MARYLAND

Department of the Environment

REPORT TO THE LEGISLATURE:
Status of the State Coal Combustion By-Products Management Fund
Fiscal Year 2010

Prepared for:

Senate Education, Health, and Environmental Affairs Committee
and the
House Environmental Matters Committee
Maryland General Assembly

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard | Baltimore, MD 21230 | www.mde.state.md.us
410-537-3318 | 800-633-6101 x3318 | TTY Users: 800-735-2258
Martin O'Malley, Governor | Anthony G. Brown, Lt. Governor | Robert M. Summers, Secretary

MDE

TABLE OF CONTENTS

INTRODUCTION, BACKGROUND, AND SCOPE 2

REGULATORY FRAMEWORK AND DEVELOPMENT 3

STATUS OF THE FUND 5

USES OF THE FUND 6

EFFICIENCY OF THE PROGRAM 6

CONCLUSION 7

Table I: CCB Invoices 2009: 8

TABLE II: FINANCIAL STATEMENT 9

REPORT TO THE LEGISLATURE:
Status of the State Coal Combustion By-Products Management Fund
February 18, 2011

INTRODUCTION, BACKGROUND, AND SCOPE

This report is submitted to the General Assembly of Maryland to satisfy §9-285 of the Environment Article, Annotated Code of Maryland, which requires that the Maryland Department of the Environment ("MDE", the "Department") inform the Legislature about the status of the State Coal Combustion By-Products Management Fund, which was created by §9-282 of the Environment Article effective July 1, 2009. The specific topics that §9-285 requires the Department to provide information about are:

(1) The status of the Fund;
(2) Revenues of and expenditures from the Fund;
(3) The efficiency of the regulatory program;
(4) Compliance rates within the regulatory program; and
(5) Based on the factors listed in items (1) through (4) above, the necessity to review and adjust the fee in accordance with § 9-283(g).

The purpose of the State Coal Combustion By-Products Management Fund (the "Fund") is to provide the Department with the resources to oversee the disposal, beneficial use, and management of coal combustion byproducts ("CCBs") in the State of Maryland. These materials are the residuals created when coal is burned. Coal consists of a large percentage of organic carbon, with a variable percentage of other naturally-occurring minerals that may contain a wide range of elements including metals. A significant amount of volume reduction takes place when the coal is burned, as a large percentage of the organic carbon in the coal is converted into carbon dioxide. The carbon dioxide escapes as a gas; but most of the chemicals that made up the other minerals remain as solids, often oxides formed when the rock is burned. The removal of the carbonaceous material causes the percentage, or concentration, of the non-volatile elements that were present to be increased in the residual ash. So, although there is no more of a given element in the ash than there was in the original coal, it is now mixed with a much smaller volume of other chemicals, producing a higher concentration in the ash than there was in the original coal. Therefore, although largely derived from natural earth materials including coal and limestone, CCBs can contain potentially harmful amounts of some heavy metals, such as mercury, lead, chromium, cadmium, selenium, molybdenum, and boron, among others. Although not acutely toxic or immediately hazardous, the concentrations of these chemicals can be harmful to plant and aquatic life, and can render the air and both surface water and groundwater unhealthy for prolonged human consumption.

The need for closer regulation of CCBs was brought into sharp focus in 2006 and2007 with the discovery that the BBSS, Inc. site in Crofton, Anne Arundel County, where CCBs were being used to reclaim a sand and gravel mine and had contaminated nearby domestic water supplies (For more information, see the fact sheet and related materials on MDE's website at http://www.mde.maryland.gov/citizensinfocenter/health/flyash.asp). In addition to responding to that crisis, MDE undertook numerous other actions to better regulate CCBs, including a survey of past and current CCB disposal sites, the development of comprehensive new regulations setting stringent standards for the disposal and use of CCBs in landfills and mine reclamation, and enforcement action against several sites which were found to be causing environmental impacts, including the BBSS site. Among other successful outcomes, these efforts resulted in the promulgation of several regulations, which are discussed below.

This report describes the status of the Fund, its uses and the statutorily required elements required above.

