

TOXIC COAL ASH IN MARYLAND

Addressing Coal Plants' Hazardous Legacy

Maryland has 21 coal ash dumpsites, 18 of which are unregulated.

For decades, utilities disposed of coal ash – the hazardous substance left after burning coal for energy – by dumping it in unlined ponds and landfills.

Coal ash contains hazardous pollutants including arsenic, boron, cobalt, chromium, lead, lithium, mercury, molybdenum, radium, selenium, and other heavy metals, which have been linked to cancer, heart and thyroid disease, reproductive failure, and neurological harm. Industry's own data indicate that across the country 91% of coal plants are currently contaminating groundwater above federal health standards with toxic pollutants.¹

Coal ash remains one of our nation's largest toxic industrial waste streams. U.S. coal plants continue to produce approximately 70 million tons every year.²

Despite EPA's 2015 Coal Ash Rule, which created the first-ever safeguards for coal ash disposal, many coal ash dumps remain unregulated due to sweeping exemptions for legacy coal ash ponds and inactive landfills. The exempted coal ash dumps are sited disproportionately in low-income communities and communities of color. The EPA will issue a proposed rule to address these exemptions in May 2023.

Maryland's legacy of harm from coal ash includes the poisoning of drinking water with heavy metals in Gambrills, MD, an environmental justice community.³ Maryland utilities currently operate **three federally regulated coal ash landfills** that contain more than 6.1 million cubic yards (12.2 billion pounds) of toxic waste (Table 1). One of the three dumps, the Brandywine Ash Management Facility, located 19 miles southeast of Washington,

Coal ash is leaching unsafe levels of toxic pollutants into groundwater at 91% of coal plants in the United States.

D.C., is the seventh most contaminated coal ash site in the nation. The site contaminates groundwater with unsafe levels of eight pollutants, including lithium at more than 200 times recommended levels, and molybdenum (which may damage the liver and kidneys)

at more than 100 times recommended levels. The Maryland utilities that own the dumps have yet to initiate any cleanups to restore water resources despite the legal requirement to do so.

In addition, Maryland hosts at least 18 unregulated inactive coal ash landfills and legacy ponds that escape federal regulation (Table 2). One, the "unregulated" portion of the Brandywine facility, is 190 acres and contains nearly 8 million tons of ash. It is estimated that these unregulated landfills contain about 20-25 million tons of coal ash.⁴ These dumps are almost certainly contaminating water and threatening health and the environment; however, monitoring data are not currently available for most unregulated sites.

As we anticipate EPA's proposed rule on legacy ponds and unregulated landfills in May 2023, a concern remains that the agency will not address coal ash that was dumped off site or used as fill.

Action Needed

The magnitude of harm from recklessly dumped toxic coal ash requires decisive action from federal and state regulators. Utilities must be required to comply with the law and immediately clean up their pollution.⁵ EPA and states must make enforcement a priority and act quickly to ensure that utilities leave communities with sites that benefit rather than harm

their health, environment, and economic status. EPA must swiftly strengthen the Coal Ash Rule to address the many legacy ponds and inactive landfills that are unregulated, and to prohibit coal ash used as fill unless protective measures are put in place, to ensure all Maryland communities are protected from coal ash pollution.

Table 1: Three Regulated Coal Ash Landfills in Maryland

Coal Plant	City	Owner	Coal Ash Dumps (total coal ash in cubic yards)	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁶
Brandywine Ash Management Facility	Aquasco	GenOn	1 landfill (1.4 million cubic yards)	Arsenic (x5), Beryllium (x2), Boron (x29), Cobalt (x47), Lithium (x222), Molybdenum (x111), Selenium (x9), Sulfate (x11)
Fort Armistead Road	Baltimore	Talen	1 landfill (903,400 cubic yards)	No data on constituents exceeding standards
Westland Ash Mgmt	Dickerson	GenOn	1 landfill (>3.8 million cubic yards)	Boron (x5), Lithium (x21), Molybdenum (x30), Selenium (x6), Sulfate (x2)

For more information on regulated coal ash dumpsites in Maryland, see earthjustice.org/coalash/map.

Table 2: 18 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Maryland (ash dumps exempted from the 2015 Coal Ash Rule)⁷

Coal Plant or Landfill	City	Owner or Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁸
Brandywine Ash Management Facility	Aquasco	GenOn	0	1	Yes – EPA damage case
AES Warrior Run Cogen Facility	Cumberland	AES WR Ltd	1	0	Unknown – no data
CP Crane	Bowley's quarters	Baltimore Gas & Electric	0	1	Unknown – no data
Cumberland Site 1*	Allegany County	Cumberland Power Plant	0	1	Unknown – no data
Cumberland Site 2*	Allegany County	Cumberland Power Plant	0	1	Unknown – no data

(Table continues on the next page)

Table 2, continued: 18 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Maryland (ash dumps exempted from the 2015 Coal Ash Rule)⁷

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁸
Joppa Sand and Gravel Site*	Harford Co	Wagner Power Plant	0	1	Unknown – no data
Morgantown	Newburg	GenOn Mid-Atlantic	0	2	Yes – EPA damage case
R Paul Smith Power Station	Williamsport	Allegheny Energy Supply	2	1	Unknown – no data
Riverside Site*	Baltimore Co.	Riverside Power Plant	0	1	Unknown – no data
Rossville Industrial Park*	Baltimore City	Baltimore Gas & Electric	0	1	Unknown – no data
Turner Pit (West)*	Anne Arundel Co.	Brandon Shores & Wagner	0	1	Yes – EPA damage case
Vienna Site 2*	Dorchester Co	Vienna Power plant	1	0	Unknown – no data
Waugh Chapel Pit*	Anne Arundel Co	Brandon Shores & Wagner	0	1	Yes – EPA damage case
Westport Site 1*	Baltimore City	Westport power	0	1	Unknown – no data
Westport Site 2*	Baltimore City	Westport power	0	1	Unknown – no data

^{*} Data on these unregulated landfills are found in Maryland Department of Natural Resources, Coal Combustion By-Product Storage, Use, and Disposal Sites in Maryland (Aug 2019).

Endnotes

- ¹ Earthjustice and Environmental Integrity Project, "Poisonous Coverup, The Widespread Failure of the Power Industry to Clean Up Coal Ash Dumps," *available at* https://earthjustice.org/document/ poisonous-coverup.
- ² American Coal Ash Association, 2020 CCP Production and Use Survey Report, https://acaa-usa.org/wp-content/uploads/2021/12/News-Release-Coal-Ash-Production-and-Use-2020.pdf.
- ³ U.S. EPA, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule, 80 Fed. Reg. 21,302 at 21,328.
- ⁴ Maryland Department of Natural Resources, Coal Combustion By-Product Storage, Use, and Disposal Sites in Maryland (Aug 2019). https://dnr.maryland.gov/pprp/Documents/CCB Sites-in-Maryland.pdf.
- ⁵ See footnote 1, supra, for more information re widespread utility non-compliance with the 2015 Coal Ash Rule.
- ⁶ All data derived from the utilities' publicly accessible <u>CCR Compliance Data and Information</u> websites, and exceedances were calculated by Environmental Integrity Project.
- ⁷ These data were developed by using EPA datasets relied upon in their 2007 and 2014 CCR risk assessments (Human and Ecological Risk Assessment of Coal Combustion Residuals) and comparing those datasets to the universe of regulated units.
- ⁸ "EPA damage case" denotes a site where US EPA has found documented groundwater contamination from coal ash. See: https://www.regulations.gov/document/EPA-HQ-RCRA-2009-0640-12123.