

Department of Legislative Services
Maryland General Assembly
2010 Session

FISCAL AND POLICY NOTE

Revised

House Bill 1467

(Delegate Stein)

Environmental Matters

Education, Health, and Environmental Affairs

Environment - Coal Combustion By-Products - Minimum Standards - Beneficial
Uses

This bill requires that the specified use and disposal of coal combustion by-products (CCB) conform to certain best engineering practices and current Maryland Department of the Environment (MDE) regulations.

The bill takes effect July 1, 2010.

Fiscal Summary

State Effect: The bill is not anticipated to materially affect State operations or finances, as the bill is generally consistent with MDE's existing and proposed regulations governing the disposal, storage, and beneficial use of CCBs.

Local Effect: The bill is not anticipated to materially affect local finances or operations, as the bill is generally consistent with MDE's existing and purposed CCB regulations.

Small Business Effect: Minimal or none.

Analysis

Bill Summary: The use and disposal of CCBs involving contact with the ground must, except for use in coal mine reclamation, comply with best engineering practices to minimize the impact of leachate generation and fugitive dust emissions or to control fugitive dust emissions and control and capture leachate generation. All use and disposal of CCBs involving contact with the ground also must comply with applicable CCB regulations governing landfill disposal, beneficial use, or mine reclamation. In addition,

any person who uses CCBs for landfill, structural fill, soil improvement, agriculture, soil conditioning, or land reclamation must minimize dust and wind erosion and comply with all applicable MDE regulations and permit requirements. Finally, any person who uses CCBs for structural fill or nonmine land reclamation must use engineering practices that are at least as protective of the environment and public health as those required for landfill disposal of CCBs or for noncoal mine reclamation using CCBs.

The bill defines “pozzolan” as the finely divided residue that results from combustion of ground or powdered coal and is released by combustion gases, as defined by the test methods published by the American Society for Testing and Materials (ASTM). In addition, the bill defines “structural fill” as material used to create a base to provide bearing capacity to support a building but specifies that the term does not include material that will support a roadway or that meets the standards for concrete established by ASTM and the American Concrete Institute.

Due to the bill’s changes, the bill also eliminates certain references to pozzolan, a type of CCB, from the mining subtitle of the Environment Article. Under those provisions, currently any person who uses pozzolan for landfill must do so in a manner that complies with sound engineering practices; and any person who uses pozzolan for landfill, structural building, soil improvement, agriculture, soil conditioning, or land reclamation is required to minimize dust and wind erosion and comply with all silt control regulations and MDE permit requirements.

Current Law: On December 1, 2008, new regulations developed by MDE for the handling of CCBs took effect. The regulations are comprehensive, imposing new requirements pertaining to the disposal of CCBs and their use in mine reclamation. Under the regulations, disposal facilities need to meet all of the same standards required for industrial solid waste landfills, such as leachate collection, groundwater monitoring, the use of liners, and routine analysis of CCBs. For noncoal mine reclamation sites using CCBs, the regulations also require the site to meet standards similar to those required for industrial solid waste landfills. In addition, for both disposal and the use of CCBs in noncoal mine reclamation, dust control measures must be implemented, post-closure monitoring and maintenance must be performed, and MDE may impose other requirements as part of the permitting process.

While the new regulations were not immediately enforced due to a lack of funding, Chapter 480 of 2009 established a Coal Combustion By-Products Management Fund comprising fees collected by MDE on each ton of CCBs generated. The fee must be adjusted annually by MDE to ensure that all revenues collected cover the cost to implement MDE’s CCB management program, without producing excess revenues.

Chapter 717 of 2009 required MDE to submit regulations defining the *beneficial use* of CCBs to the Joint Committee on Administrative, Executive, and Legislative Review (AELR), by December 31, 2009. The draft regulations, which were recently submitted to the AELR Committee, define beneficial use as the use of CCBs in a manufacturing process to make a product, or as a substitute for a raw material or commercial product, which, in either case, does not create an unreasonable risk to public health or the environment as determined by MDE. The definition specifically excludes the use of CCBs in a mining operation or in mine reclamation activities.

Background: CCBs are noncombustible materials generated from burning coal. Approximately 2 million tons of CCBs are currently generated each year in Maryland, primarily from nine power plants. This amount is anticipated to increase as a result of new environmental controls being installed at power plants to collect CCBs from the combustion process.

CCBs are currently either disposed of or beneficially used. According to MDE, uses of coal ash include mine reclamation, structural fill applications, or as a substitute for cement in the production of concrete. According to a 2008 report by the Department of Natural Resources, in 2006 about 46% of CCBs were placed in four major disposal sites or used in 10 major beneficial use projects in Maryland.

Under certain geologic conditions, certain types of coal ash can produce high concentrations of potentially toxic constituents (such as arsenic, boron, cadmium, iron, lead, manganese, selenium, sulfate, and thallium) in soil that may leach into surface or groundwater. According to a 2007 report by the U.S. Environmental Protection Agency, groundwater contaminated with CCB waste poses a substantial cancer risk. In addition, without proper controls, MDE reports that coal ash released into the air in large quantities can create a public nuisance and/or cause respiratory problems.

Pozzolan is a material that can be made as the result of a power plant's emission control technology. A pozzolan-stabilized material may be used effectively as a structural building material and is often added to Portland cement to increase its strength.

Additional Information

Prior Introductions: None.

Cross File: SB 653 (Senator Lenett, *et al.*) - Education, Health, and Environmental Affairs.

Information Source(s): Kent, Washington, and Worcester counties; Baltimore City; Maryland Department of Agriculture; Department of Natural Resources; Maryland Department of the Environment; Department of General Services; Northeast Maryland Waste Disposal Authority; U.S. Environmental Protection Agency; Department of Legislative Services

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