power Plant Research Project are involved in permitting, regulatory enforcement, and research activities related to incinerators.

There are about 90 MSW incinerators currently operating nationwide, including four major MSW incinerator sites in Maryland (and five other incinerators permitted by MDE). These four incinerator facilities have the capacity to generate several hundred megawatts (MW) of energy (267 MW of which are certified as Tier 2 renewable sources in Maryland) and to handle several thousand tons of MSW per day. The Northeast Maryland Waste Disposal Authority (NMWDA) advises that planning is underway to add a new MSW incinerator facility in Frederick County, and Baltimore City advises that an energy facility that may qualify as an MSW incinerator is being planned for a site within the city.

As discussed, MSW incinerators are both hailed for their waste disposal and renewable energy attributes and widely regulated due to various environmental impacts. As an

energy source, MSW incinerators compare very favorably to coal and oil electricity generators in terms of carbon dioxide, sulfur dioxide, and nitric oxides emissions. However, MSW incinerators are significant contributors to the environmental deposition of mercury, dioxin, furan, and other toxic metals and organic compounds. Nevertheless, since U.S. Environmental Protection Agency regulation under federal solid and hazardous waste laws began in the early 1990s, emissions of these toxic pollutants have fallen dramatically.

Recycling is generally considered the most environmentally optimal method of solid waste management. However, in the absence of composting or reusing waste materials, the MSW stream must either be disposed of in a landfill or incinerated. A number of jurisdictions, including Baltimore, Carroll, Frederick, Harford, and Montgomery counties, and Baltimore City now rely on incinerators as a significant component of their solid waste management plans. And because MSW incinerators are able to sell both metals extracted from the incoming waste stream as well as energy recovered from the incineration process, the additional revenues help defray other costs associated with incinerator operations and the counties' overall solid waste management programs.

MDE advises that, in 2008, about 18% of the solid waste generated in Maryland was managed through incinerators or waste-to-energy facilities.

According to MDE, there are currently nine permitted MSW incinerators and medical waste incinerators in the State. These facilities include the Southwest Resource Recovery Facility in Baltimore City; the Baltimore Regional Medical Waste Incinerator in Baltimore City; the University of Maryland Medical Center's Medical Waste Incinerator in Baltimore City; the Indian Head Naval Surface Warfare Center Incinerator in Charles County; the Fort Detrick Incinerator Complex in Frederick County; the Harford Waste-to-Energy Facility; the Montgomery County Resource Recovery Facility; the Smith Island Incinerator in Somerset County; and the Washington County Hospital Association's Medical Waste Incinerator.

Local Fiscal Effect: Under the bill's prohibition, MDE advises that it will be difficult to issue a permit for a new or modified incinerator almost anywhere in the State. Thus, both existing and proposed facilities could be prevented from obtaining the necessary permits to operate under the bill's limitations.

At least two proposed incinerators will not be eligible to receive permits from MDE under the bill. These two incinerators are to be located in Frederick County and Baltimore City. The proposed facility to be located in Frederick County has been approved by the county commissioners of both Carroll and Frederick counties. NMWDA advises that both counties have expended significant resources to date in planning the MSW incinerator. Further, Frederick County advises that the net present value of

expected revenues and savings from the new facility is between \$42.0 and \$198.2 million over a 30-year period, including electricity generation revenue, but excluding savings that may accrue from foregone wastewater infrastructure costs. The bill will also prevent the construction of a proposed \$900 million waste-to-energy project in Baltimore City, worth several million dollars in future tax revenues.

In addition to the impact on proposed facilities, any existing permitted facilities would likely be prohibited from modifying or expanding their operations under the bill's prohibition. For example, at least two existing MSW incinerators, located in Baltimore City and Harford County, are currently planning or have recently considered expanding operations. Montgomery County also advises that its Resource Recovery Facility may no longer be able to acquire the additional permits that allow it to continue operation at some point in the future; the facility replaced the county's last landfill in 1997. Any other permitted incinerators could also be affected to the extent they seek permits in the future.

Finally, expenditures may also increase for all local governments to the extent the bill increases the overall costs of waste management in the State. In addition, several counties may incur an additional operational burden to revise solid waste management plans to the extent the bill prevents them from relying on incinerators for any portion of their solid waste management programs.

Small Business Effect: There is a meaningful adverse impact on any small businesses that operate incinerators regulated by MDE. To the extent that future construction associated with building new incinerators is prevented by the bill, small construction and engineering contractors will also be adversely affected. In addition, small businesses generally may pay higher fees to the extent a jurisdiction's solid waste disposal costs increase under the bill. However, the bill may have a meaningful beneficial impact on small businesses engaged in other forms of waste disposal.

Additional Information

Prior Introductions: None.

Cross File: HB 1427 (Delegate Hucker) - Rules and Executive Nominations.

Information Source(s): Baltimore, Charles, Frederick, Montgomery, and Somerset counties; Department of Natural Resources; Maryland Department of Planning; Maryland Department of the Environment; Public Service Commission; Maryland-National Capital Park and Planning Commission; Northeast Maryland Waste Disposal Authority; Department of Legislative Services

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