

TOXIC COAL ASH IN MISSOURI

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.

Missouri has 60 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.

Missouri is one of the nation's top coal ashgenerating states, ranking fourth in ash production in 2020.³ Missouri utilities operate **43 federally regulated coal ash ponds and landfills** at 16 plants that contain more than 73.4 million cubic yards of toxic waste (Table 1). Coal ash has caused significant groundwater contamination at all of the

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

state's regulated dumpsites. Missouri utilities, however, have failed to restore water resources despite the legal requirement to do so.

In addition, Missouri hosts at least 17 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. 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 Missouri communities are protected from coal ash pollution.

Table 1: 43 Regulated Coal Ash Disposal Sites in Missouri

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁵
Ashbury	Ashbury	Empire District Electric Co	1 unlined pond	Boron (x26), Cobalt (x2), Lithium (x8), Sulfate (x4)
Blue Valley	Independence	City of Independence	3 unlined ponds	Not evaluated
Columbia Muni	Columbia	City of Columbia	1 unlined pond	Boron (x1), Sulfate (x1), Thallium (x2)
latan	Weston	Evergy	1 unlined pond, 1 landfill	Arsenic (x2), Boron (x1), Cadmium (x2), Lithium (x1), Molybdenum (x2)
James River	Springfield	City Utilities of Springfield	2 unlined ponds, 1 landfill	No contaminants exceeding
John Twitty	Springfield	City Utilities of Springfield	2 unlined ponds, 1 landfill	Antimony (x1)
Labadie	Labadie	Ameren	2 unlined ponds, 1 landfill	Arsenic (x4), Boron (x8), Lithium (x1), Molybdenum (x14)
Meramec	St. Louis	Ameren	5 unlined ponds	Arsenic (x2), Boron (x13), Lithium (x4), Molybdenum (x11), Sulfate (x2)
Missouri City	Missouri City	City of Independence	1 unlined pond	Molybdenum ^a
Montrose	Clinton	Evergy	2 unlined ponds, 1 landfill	Arsenic (x1), Boron (x4), Cobalt (x18), Thallium (x1)
New Madrid	New Madrid	Associated Electric Coop	3 unlined ponds, 1 landfill	Arsenic (x2), Boron (x10), Cobalt (x1), Lead (x1), Molybdenum (x76)
Rush Island	Festus	Ameren	1 unlined pond	Arsenic (x29), Boron (x8), Molybdenum (x20)
Sibley	Sibley	Evergy	2 unlined ponds, 1 landfill	Arsenic (x20), Boron (x3), Molybdenum (x30)
Sikeston	Sikeston	Sikeston Bd of Municipal Utilities	2 unlined ponds	Boron (x2), Molybdenum (x14)
Sioux	West Alton	Ameren	2 unlined ponds, 1 lined pond, 1 landfill	Boron (x15), Cobalt (x2), Lithium (x1), Molybdenum (x162), Sulfate (x2)
Thomas Hill	Clifton Hill	Associated Electric Coop	4 unlined ponds	Sulfate (x5)

^a Based on historical industry monitoring data. *See* <u>Ashtracker.org</u>. For more information on regulated coal ash sites in Missouri, see <u>earthjustice.org/coalash/map</u>.

Table 2: 17 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Missouri (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
Chamois	Chamois	Central Elec Power Coop	5	0	Unknown – no data
Hawthorn	Kansas City	Kansas City Power & Light	2	1	Unknown – no data
John Twitty	Springfield	City Utilities of Springfield	0	1	Yes – industry data
Lake Road	St. Joseph	KCP&L Greater MO	2	1	Unknown – no data
Montrose	Clinton	Evergy	0	1	Yes – industry data
Rush Island	Festus	Ameren	0	1	Yes – industry data
Sibley	Sibley	Evergy	0	1	Yes – industry data
Sioux	West Alton	Ameren	0	1	Yes – industry data
Thomas Hill	Clifton Hill	Associated Electric Coop	0	1	Yes – industry data

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 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 <u>CCR Compliance Data and Information</u> <u>websites</u>, 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.