

Coal Combustion Byproducts (CCB) Annual Generator Tonnage Report

Instructions for Calendar Year 2009

The following is general information relating to the requirement for reporting quantities of coal combustion byproducts that were managed in the State of Maryland during calendar year 2009. Please answer the questions on the form provided, attaching additional information and any requested supplemental information to the back of the form.

I. Background. This requirement that generators of coal combustion byproducts (CCBs) submit an annual report was instituted in the Code of Maryland Regulations COMAR 26.04.10.08, that was promulgated effective December 1, 2008. The regulation requires that any non-residential generator of CCBs submit a report to the Department by March 1 of each year describing the manner in which CCBs generated within the State were managed during the preceding calendar year. Additional information and specific instructions follow. For more detailed information, please refer to COMAR 26.04.10.08.

II. General Information and Applicability.

A. Definitions. Coal combustion byproducts are defined in COMAR 26.04.10.02B as:

“(3) Coal Combustion Byproducts. (a) "Coal combustion byproducts" means the residue generated by or resulting from the burning of coal.

(b) "Coal combustion byproducts" includes fly ash, bottom ash, boiler slag, pozzolan, and other solid residuals removed by air pollution control devices from the flue gas and combustion chambers of coal burning furnaces and boilers, including flue gas desulfurization sludge and other solid residuals recovered from flue gas by wet or dry methods. “

A generator of CCBs is defined in COMAR 26.04.10.02B as:

“(9) Generator.

(a) "Generator" means a person whose operations, activities, processes, or actions create coal combustion byproducts.

(b) "Generator" does not include a person who only generates coal combustion byproducts by burning coal at a private residence.”

B. Applicability. If you or your company meet the definition of a generator of CCBs as defined above, you must provide the information as required below. For the purposes of this report, “you” shall hereinafter refer to the generator defined above. Please note that COMAR 26.04.10.08 requires generators of CCBs to submit an annual report to the Department concerning the disposition of the CCBs that they generated the previous year.

Facility Name: Morgantown Generating Station **CCB Tonnage Report – 2009**

III. Required Information. The following information must be provided to the Department by March 1, 2010:

A. Contact information:

Facility Name: Morgantown Generating Station

Name of Permit Holder: Mirant Mid-Atlantic, LLC

Facility Address: 12620 Crain Highway
Street

Facility Address: Newburg MD. 20664
City State Zip

County: Charles

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: 301-843-4600 Facility Fax No.: 301-843-4552

Contact Name: Elizabeth A. Spitzer

Contact Title: Environmental Analyst

Contact Address: 8301 Professional Place, Suite 230
Street

Contact Address: Landover MD. 20785
City State Zip

Contact Email: elizabeth.spitzer@mirant.com

Contact Telephone No.: 301-955-9051 Contact Fax No.: 301-955-9015

For questions on how to complete this form, please call Mr. Edward Dexter, Administrator, Solid Waste Program at 410-537-3318.

B. A description of the process that generates the coal combustion byproducts, including the type of coal or other raw material that generates the coal combustion byproducts. If the space provided is insufficient, please attach additional pages:

See Attachment A

C. The annual volume of coal combustion byproducts generated during the last calendar year, including an identification of the different types of coal combustion byproducts generated and the volume of each type generated. If the space provided is insufficient, please attach additional pages in a similar format:

Table I: Volume of CCBs Generated for Previous Calendar Year:

Reporting Year	Volume of CCB Type:	Volume of CCB Type:	Volume of CCB Type:
	<u>Flyash</u>	<u>Bottom Ash</u>	<u>On-Spec Gypsum</u>
2009	138,149 tons	41,265 tons	12,189 tons

Additional notes:

See Attachment B

Note: CCBs reported in short dry tons.

D. Descriptions of any modeling or risk assessments, or both, conducted relating to the coal combustion byproducts or their use that were performed by you or your company during the reporting year. Please attach this information to the report. N/A

E. Copies of all laboratory reports of all chemical characterizations of the coal combustion byproducts. Please attach this information to the report. N/A

F. A description of how you disposed of or used your coal combustion byproducts in the last calendar year , identifying:

(a) The types and volume of coal combustion byproducts disposed of or used (if different than described in Paragraph C above), the location of disposal, mine reclamation and use sites, and the type and volume of coal combustion byproducts disposed of or used at each site:

Flyash generated in 2009 was 138,149 tons of which 21,742 tons were sold to SEFA, located in Columbia, SC., and 116,407 tons were disposed of at the Faulkner Ash Site, located in Charles County, MD.

