

TOXIC COAL ASH IN OHIO

Addressing Coal Plants' Hazardous Legacy

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

Ohio has more than 67 coal ash dumpsites. 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.

Ohio is one of the nation's top coal ash-generating states, ranking third in ash production in 2020.³ Ohio utilities operate **37 federally regulated coal ash ponds and landfills** containing more than 172 million cubic yards of toxic waste (Table 1). Coal ash has caused significant groundwater contamination at all of Ohio's regulated dumpsites. In fact, the majority of the Ohio plants are in the

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top 100 contaminated ash sites in the nation. Ohio plants have failed to initiate any plant-wide cleanup to restore water resources despite the legal requirement to do so.

In addition, Ohio hosts at least **30 unregulated 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.⁴ 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 Ohio communities are protected from coal ash pollution.

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Table 1: 37 Regulated Coal Ash Disposal Sites in Ohio that Industry Acknowledges are Federally Regulated*

Coal Plant	City	Owner	Coal Ash Dumps (total coal ash in million cubic yards)	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁵
Cardinal	Brilliant	AEP	2 unlined ponds, 1 landfill (> 20M CY)	Arsenic (x4), Boron (x3), Lithium (x11), Molybdenum (x9), Sulfate (x3)
Conesville	Conesville	AEP	1 unlined pond, 1 landfill (> 4.7M CY)	Arsenic (x15), Beryllium (x4), Boron (x7), Cobalt (x7), Fluoride (x2), Lithium (x4), Molybdenum (x15), Radium 226+228 (x2)
Gavin	Cheshire	Gavin Power, LLC	2 unlined ponds, 1 landfill (> 87 M CY)	Arsenic (x3), Boron (x2), Cobalt (x23), Fluoride (x2), Lead (x2), Lithium (x17), Molybdenum (x6)
JM Stuart Station	Aberdeen	Kingfisher Development	5 unlined ponds, 3 landfills (25M CY)	Arsenic (x11), Barium (x1), Boron (x9), Cobalt (x4), Lithium (x4), Molybdenum (x26), Radium 226+228 (x2), Selenium (x1), Sulfate (x1)
Killen	Manchester	AES Ohio Gen	3 unlined ponds (> 14.5 M CY)	Boron (x4), Lithium (x19), Molybdenum (x35)
Kyger Creek	Cheshire	Ohio Valley Electric	2 unlined ponds, 1 landfill (> 8.6M CY)	Arsenic (x11), Barium (x33), Boron (x9), Cobalt (x5), Lithium (x11), Molybdenum (x4), Radium 226+228 (x2), Sulfate (x2)
Miami Fort	North Bend	Luminant	2 unlined pond, 1 landfill (> 4.1M CY)	Arsenic (x11), Barium (x33), Boron (x9), Cobalt (x5), Lithium (x11), Molybdenum (x4), Radium 226+228 (x2), Sulfate (x2)
Richmond Mill	Richmond Mill	Richmond Mill, Inc.	1 landfill (> 3M CY)	Boron (x16), Cobalt (x1), Lithium (x116), Molybdenum (x38), Radium 226+228 (x15), Sulfate (x3)
Walter Beckjord	New Richmond	Commercial Liability Partners	4 unlined ponds (Volume unknown)	Not Evaluated
WH Sammis	Stratton	Energy Harbor Gen	2 unlined ponds, 1 landfill (> 3.6 M CY)	Barium (x2), Cobalt (x8)
Zimmer	Moscow	Luminant	3 unlined ponds, 1 landfill (22M CY)	Boron (x3), Lithium (x6), Sulfate (x2)

* First Energy's Bay Shore Plant, located in Oregon, OH, and Commercial Liability Partners' Walter Beckjord plant in New Richmond, OH, operate inactive coal ash ponds at the facility according to historical reporting to EPA, but the owners have not complied with the CCR rule's requirements that apply to these ponds, including reporting, groundwater monitoring, closure, and corrective action.

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

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Table 2: 30 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Ohio (ash dumps exempted from the 2015 Coal Ash Rule)⁶

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁷
Avon Lake	Avon Lake	GenOn Power Midwest	2	1	Unknown – no data
Conesville	Conesville	AEP	0	1	Yes (EPA damage case)
Ashtabula	Ashtabula	First Energy	1	0	Unknown – no data
Bay Shore	Oregon	First Energy	0	1	Unknown – no data
Eastlake	Willoughby	First Energy	1	1	Unknown – no data
Lake Shore	Cleveland	First Energy	1	0	Unknown – no data
R.E. Burger	Shadyside	First Energy	2	1	Unknown – no data
Gavin	Cheshire	Gavin Power, LLC	0	1	Yes (EPA damage case)
Miami Fort	North Bend	Luminant	0	1	Yes (Industry data)
Muskingum River	Beverly	Ohio Power Co	4	1	Yes (EPA damage case)
Niles	Niles	GenOn Power Midwest	4	0	Unknown – no data
OH Hutchings	Miamisburg	Dayton Power & Light	3	0	Unknown – no data
Picway	Lockbourne	Columbus Southern	1	0	Unknown – no data
Richard Gorsuch	Marietta	American Muni Power	0	1	Unknown – no data
Walter Beckjord	New Richmond	Commercial Liability Partners	0	2	Yes (EPA damage case)

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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 Leading states by primary energy consumption from coal in the United States in 2020, <https://www.statista.com/statistics/189862/leading-us-states-in-energy-consumption-from-coal/>.
- ⁴ See endnote 1, *supra*, for more information re widespread utility non-compliance with the 2015 Coal Ash Rule.
- ⁵ All data derived from the utilities’ publicly accessible [CCR Compliance Data and Information websites](#), and exceedances were calculated by Environmental Integrity Project.
- ⁶ 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.
- ⁷ “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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