

# Maryland Coal Ash Water Contamination and Disposal Sites

## Coal Ash Water Contamination in MD:

All of the large coal ash landfills in the state that we know to be leaking belong to Mirant Corp. These are: Mirant Faulkner, Mirant Brandywine, and Mirant Westland.

### Brandywine Coal Ash Landfill

- The coal ash is produced by Chalk Point power plant; operated by Mirant Mid-Atlantic.
- Cadmium levels in surrounding groundwater have been 100 times the primary Maximum Contamination Levels which were set by the EPA.
- Selenium has also been released in the leakage.
- Most of the pits for disposal at the Brandywine landfill are not lined.
- Contaminated groundwater has leaked into the nearby Mattaponi Creek, which flows through the Merkle Wildlife Sanctuary into the Patuxent River. The chemicals are carried by the Patuxent into the Chesapeake Bay.
- The site contains 7 million cubic yards, or 8.5 million tons of toxic coal ash.

### Faulkner Fly Ash Storage Facility

- The storage facility has leaked toxic chemicals into the Zekiah Swamp, in the Chesapeake Bay watershed.
- In 2003, 27,600 pounds of arsenic compounds, 27,200 pounds of lead compounds and 181 pounds of mercury compounds were transferred into the storage facility.
- Groundwater at the site had an acidity level (pH) of up to 3.9, which is more than 1000 times higher the neutral 7.0 level.
- Many claims have been made by local residents that the Wimlico River has been adversely affected by Faulkner.

### Westland Fly Ash Site

- No data available.

In addition, the BBSS site at Gambrills contaminated drinking water wells with heavy metals in 2007. Residents told state environmental and mining officials in May of this year that their water is still polluted nearly three years after the toxic fly ash seeped into their water from the nearby disposal site.

### BBSS at Gambrills

- The coal ash was produced by Constellation Energy.
- 4.5 million tons of coal ash were dumped into former gravel mines with improper lining.
- Ash particles were also found to be floating through the air, and made up 1-5% of dust particles.
- Anne Arundel County has since banned all dumping of coal ash.

## **Breakdown of Coal Ash Disposal Sites by County:**

### **Allegany County**

#### **Ritchie Trucking and Excavating**

Location: Midlothian Rd 1 mile south of Frostburg

Type of CCB: alkaline FBC bottom ash and fly ash

Estimated Amount: unknown

Type of Site: surface coal mine, ash placed on pavement and mixed with backfill

Facility Generating: AES Warrior Run, Cumberland MD

Monitoring: offsite water monitoring

CCB use/disposal: inactive

#### **Mountain View Landfill**

Location: 13300 New George's Creek Road, Frostburg

Type of CCB: bottom ash and fly ash

Estimated Amount: Approximately 10,000 tons in 2008

Type of Site: Municipal Solid Waste Landfill operated by Allegany County

Facility Generating: Constellation Energy's Brandon Shores and H.A. Wagner Power Plants

Monitoring: onsite groundwater monitoring for life of facility plus 30 years

CCB use/disposal: active

#### **Vindex Energy Corporation #2**

Location: Potomac Hollow Rd east of Barton

Type of CCB: alkaline FBC bottom ash and fly ash

Estimated Amount: unknown

Type of Site: surface coal mine, ash placed on pavement and mixed with backfill

Facility Generating: AES Warrior Run, Cumberland MD

Monitoring: offsite water monitoring

CCB use/disposal: inactive

#### **Vindex Energy Corporation-Carlos**

Location: Legislative Rd 1.4 miles south of Midlothian

Type of CCB: alkaline FBC bottom ash and fly ash

Estimated Amount: unknown

Type of Site: surface coal mine, ash placed on pavement and mixed with backfill

Facility Generating: AES Warrior Run, Cumberland MD

Monitoring: offsite water monitoring

CCB use/disposal: inactive

#### **Tri-Star Mining #3**

Location: Michael Rd via Bartlett Run Rd 2.1 miles west of Barton

Type of CCB: alkaline FBC bottom ash and fly ash

Estimated Amount: unknown

Type of Site: surface coal mine, ash placed on pavement and mixed with backfill

Facility Generating: AES Warrior Run, Cumberland MD

Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: inactive

**Vindex Energy Corporation #4**

Location: Potomac Hollow Rd 0.2 mile east of Barton  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: active