Bottom ash generated in 2009 amounted to 41,265 tons, of which 10,341 tons were sold to SEFA, whose headquarters are located in Columbia, SC., and 30,924 tons were transported to the Brandywine Ash Site, located in Prince George's County, MD.

12,189 tons of On-Spec Gypsum was transported via barge to Buchannan, NY for the manufacture of wallboard.

200 tons of off-spec Gypsum was sold to Synmat, headquartered in Louisville, KY.

and (b) The different uses by type and volume of coal combustion byproducts:

Flyash:

Volume: 21,742 tons sold.

Uses: 2,422 tons – Portland Cement

550 tons - Grout

18,770 tons – Supplemental Cementitious Material for Concrete and Concrete Products

Bottom Ash:

Volume: 10,341 tons sold

Uses: 10,341 tons - lightweight aggregate for block and concrete products.

On-Spec Gypsum:

Volume: 12,189 tons

Uses: Wallboard

Off-Spec Gypsum:

Volume: 200 tons

Use: Agricultural Use.

If the space provided is insufficient, please attach additional pages in a similar format. . (Please note that in subsequent years you need only provide the information in Section F for the last calendar year).

G. A description of how you intend to dispose of or use coal combustion byproducts in the next 5 years, identifying:

(a) The types and volume of coal combustion byproducts intended to be disposed of or used, the location of intended disposal, mine reclamation and use sites, and the type and volume of coal combustion byproducts intended to be disposed of or used at each site:

Flyash: Approximately 140,000 tons are expected to be generated of which it is expected that about 25% or 35,000 tons will be sold to SEFA, headquartered in Columbia, SC., and the remainder, or approximately 105,000 tons will be transported for disposal to the Brandywine Ash site, located in Prince George's County, MD.

Bottom Ash: Approximately 42,000 tons are expected to be generated of which 100% is expected to sold to SEFA, headquartered in Columbia, SC.

On - Spec Gypsum: 611,250 tons of on-spec gypsum are predicted to be generated all of which to be sent to Buchanan, NY for the manufacture of wallboard.

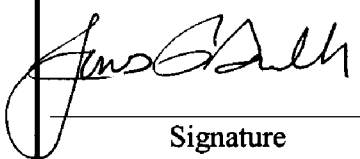
Waste Water Treatment Plant Fines (WWTP Fines): 18,000 tons of fines from the FGD Waste Water Treatment Plant are expected to be generated all of which will be transported to Waste Management's Amelia Landfill in VA.

and (b) The different intended uses by type and volume of coal combustion byproducts.

See Attachment C

If the space provided is insufficient; please attach additional pages in a similar format.

IV. Signature and Certification. An authorized official of the generator must sign the annual report, and certify as to the accuracy and completeness of the information contained in the annual report:

This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.		
 Signature	<u>James P. Garlick – SVP, Operations</u> 678-579-5040 Name, Title, & Telephone No. (Print or Type)	<u>02/19/10</u> Date
	<u>jim.garlick@mirant.com</u> Your Email Address	