REGULATORY FRAMEWORK AND DEVELOPMENT

The Department has undertaken an aggressive approach to the development of regulations to govern all aspects of the management of CCBs. These activities have led to the promulgation of several regulations governing various aspects of CCB handling, transportation, use, and disposal. The following regulations became effective in December, 2008:

COMAR 26.04.10, Management of Coal Combustion Byproducts
www.dsd.state.md.us/comar/SubtitleSearch.aspx?search=26.04.10.*

Subtitle 20 Surface Coal Mining and Reclamation Under Federally Approved Program
COMAR 26.20.24 Special Performance Standards
www.dsd.state.md.us/comar/comarhtml/26/26.20.24.08.htm

Subtitle 21 Mining
COMAR 26.21.04 Utilization of Coal Combustion Byproducts in Noncoal Surface Mine Reclamation
www.dsd.state.md.us/comar/SubtitleSearch.aspx?search=26.21.04.*

In addition, following the 2009 Legislative Session when §§9-281 through 290 relating to CCB disposal and use were added to the Environment Article, MDE was authorized to charge fees to the generators of CCBs in the State to help support the Department's regulatory efforts. This resulted in an addition to COMAR 26.04.10, initially proposed as both emergency regulations, which were effective immediately, and then a normal regulatory proposal, which was subsequently adopted on February 26, 2010.

From COMAR 26.04.10.09:

"D. Annual Generator Fee Schedule.

(1) Base Fee. The initial base fee shall be $1.15 for each ton of coal combustion byproducts generated. The base fee may be adjusted by the Department on an annual basis as provided in Environment Article, §§9-283 and 9-284, Annotated Code of Maryland, for the next applicable fiscal year.

(2) Base Fee Adjustment Factors. The base fee shall be adjusted depending on how the coal combustion byproducts are managed based on the appropriate adjustment factor in Table 1:

Table 1—Base Fee Adjustment Factors

Management category:	Adjustment Factor
Coal combustion byproducts disposed of in the State	1.0
Coal combustion byproducts used for noncoal mine reclamation in the State	1.0
Coal combustion byproducts transported out-of-State	0.5

(3) Calculation of Fee. The annual generator's fee shall be calculated by adding the results of the following formula for each Management Category in Table 1:

(The number of tons of coal combustion byproducts used or disposed of in a management category during the reporting period) × (the base fee for the reporting period as determined by the Department) × (the adjustment factor for that management category) = subtotal of amount charged.

(4) Adjustment of Fees.

(a) Billing of the annual generator's fee shall be based on the generation of coal combustion byproducts by a generator that occurs on a calendar year schedule beginning on January 1 of each year, and be based on the annual report of a generator for the previous calendar year as required under Regulation .08 of this chapter.

(b) Expenditures by the Department shall be calculated on a fiscal year basis, beginning on July 1 and ending on June 30 of the next calendar year.

(c) Whenever the combination of unallocated funds remaining in the Coal Combustion Byproducts Management Fund and the projected revenue from the annual generator's fee exceed anticipated expenditures, the annual generator's base fee shall be adjusted so that the combination of unallocated funds and revenue from the annual generator's fee does not exceed the Department's anticipated expenditures.

(d) Unallocated funds shall include all funds that are expected to be available for carryover into the next fiscal year after payment of all budgeted items and other anticipated expenses.

(5) Exemptions.

(a) A generator may not be required to pay the annual generator's fee for the following:

(i) Coal combustion byproducts that are generated by a generator generating less than 10,000 tons of coal combustion byproducts per calendar year;

(ii) Coal combustion byproducts that are used in accordance with applicable regulations in a surface coal mining and reclamation operation, in a deep mine, or in an abandoned coal mine; and

(iii) Coal combustion byproducts that are used beneficially in the State."

Also, as required by §9-289(b)(1), the Department has pursued the promulgation of regulations governing the transportation of CCBs, to prevent the emission of fugitive dust from vehicles that haul CCB materials to various destinations. Changes to the existing regulations regarding CCB general restrictions and prohibited acts at COMAR 26.04.10.03 were adopted effective October 18, 2010. These changes require vehicles hauling CCBs to be covered, be inspected, and, if necessary, cleaned prior to departure with a load of CCBs, in order to prevent CCB's from blowing off the load or the wheels and undercarriage of the vehicle.

Lastly, in compliance with §9-289(b)(2), the Department proposed comprehensive regulations governing the beneficial use of CCBs. These regulations were proposed as new Chapter COMAR 26.04.11 on February 26, 2010. The Department received numerous and extensive comments concerning this proposal, and is in the process of reviewing them. The Administrative Executive Legislative Review Committee (AELR) placed a "hold" on the proposed regulations while the Department worked with stakeholders on several issues. The proposed regulations have now expired since the one year after promulgation has passed. The Department has met with various focus groups concerning a variety of aspects, and expects to be able to proceed with these regulations in 2011.

