

Department of Legislative Services  
Maryland General Assembly  
2006 Session

FISCAL AND POLICY NOTE

House Bill 1220 (Delegate Cardin, *et al.*)  
Environmental Matters

---

Environment - Sewage Sludge - Evaluate Potential as Alternative Energy Source

---

This bill requires a county or municipal corporation to review and evaluate the potential for sewage sludge treated within its boundaries to be converted to an alternative energy source. The bill establishes requirements for the study and directs a county or municipal corporation to submit a report of its findings and recommendations to the Maryland Department of the Environment (MDE) by November 1, 2007. By December 31, 2007, MDE must prepare and submit a report to the General Assembly that provides a synopsis of the potential for sewage sludge conversion statewide.

The bill terminates on September 30, 2008.

---

Fiscal Summary

**State Effect:** The bill's changes could be handled with existing budgeted resources.

**Local Effect:** Local expenditures could increase to review and evaluate the potential for sewage sludge to be converted to an alternative energy source. **This bill may impose a mandate on a unit of local government.**

**Small Business Effect:** Minimal.

---

Analysis

**Current Law:** MDE's Waste Management Administration regulates the transportation and utilization of sewage sludge. MDE's Air and Radiation Management Administration regulates discharges to the atmosphere from kilns and other furnaces that would likely be candidates for using sewage sludge as a supplemental fuel.

Chapters 487 and 488 of 2004 established a Renewable Energy Portfolio Standard (RPS) in Maryland. The law requires each electricity supplier to include in its portfolio of electricity for retail sales a specified percentage of energy derived from renewable sources. Sewage sludge is not explicitly included as an eligible energy source under the RPS.

**Background:** According to MDE, each year more than 700,000 wet tons of sewage sludge are generated in Maryland. An estimated 50% of it is applied to agricultural land; 18% is composted or palletized and made into a commercial soil supplement; 21% is used for land reclamation such as restoring surface mines; and 11% is disposed of in landfills or incinerated.

According to MDE, sewage sludge is already used as a supplemental fuel in cement kilns in other states, and one Maryland company in Carroll County has already conducted a test burn at its facility. MDE advises that, during the test burn, the use of dried biosolids in the cement process showed significant increases in nitrogen oxide emissions; however, there were decreases in other air pollutants. MDE has granted the company permission to conduct a second trial to determine if dried biosolids can be used without impacting air emissions.

MDE advises that the use of sewage sludge as a supplemental fuel in some furnaces can be beneficial, and that the industry is investigating its possible use. MDE advises that, while sewage sludge may be useful as a fuel supplement, it probably does not provide sufficient thermal energy to totally supplant more traditional fuels in most applications.

According to the U.S. Energy Information Administration, in 2002, net generation from biomass sources (including sludge waste) totaled 2,672,017,000 kilowatt-hours nationwide. Of that amount, only 29,000 kilowatt-hours were generated in Maryland.

**Local Expenditures:** Local expenditures could increase to review and evaluate the potential for sewage sludge to be converted to an alternative energy source. According to MDE, this study would need to include items that might be difficult for a local government to determine due to a lack of existing data. While some local governments could probably conduct the study using existing resources, others might need to hire a consultant. Accordingly, costs could increase. Any such increase cannot be reliably estimated at this time.

---

## Additional Information

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Maryland Department of the Environment, Maryland Energy Administration, Baltimore City, Baltimore County, Garrett County, Montgomery County, Prince George's County, Maryland Municipal League, Washington Suburban Sanitary Commission, U.S. Energy Information Administration, Department of Legislative Services

**Fiscal Note History:** First Reader - March 10, 2006  
nas/ljm

---

Analysis by: Lesley G. Cook

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