

Maryland: Coal Ash Disposal in Ponds and Landfills

Summary of Maryland Coal Ash Waste Sites:¹

Operator and Coal-Fired Power Plant	Landfill or Minefill	Amount of Coal Ash (2008)	County
Constellation Energy's Brandon Shores & H.A. Wagner Power Plants	Mountain View Landfill	10,000 tons	Allegany
AES Warrior Run, Cumberland MD	Ritchie Trucking & Excavating Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Vindex Energy Corporation #2 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Vindex Energy Corp. Carlos Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Tri-Star Mining #3 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Vindex Energy Corporation #4 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Vindex Energy Corporation #5 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Vindex Energy Corporation # 6 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	G&S Coal Company #4 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Tri-Star Mining #4 Minefill	unknown	Allegany
AES Warrior Run, Cumberland MD	Cobra Mining, Inc. Minefill	unknown	Allegany
Constellation Energy's Brandon Shores & H.A. Wagner Power Plants	BBSS Sand and Gravel Pit Structural Fill (also known as Gambrills)	4 million tons	Anne Arundel
Constellation Energy's Brandon Shores & H.A. Wagner Power Plants	Brandon Woods Structural Fill	3.5 million tons	Anne Arundel
Constellation Energy's Brandon Shores & Wagner Station Power Plants	Millersville Landfill	64,000 cubic yards	Anne Arundel
Constellation Energy's C.P. Crane Power Plant	Rossville Industrial Park Structural Fill	45,000 tons	Baltimore
Constellation Energy's Brandon Shores Power Plant	I-695 Overpasses, Sparrows Point Structural Fill for highway	320,000 tons	Baltimore
Mirant Morgantown Power Plant	Faulkner Flyash Site	7 million cubic yards	Charles
New Page	Moran Coal Company, Inc. Minefill	444,000 tons	Garrett
AES Warrior Run, Cumberland MD	G & S Coal Company #1 Minefill	unknown	Garrett
AES Warrior Run, Cumberland MD	G & S Coal Company #2 Minefill	unknown	Garrett
AES Warrior Run, Cumberland, MD	Tri-Star Mining Minefill	unknown	Garrett
AES Warrior Run, Cumberland, MD	Tri-Star Mining 2 Minefill	unknown	Garrett
AES Warrior Run, Cumberland MD	Savage Mountain Minerals Minefill	unknown	Garrett
AES Warrior Run, Cumberland MD	G & S Coal Company #3 Minefill	unknown	Garrett
AES Warrior Run, Cumberland, MD	Vindex Energy Corp. Island South	unknown	Garrett
AES Warrior Run, Cumberland, MD	Moran Coal Company #2 Minefill	unknown	Garrett
Virginia Electric Power's (VEPCO) North Branch Power Plant and VEPCO's Mt. Storm Plant	Mettiki Coal Company LLC	720,000 tons/year (N. Branch, 480,000; Mt. Storm, 240,000)	Garrett
Mirant Dickerson Power Plant	Westland Fly Ash Site	3.5 million cubic yards	Montgomery
Mirant Chalk Point Power Plant	Brandywine Fly Ash Site	7 million cubic yards	Prince George's
Delmarva Power's Indian River Plant (southern DE) & Constellation Energy's Brandon Shores Power Plant	U.S. Route 50/MD 213 Overpass, Centreville highway embankment	60,000 tons (Delmarva, ~40,000; Brandon Shores, ~20,000)	Queen Anne's
Allegheny Energy R. Paul Smith Plant	Brandywine Fly Ash Site	35,831 tons ²	Washington

¹ United States Environmental Protection Agency (U.S. EPA), Database of coal combustion waste surface impoundments (2009) (collected by EPA from industry responses to Information Collection Request letters issued to the companies on March 9, 2009); Maryland Department of the Environment (MDE), Facts About Coal Combustion Byproduct Sites in Maryland, available at <http://www.mde.state.md.us/assets/document/FactSheetCCBSites.pdf> (Active sites only); Allegheny Energy CCB Tonnage Report to MDE (Feb. 13, 2009).