**Vindex energy Corporation #5**

Location: Potomac Hollow Rd 1.3 miles east of Barton  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: offsite water monitoring  
CCB use/disposal: inactive

**Vindex energy Corporation # 6**

Location: Rt 36 3 miles south of Frostburg  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: offsite water monitoring  
CCB use/disposal: active

**G&S Coal Company #4**

Location: Miller Rd, south of Barton, 1 mile east of Rt 36 intersection  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: offsite water monitoring  
CCB use/disposal: active

**Tri-Star Mining #4**

Location: Rt 36 1.3 miles north of Westernport  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring

CCB use/disposal: inactive

**Cobra Mining, Inc.**

Location: Potomac Hollow Rd 0.5 mile east of Barton

Type of CCB: alkaline FBC bottom ash and fly ash

Estimated Amount: unknown

Type of Site: surface coal mine, ash placed on pavement and mixed with backfill

Facility Generating: AES Warrior Run, Cumberland MD

Monitoring: annual testing of CCB; offsite water monitoring

CCB use/disposal: active

**Anne Arundel County**

**BBSS (See Contamination Details Above)**

Location: MD Route 3 between Evergreen Road and Waugh Chapel Road

Type of CCB: bottom ash and fly ash

Estimated amount: 4 million tons

Type of Site: CCBs used for land reclamation at two sand & gravel pits onsite

Facility Generating: Constellation Energy's Brandon Shores and H.A. Wagner Power Plants

Monitoring: onsite and offsite groundwater monitoring

CCB use/disposal: inactive. Site is currently operating under terms of civil consent decree two surface mining permits (Turner and Waugh Chapel) and NPDES permit

**Brandon Woods**

Location: Ft. Smallwood and Solley Roads

Type of CCB: bottom ash and fly ash

Estimated amount: 3.5 million tons

Type of Site: CCBs used as structural fill for property development

Facility Generating: Constellation Energy's Brandon Shores and H.A. Wagner Power Plants

Monitoring: onsite and offsite groundwater monitoring

CCB use/disposal: inactive

**Millersville Landfill**

Location: Cell 1E, Millersville Sanitary Landfill, Burns Crossing Road, Millersville

Type of CCB: fly ash

Estimated amount: Approximately 64,000 cubic yards.

Type of Site: Municipal sanitary landfill operated by Anne Arundel County DPW.

Facility generating: Constellation Energy's Brandon Shores and Wagner Station Power Plants.

Monitoring: The entire landfill is subject to intensive groundwater monitoring for a broad suite of organic, inorganic, and indicator parameters. Monitoring is required for the life of the facility plus at least 30 years.

CCB use/disposal: Millersville Landfill is still active although the area where the fly ash was placed is closed and capped.

## **Baltimore County**

### **Rossville Industrial Park**

Location: U.S. Route 40 and Rossville Boulevard

Type of CCB: fly ash

Estimated Amount: 45,000 tons

Type of Site: used as structural fill for property development

Facility generating CCB: Constellation Energy C.P. Crane Power Plant

Monitoring: onsite and offsite groundwater monitoring

CCB use/disposal: inactive

### **I-695 Overpasses, Sparrows Point**

Location: I-695 adjacent to Sparrows Point Steel Plant, southeastern Baltimore County.

Type of CCB: fly ash

Estimated Amount: 320,000 tons

Type of Site: CCBs used as structural fill for highway embankment

Facility generating: Brandon Shores Power Plant

Monitoring: Extensively studied but no current monitoring

CCB use/disposal: inactive

## **Charles County**

### **Faulkner Fly Ash Storage Facility (See Contamination Details Above)**

Location: 10200 Faulkner Road, Faulkner, MD 20664

Type of CCB: flyash and bottom ash

Estimated Amount: 7 million cubic yards

Type of Site: monofill disposal site

Facility Generating: Mirant Morgantown Power Plant

Monitoring: on site groundwater and surface water monitoring under State Discharge Permit

