

Department of Fiscal Services
Maryland General Assembly

FISCAL NOTE
Revised

Senate Bill 380 (Senator Neall)

Economic and Environmental Affairs

Referred to Environmental Matters

Rubble Landfills - Liners - Local Authority

This amended bill prohibits the Maryland Department of the Environment (MDE) from issuing a permit for a rubble landfill unless (1) a liner and leachate collection system or an alternative system is required as a condition of the permit; or (2) the local jurisdiction in which the landfill is located has waived its authority to require a liner and leachate collection system. A local jurisdiction may require any new rubble landfill or expansion of an existing landfill to install a single liner of specified dimensions and leachate collection system regardless of any regulation adopted by MDE.

The local jurisdiction must notify MDE in writing that it has required the applicant to install a liner and leachate collection system or alternative system within 60 days after the local jurisdiction receives the complete Phase II report for the permit application; failure to do so means that the local government has waived its authority to require any such system.

This bill is effective July 1, 1997. Existing permitted rubble landfills are subject to the bill's requirements by July 1, 2001; the requirements do not apply to pending permit applications that have received Phase II approval from MDE by March 1, 1997. Any alteration or extension of an existing landfill is subject to the requirements on July 1, 1997.

Fiscal Summary

State Effect: Indeterminate increase in expenditures; revenues would not be affected.

Local Effect: Potential indeterminate effect on expenditures and revenues.

Small Business Effect: Potential meaningful impact on small business as discussed below.

Fiscal Analysis

Background: MDE has submitted regulations that would require the installation of an impermeable liner system with a leachate collection and removal system at all rubble landfills. Under the proposed regulations, all new facilities or expansion to new cells at existing rubble facilities will be required to meet the proposed standards by July 1, 1997 while existing facilities will be required to upgrade by July 1, 2001.

State Effect: To the extent that State agencies use rubble landfills for waste disposal, expenditures could increase due to any increase in tipping fees.

Local Effect: To the extent that local governments require that rubble landfills have liners and leachate collection systems, local expenditures could increase. If local governments operate such landfills they will have to pay for these systems; if private companies operate the landfills they will likely pass on the costs of these requirements to the local government. Local revenues could increase to the extent that local jurisdictions pass on these increased costs to rate holders. For instance, if the landfill is owned by the local jurisdiction, increased costs could be offset by an increase in tipping fees.

There are five county owned, municipal solid waste landfills that also operate unlined rubble cells. As discussed below, total costs if all affected facilities choose to require these systems would be \$1 million in the first year.

Small Business Effect: MDE advises that a total of 16 existing landfill facilities could be affected by the legislation; of the eight privately owned facilities, it is estimated that four would be considered small businesses. Overall, 2 million tons of construction and demolition waste is disposed on an annual basis in Maryland at permitted sanitary landfills. Historically, approximately 10% (200,000 tons) is disposed of in publicly owned landfills and 90% (1.8 million tons) is disposed in privately owned landfills. It is estimated that 52 acres of new landfill capacity will be required on an annual basis.

The following cost estimate is an example based on all existing landfill facilities installing liner and leachate collection systems. The actual number of such systems that could be required under the legislation is not known at this time. Costs could also vary depending upon the alternative systems that may be allowed.

Development costs associated with liner and leachate collections systems is estimated to be \$150,000 per acre. The total estimated annual capital cost (excluding financing) is \$0.8 million for public landfills and \$7 million for privately owned landfills. It is not known at this time how these costs would be allocated amongst the various facilities, and what percentage would be borne by small businesses.

It is estimated that one acre of a lined landfill cell will produce an average 270,000 gallons of leachate per year for the time that the landfill cell remains open. Transportation and off-site disposal costs can range from \$.05 and \$.30 per gallon. Using \$.15 per gallon, the total estimated annual cost for leachate management is approximately \$2.1 million; \$0.2 million for publicly owned facilities and \$1.9 million to privately owned facilities. This amount would increase over time as more cells with protective systems are developed and leachate management is practiced in existing cells. It is not known at this time how these costs would be allocated amongst the various facilities, and what percentage would be borne by small businesses.

If all of the additional costs are passed along through tipping fees, the tipping fees in the first year could increase by approximately \$4.75 per ton at publicly owned facilities and by \$5.00 per ton at privately owned landfills. This amount would increase over time as more cells with protective systems are developed and leachate management is practiced in existing cells. This increase would impact home builders, home improvement contractors, demolition contractors, roofers, or any other business that would generate rubble or construction waste. In addition, haulers of such materials could be impacted. According to the Maryland Builders Association, a typical builder pays \$511 per house for construction waste disposal.

Engineers and contracting firms that design and construct new landfill capacity would benefit from a requirement for liner and leachate collection systems. Due to the special design and construction techniques necessary for landfill construction, MDE advises that the number of engineering and contracting firms qualified to accomplish these tasks are limited to about 20 in the State. It is not known how many of these are small businesses.

Furthermore, it is possible that the required protective systems would save the cost of future remediation of rubble landfill sites. Actual capital costs for ground water remediation at former landfill sites average approximately \$15,000 per acre and have operational costs of \$1,000 per acre. A typical "pump and treat" ground water remediation project can last approximately 7 to 12 years.

Information Source(s): Anne Arundel, Prince George's, and Garrett counties; Maryland Department of the Environment; Maryland Builders Association; Department of Fiscal Services

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Analysis by: Kim E. Wells-McDonnell

Direct Inquiries to:

Reviewed by: John Rixey

John Rixey, Coordinating Analyst

(410) 841-3710

(301) 858-3710