² Ash disposal in West Virginia, just over the Maryland state border (MDE NPDES Permit to Allegheny Energy Paul Smith Power Station, MD0000582; and West Virginia NPDES Permit No. WV0079316).

Amount of coal ash generated per year: over 1.9 million tons of coal combustion waste (CCW).

- Maryland ranks 23rd in the country for coal ash generation.³

Information on Maryland Disposal Sites:

- **Number of Coal Ash Ponds and Landfills:** At least 31 landfills and minefills. Ponds are prohibited.
- **Capacity and releases:** Recent Spills: On March 9, 2009, New Page Corp. located in Allegany County, reported to the Maryland Department of the Environment (MDE) that it spilled 4,000 gallons of coal ash slurry into the North Branch Potomac River.⁴

State of Regulations: Although Maryland’s regulations expressly prohibit disposal of coal ash in leach-prone coal ash impoundments, its rules concerned disposal in landfills and beneficial reuse have significant deficiencies, including:

- Many of Maryland’s landfill regulations are purely discretionary, including:
 - whether any surface or groundwater monitoring will be imposed;
 - whether landfills that pre-dated regulations would be “grandfathered” from regulation (sites are grandfathered unless MDE imposes regulations “as it considers necessary to protect public health and the environment or to prevent nuisance conditions”);
 - where monitoring wells will be located;
 - what the minimum number of monitoring wells will be;
 - what the monitoring parameters will be;
 - what the monitoring frequency will be;
 - whether daily cover will be used;
- Maryland’s post-closure monitoring requirement for landfills is only 5 years;
- There are no financial assurance requirements; and
- A composite liner is not required (sites are only required to use either a clay or a synthetic liner);

Damage cases:

- Maryland Department of the Environment is suing Mirant for Clean Water Act violations at the Mirant **Faulkner, Brandywine, and Westland** ash landfills in federal court.
- The BBSS **Gambrills** site contaminated private drinking water wells in an African America community with arsenic, cadmium, thallium, beryllium, aluminum, manganese, and sulfate levels above maximum contaminant levels, resulting in a \$54 million settlement on top of remediation costs.
- At the **Brandywine** Landfill, there has been demonstrated on-site damage to groundwater and off-site damage to surface water. Groundwater monitoring has documented cadmium, iron, aluminum, manganese, sulfates, total dissolved solids, and chlorides at levels that exceed drinking water standards—some as high as 50, 100, and even 600 times the MCL—in groundwater beneath and downgradient of the Brandywine CCW landfill. Cadmium levels, for example, have been documented at 100 times the .005 mg/L MCL in one groundwater monitoring well. Cadmium and lead levels also regularly exceed water quality criteria regularly in Mataponi Creek downstream of the landfill.⁵
- The PEPCO Morgantown Generating Station’s **Faulkner** Off-site Disposal Facility is listed as a proven damage case in EPA’s 2007 *Coal Combustion Waste Damage Case Assessments* due to groundwater contamination, including low (acidic) pH.⁶

³ U.S. EPA and U.S.DOE, *Coal Combustion Waste Management at Landfills and Surface Impoundments, 1994-2004*, 5 (Aug. 2006).

⁴ Maryland Department of the Environment, Press Release, *The Maryland Department of the Environment Continues to Investigate Fly Ash Spill to North Branch Potomac River In West Virginia* (March 9, 2009), available at <http://www.mde.state.md.us/PressReleases/1175.html>.

⁵ Environmental Integrity Project and Earthjustice. *Out of Control: Mounting Damages from Coal Ash Waste Sites* (Feb. 24, 2010), available at <http://earthjustice.org/sites/default/files/library/reports/ej-eipreportout-of-control-final.pdf>

⁶ U.S. EPA, *Coal Combustion Waste Damage Case Assessments* (July 9, 2007).