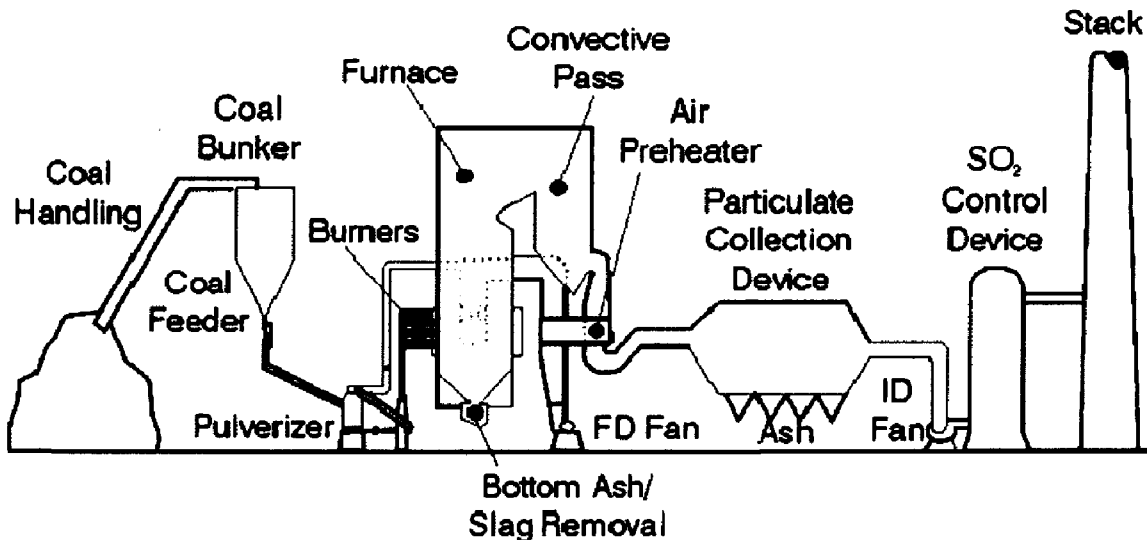
Attachment A

Morgantown Generating Station
12620 Crain Highway,
Newburg, Charles County, MD. 20664
301-843-4600

The Morgantown Generating Station is located on the Potomac River, just south of Rt. 301 at the Harry W. Nice Bridge near the town of Newburg in Charles County, MD. The facility is engaged in the generation of electrical energy for sale. The primary SIC code is 4911. There are two tangentially fired supercritical steam units each firing bituminous coal. Each unit is rated at 640 MWs (base loaded) and each is equipped with a superheater, single reheat, and economizer. Pollution control devices on both units include low NO_x burners with Separated Over-Fired Air (SOFA) and Selective Catalytic Reduction (SCR) for control of oxides of nitrogen (NO_x); and electrostatic precipitators (ESP) for the control of particulate matter. A Wet Scrubber (FGD) was installed and went in service on both units in late 2009. Units 1 & 2 exhausts through the scrubber stack or, when the FGD is not in service, through separate 700 ft. stacks.

Coal is currently delivered by both rail and by barge. The rail cars are emptied using a rotary dumper, then transferred by conveyor and dravo to either a storage pile or fed directly to the units' bunker. The barge unloading facility consists of a dock, an unloader, a transfer system, and a rail loading system and a rail loading facility. The barge unloading transfer and distribution system is integrated into Morgantown's existing coal handling system.

The illustration below shows a simple schematic diagram for a typical pulverized coal combustion system. The coal is prepared by grinding to a very fine consistency for combustion.



Attachment A

The CCBs currently produced and used are a result of the combustion of pulverized coal.

Ash is formed in the boiler while coal combusts. In general, pulverized coal combustion results in approximately 10% ash, of which 65%–85% is fly ash, and the remainder is coarser bottom ash. Bottom ash is a coarse material and falls to the bottom of the boiler. Fly ash is finer than bottom ash and is carried along the combustion process with flue gas. Particulate collection devices remove fly ash from the flue gas and the collected ash is transferred to one of two ash silos. In 2009, flyash that was not marketed was sent to the Faulkner Ash Site, located approximately six miles north and also in Charles County, MD. The bottom ash is conveyed out of the bottom of the boiler via a drag chain conveyor. The bottom ash is then either prepared for sale, or sent to the Brandywine Ash Site, where it is often used in the construction of flyash disposal cells.

Gypsum is a byproduct of SO₂ removal by the Flue Gas Desulfurization (FGD) system, commonly known as a scrubber. Morgantown uses wet scrubbers for SO₂ removal. Wet scrubbing uses a slurry of limestone alkaline sorbent to remove SO₂, - as well as some mercury contaminants - from the air stream. The byproduct - gypsum - is conveyed to a storage dome temporarily and then sent via barge to Buchanan, New York to be made into wallboard. Waste Water Treatment Plant Fines (WWTP Fines) are removed from the Scrubber's WWTP as needed and transported to Waste Management's Amelia Landfill in Virginia for disposal.

Facility Name: Morgantown Generating Station **CCB Tonnage Report – 2009**

Attachment B

Reporting Year	Volume of CCB Type: <u>Off-Spec Gypsum</u>	Volume of CCB Type:	Volume of CCB Type:
2009	200 tons		

Facility Name: Morgantown Generating Station CCB Tonnage Report – 2009

Attachment C

Section G(b):

Flyash:

Volume: ~ 35,000 tons

Uses: 30,100 tons Supplemental Cementitious Material for Concrete and Concrete Products

3,850 tons Portland Cement

1,050 tons Grout

Bottom Ash:

Volume: ~ 42,000 tons

Uses: Lightweight aggregate

On-Spec Gypsum:

Volume: 611,250 tons

Uses: Wallboard