STATUS OF THE FUND

Each year, the Department calculates a generator fee to charge the major generators to support the State's CCB regulatory activities. This fee is based on the following factors:

- The requirements of COMAR 26.04.10.09;
- The amount of coal combustion byproducts generated by each major generator, and their fate of the CCB's;
- The funding required to operate the Department's CCB activities for a fiscal year; and
- The amount of money remaining in the CCB fund at the end of the previous fiscal year.

Revenues to the Fund. Under the emergency regulations, generators were required to submit a report detailing their CCB generation for the past 5 years, which was due in March 2009. Based on this information, the Department developed fees for each site generating CCBs, which are detailed in Table I. In accordance with the regulation, the initial base fee was $1.15 per ton of CCBs disposed of in Maryland, and $0.575 per ton for CCBs transported out of State. Invoices were mailed to generators, and $763,614.38 was collected to support the program.

Expenditures from the Fund. The Department then proceeded to hire the additional scientific, engineering, and other technical staff needed to perform the necessary work. A total of $762,360.46 was expended from the Fund, largely for salaries for the technical staff, and the remainder to provide the necessary supplies needed to run the program. A balance of $1,253.92 was remaining in the Fund at the end of FY2010, which was required to be subtracted from the total amount billed for FY 2011 activities.

Projected Costs for FY 2011. The anticipated costs to operate the program for fiscal year 2011 are $911,973.00. This amount has been appropriated for this year's budget. A balance of $1,253.92 was remaining in the Fund at the end of FY2010, which is required to be subtracted from the total amount billed for this year's activities. This leaves $910,719.08 as the total amount to be billed for this FY2011.

Adjustments to the Base Fee. COMAR 26.04.10.09 provides that the base billing fee (subject to adjustment) is $1.15 per ton of CCBs generated. The adjustment factors are 1.0 for CCBs disposed of or used for non-coal mine reclamation in Maryland, and 0.5 for CCBs transported out of State. No fee is charged for CCBs which are beneficially used or used for coal mine reclamation in Maryland. Of these amounts, 743,768.8 tons are billable as either in-State disposal or transportation out of State. Further, the Department can adjust the base rate to accommodate anticipated expenditures. Based on the anticipated program needs and the amount of CCBs managed, the Department has calculated that the base billing fee for this billing period is $1.22465 per billable ton. This is anticipated to generate $910,734 (rounded), which would leave a total surplus of $15 to be carried over if all appropriated funds are expended. Any surplus or unexpended funds will be credited to next year's bills.

Some generators have questioned MDE's assessments, and this value may be subject to re-evaluation if the Department agrees with any of the claimed exemptions (e.g., for material that was really beneficially used, or used in coal mine reclamation, which are exempted from the fee by statute).

USES OF THE FUND

With the support provided by the Fund, MDE has hired geological scientists, engineers, inspectors, and an Assistant Attorney General to focus on the management of coal combustion byproducts in Maryland. The following is a description of the activities of the Department in 2009-2010 that were supported by the Fund.

- Review of plans and construction of liners in CCB landfills and mine reclamations sites: Constellation Energy has proposed to convert one 28-acre landfill cell of the existing Millenium Chemical industrial waste landfill at the Millenium plant near the Key Bridge in southeast Baltimore City a dedicated landfill for the disposal of CCBs from the BGE coal-fired plants in the Baltimore area. The Department reviewed plans for the proposed upgrades to the landfill liner and other structures at the landfill, and held a public hearing concerning the change. Comments received from the public are currently under review. In addition, Departmental engineers have evaluated the plans for installation of new lined cells at two of Mirant's existing landfills to insure that they comply with the new regulations, and accepted engineering practices.

- Review of groundwater data from CCB landfills. Geologists are needed throughout the Department to evaluate groundwater monitoring data from potential pollution sources, in order to discriminate between chemical pollution and naturally occurring concentrations. The CCB staff review data relating to CCB landfills located in the State to evaluate whether they have caused an impact to the local water resources. Scientific advice and testimony is also provided in support of Departmental enforcement actions.

- Compliance Activities. Inspections of CCB facilities are performed by inspectors throughout the Department, and include inspections at the generating facilities, disposal sites, mine reclamation sites, and sites where CCBs are being beneficially used. During FY 2010, Departmental counsel and scientific and enforcement staff participated in the ongoing litigation against Mirant over the Faulkner flyash disposal site in Charles County, investigated and prepared for litigation regarding another CCB disposal facility, and issued a Site Complaint at a Baltimore site where CCBs were used to manufacture sand-blasting agents.

