

TOXIC COAL ASH IN VIRGINIA

Addressing Coal Plants' Hazardous Legacy

Virginia has 36 coal ash dumpsites.

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.

Virginia utilities operate **17 federally regulated coal ash ponds and landfills**, containing more than 51.5 million cubic yards of toxic waste at eight coal plants (Table 1). Coal ash has caused significant groundwater contamination at nearly all the state's regulated dumpsites. To date, however, no Virginia plant has even selected a cleanup plan to remediate groundwater, although cleanup should have been initiated at most sites according to the federal Coal Ash Rule.

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

In addition, Virginia hosts at least **19 inactive coal ash landfills and legacy ponds** that escape federal regulation (Table 2). The exact number remains unknown because utilities are not required to report these sites. 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.³ 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 Virginia communities are protected from coal ash pollution.

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Table 1: 17 Federally Regulated Coal Ash Disposal Sites in Virginia

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁴
Bremo	Bremo Bluff	Dominion	3 unlined ponds	Boron (x1), Cobalt (x6), Lithium (x10), Molybdenum (x5)
Chesapeake	Chesapeake	Dominion	1 unlined pond	Antimony (x1), Arsenic (x21), Beryllium (x6), Boron (x2), Cobalt (x13), Lithium (x11), Molybdenum (x2), Radium 226+228 (x9), Selenium (x9), Sulfate (x4)
Chesterfield	Chester	Dominion	2 unlined ponds, 1 landfill	Arsenic (x16), Boron (x3), Cobalt (x31), Lithium (x3), Molybdenum (x2), Radium 226+228 (x2), Sulfate (x1)
Clinch River	Cleveland	AEP	1 unlined pond	Barium (x2), Cobalt (x2), Lithium (x4), Molybdenum (x4)
Clover	Clover	Dominion	1 lined pond, 1 landfill	Lithium (x2)
Possum Pt	Dumfries	Dominion	5 unlined ponds	Arsenic (x3), Boron (x1), Cobalt (x5)
Virginia City	St. Paul	Dominion	1 landfill	No contaminants exceeding federal thresholds
Yorktown	Yorktown	Dominion	1 landfill	No contaminants exceeding federal thresholds

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

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Table 2: 19 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Virginia for which Federal Regulations Have Not Yet Been Adopted⁵

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁶
Amelia Landfill^a	Jetersville	Waste Management	0	1	No data available
Battlefield Golf Course	Chesapeake	Dominion	0	1	Yes – EPA damage case
Birchwood Power Plant^a	King George	J-Power Development Company and General Electric	0	1	No data available
Chesapeake	Chesapeake	Virginia Electric & Power Co	0	1	Yes – industry data ^b
Clinch River	Cleveland	Appalachian Power Co	0	2	Yes – EPA damage case
Clover	Clover	Dominion Energy	0	2	Yes – industry data ^b
Glen Lyn	Glen Lyn	Appalachian Power Co	3	1	Yes – EPA damage case
Hopewell Power	Hopewell	Virginia Electric & Power Co	1	0	No data available
Portsmouth Genco^a	Portsmouth	Quantum Energy Partners LLC	1	0	No data available
Potomac River	Alexandria	Potomac Electric Power Co.	0	1	No data available
Riverton Power Plant^a	Riverton	Unknown	0	1	No data available
Yorktown – Chisman Creek Sites	Yorktown	Virginia Power	0	3	Yes – EPA damage case and NPL Superfund site. This site has been remediated and is monitored.

^a Data on these unregulated landfills and ponds is found in Inventory of Chesapeake Bay Watershed Coal Ash Deposits (December 2021).

^b Industry monitoring data are the basis of a finding of contamination. See [Ashtracker.org](https://www.ashtracker.org).

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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://aca-usa.org/wp-content/uploads/2021/12/News-Release-Coal-Ash-Production-and-Use-2020.pdf>.
- ³ See endnote 1, *supra*, for more information re widespread utility non-compliance with the 2015 Coal Ash Rule.
- ⁴ All data derived from the utilities’ publicly accessible [CCR Compliance Data and Information websites](#), and exceedances were calculated by Environmental Integrity Project.
- ⁵ 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.
- ⁶ “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>.

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