CCB use/disposal: active

## **Garrett County**

### **Moran Coal Company, Inc.**

Location: Site B of Franklin Strip Mine on old Westernport Road

Type of CCB: fly ash

Estimated Amount: 444,000 tons

Type of Site: Abandoned coal strip mine

Facility Generating: New Page

Monitoring: on site groundwater monitoring under a General Industrial Stormwater Permit

CCB use/disposal: active

### **G & S Coal Company #1**

Location: Mt Zion Rd 2.9 miles southeast of Rt.135

Type of CCB: alkaline FBC bottom ash and fly ash

Estimated Amount: unknown

Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: offsite water monitoring  
CCB use/disposal: active

### **G & S Coal Company #2**

Location: Pee Wee Rd 1 mile east of Rt. 38  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: active

### **Tri-Star Mining**

Location: Russell Rd via Bartlett Run Rd 1.2 miles northwest of Barton  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: inactive

### **Tri-Star Mining 2**

Location: Russell Rd via Bartlett Run Rd 2.3 miles northwest of Barton  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: inactive

### **Savage Mountain Minerals**

Location: Michael Rd via Bartlett Run Rd 1.7 miles west of Barton  
Type of CCB: alkaline FBC bottom ash and bag house fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: active

### **G & S Coal Company #3**

Location: Rt. 135 6 miles south of Bloomington  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill

Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: active

### **Vindex Energy Corporation-Island South**

Location: Sharpless Mine Rd via Mt Zion Rd 0.6 mile south of Rt. 135  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: inactive

### **Moran Coal Company #2**

Location: Westernport Rd 1.5 mile west of Westernport  
Type of CCB: alkaline FBC bottom ash and fly ash  
Estimated Amount: unknown  
Type of Site: surface coal mine, ash placed on pavement and mixed with backfill  
Facility Generating: AES Warrior Run, Cumberland MD  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: active

### **Mettiki Coal Company LLC**

Location: Table Rock Rd 3.2 miles south of US 50.  
Type of CCB: alkaline FBC bottom ash and fly ash; flue gas desulfurization sludge  
Estimated Amount: 480,000 tons of coal ash annually from Virginia Electric Power's North Branch Power Plant and 240,000 tons of fgd sludge annually from Virginia Electric Power's Mount Storm Plant  
Type of Site: coal refuse disposal, ash is mixed with coal refuse being placed in large fill  
Facility Generating: Coal Ash – VEPCO North Branch Plant in Bayard, WVA;  
FGD Sludge – VEPCO Mt. Storm Plant in Mt. Storm, WVA  
Monitoring: annual testing of CCB; offsite water monitoring  
CCB use/disposal: active

## **Montgomery County**

### **Westland Fly Ash Site (See Contamination Details Above)**

Location: 20831 Martinsburg Road, Dickerson, MD 20842  
Type of CCB: fly ash and bottom ash  
Estimated Amount: 3.5 million cubic yards  
Type of Site: monofill disposal site  
Facility Generating: Mirant Dickerson Power Plant  
Monitoring: on site groundwater and surface water monitoring under State Discharge Permit  
CCB use/disposal: active

## **Prince George's County**

### **Brandywine Coal Ash Landfill (See Contamination Details Above)**

Location: 11700 North Keys Road, Brandywine, MD 20613

Type of CCB: fly ash and bottom ash

Estimated Amount: 7 million cubic yards

Type of Site: monofill disposal site

Facility Generating: Mirant Chalk Point Power Plant

Monitoring: on site groundwater and surface water monitoring

CCB use/disposal: active

## **Queen Anne's County**

### **U.S. Route 50/MD 213 Overpass, Centreville**

Location: U.S. Route 50/MD 213 Overpass, Centreville.

Type of CCB: fly ash

Estimated amount: 60,000 tons

Type of Site: Highway embankment

Facilities Generating: Delmarva Power's Indian River plant in southern Delaware (~40,000 tons); and Constellation Energy/BGE's Brandon Shores Power Plant (~20,000 tons)

Monitoring: Extensively studied but not currently monitored.

CCB use/disposal: inactive