EFFICIENCY OF THE PROGRAM

Due to the reorganization of the Department that took place on July 1, 2009, to focus on CCB activities and as the hiring and training of new staff to accomplish the requisite activities is still ongoing, the Department's CCB regulatory activities are continuing to be developed. Nevertheless, the overall efficiency is much increased due to the following factors:

- The reassignment of specific CCB-related activities to specific units within the Department;
- The allocation of staff to perform the required tasks, which are supported by the Fund; and
- The increased attention to the issue of CCBs Department–wide.

The Department is working on altering its performance-tracking and reporting mechanisms so that subsequent reports can include quantified performance benchmarks.

CONCLUSION

The expansion of the Department's regulatory oversight to include CCB transportation, and increasing involvement in other areas of industrial CCB management activities, will cause an increase in CCB-related activities in the coming year. MDE is taking steps to track these activities separately for next year's report.

The further development of the proposed beneficial use regulations will provide industry with accepted and desirable ways of utilizing these materials, instead of disposing of them.

The impact of recently proposed federal regulations governing CCBs is yet to be assessed. The federal regulations are complex, and as EPA proposed two separate sets of regulations and has not yet chosen between them, it is not clear what impact they will have on disposal and recycling of CCBs in Maryland.

EPA has proposed two possible options for public comment regarding the management of coal ash. Both options fall under the Resource Conservation and Recovery Act (RCRA). Under the first proposal, EPA would list these residuals as special wastes by rule subject to regulation under subtitle C of RCRA, when destined for disposal in landfills or surface impoundments. This would require handling of the materials under most of the requirements imposed on hazardous waste, even though CCBs usually do not test out as hazardous waste when the methods applied to other industrial wastes are used. Under the second proposal, EPA would regulate coal ash under subtitle D of RCRA, the section for non-hazardous wastes. Essentially the same liner, closure, operational and groundwater monitoring requirements would be required under both proposals. The major difference is that under the RCRA C proposal, EPA would have primary enforcement authority, with the States being able to obtain delegation if they adopt the federal rule. Under the RCRA D proposal, the primary enforcement authority would lie with the States instead of with EPA, although citizen and environmental groups would also be able to sue to enforce the rule.

More information about the regulatory proposals can be found on EPA's website: http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/ccr-rule/index.htm.
In addition, the Federal regulations docket contains the proposal and all the comments that EPA has received, which can be viewed at: http://www.regulations.gov/#!docketDetail;D=EPA-HQ-RCRA-2009-0640.

That Maryland will have to alter its existing regulations at least to some extent is a certainty, but due to the large volume of comments being developed nationally – reportedly over 85,000 separate comments were received by EPA - it is impossible to know when they might take effect.

Table I: CCB Invoices 2009:

Vendor Address	For Generator:	Amount Owed
Mr. Burt McCullough Mirant Corporation 1155 Perimeter Center West Atlanta, Georgia 30338	Mirant – Morgantown:	$127, 282.00
Mr. Burt McCullough Mirant Corporation 1155 Perimeter Center West Atlanta, Georgia 30338	Mirant – Dickerson:	$236,216.90
Mr. Burt McCullough Mirant Corporation 1155 Perimeter Center West Atlanta, Georgia 30338	Mirant – Chalk Point:	$201,756.00
Ms. Jennifer Hazen R. Paul Smith Power Station c/o Allegheny Energy 800 Cabin Hill Drive Greensburg, PA 15601	R. Paul Smith:	$20,602.83
Mr. John Quinn Constellation Energy 2 Center Plaza, 12th Floor 110 West Fayette Street Baltimore, MD 21201	BGE - Brandon Shores	$79,017.65
Mr. John Quinn Constellation Energy 2 Center Plaza, 12th Floor 110 West Fayette Street Baltimore, MD 21201	BGE - Wagner	$72,420.10
Mr. John Quinn Constellation Energy 2 Center Plaza, 12th Floor 110 West Fayette Street Baltimore, MD 21201	BGE CP Crane	$26,318.90
Total		$763,614.38

TABLE II
FINANCIAL STATEMENT

STATE COAL COMBUSTION BY-PRODUCTS MANAGEMENT FUND

Financial Statement

July 1, 2009 to June 30, 2010

Beginning Fund Balance		**$ 0.00**
Revenue	**$**	**763,614.38**
FY2010 Expenditures		
Salaries	$	644,214.55
Communications	$	928.92
Travel	$	1,111.50
Contractual Services	$	1,000.86
Supplies	$	9,002.46
Equipment (Computers)	$	15,780.20
Other	$	0.00
Total Expenditures	**$**	**672,038.49**
Indirect Costs	**$**	**90,321.97**
Balance in Fund 6/30/2010	**$**	**1,253.92**