# **Department of Legislative Services**

Maryland General Assembly 2010 Session

# FISCAL AND POLICY NOTE

Revised

House Bill 1508 Environmental Matters (Delegate Rudolph)

Education, Health, and Environmental Affairs

#### Environment - Coal Combustion By-Products - Disposal and Noncoal Mine Reclamation Sites

This bill prohibits the Maryland Department of the Environment (MDE) from issuing a permit to install a new refuse disposal system that would accept coal combustion by-products (CCBs) for disposal or to use CCBs in new noncoal mine reclamation if the site would be located in the Chesapeake and Atlantic Coastal Bays Critical Area.

#### **Fiscal Summary**

State Effect: The bill does not materially affect State operations or finances.

**Local Effect:** The bill does not materially affect local government operations or finances as there are currently no proposed refuse disposal systems for the disposal of CCBs. Further, even in the absence of the bill, it is very unlikely that a new refuse disposal system of any kind would be approved for operation in the Critical Area.

**Small Business Effect:** Minimal. Although the extent to which any new noncoal mine reclamation operations that propose to use CCBs would be approved in the new critical area under current law is unclear, MDE advises that there are currently no applications for such sites.

### Analysis

**Current Law:** A "coal combustion by-product" is the residue generated by or resulting from the burning of coal and includes fly ash, bottom ash, boiler slag, pozzolan, and solid residuals removed by air pollution control devices from the flue gas and combustion chambers of coal-burning furnaces and boilers.

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.

A "refuse disposal system" is a landfill, landfill system, incinerator, solid waste processing facility, transfer station, or any other solid waste acceptance facility. MDE permits, monitors, and inspects refuse disposal systems.

Critical Area Commission regulations state that certain new development activities or facilities, because of their intrinsic nature or potential for adversely affecting habitats or water quality, may not be permitted in the Critical Area except in intensely developed areas and only after it has been demonstrated that there will be an improvement in quality for an adjacent body of water. In addition, new or expanded solid or hazardous waste collection or disposal facilities and sanitary landfills are specifically prohibited in the Critical Area unless no environmentally acceptable alternative exists outside the Critical Area and the facility is needed in order to correct an existing water quality or wastewater management problem.

**Background:** CCBs are noncombustible materials generated from burning coal. Approximately two 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.

## **Additional Information**

Prior Introductions: None.

Cross File: None.

**Information Source(s):** Howard and Montgomery counties; Baltimore City; Board of Public Works; Department of Natural Resources; Maryland Department of the Environment; Department of General Services; Northeast Maryland Waste Disposal Authority; Critical Area Commission; U.S. Environmental Protection Agency; Department of Legislative Services

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