

TOXIC COAL ASH IN INDIANA

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.

Indiana has 100 coal ash dumpsites, the largest number of coal ash dumps in any state.

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 multiple 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.

One of the nation's top coal ash-generating states, Indiana ranked second in ash production in 2020.³ Indiana has the most remaining operational coal plant units in the U.S. and some of the most contaminated coal ash sites. Indiana utilities operate **51 federally regulated coal ash ponds and landfills** containing more than 73.4 million cubic

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

yards of toxic waste at 16 coal plants (Table 1). At all plants, groundwater is contaminated above federal safety standards, and the majority of Indiana coal plants rank in the top 25% of contaminated sites.⁴ Despite significant water contamination, no Indiana plant to date has

selected a final plan to clean up groundwater, as required by state and federal law.

In addition, Indiana hosts at least **49 unregulated inactive coal ash landfills and legacy ponds** that escape federal regulation (Table 2). The exact number is unknown because utilities are not required to report these unregulated dumps. At most of these sites, EPA has already determined that coal ash has contaminated groundwater, but there are no federal monitoring or cleanup requirements. 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 – as often occurred in Indiana.

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.

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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 Indiana communities are protected from coal ash pollution.

Table 1: 51 Regulated Coal Ash Disposal Sites in Indiana that Industry Acknowledges are Federally Regulated

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash
				Magnitude of exceedance above federal health-based guidelines ⁶
AB Brown	Mount Vernon	Vectren	1 unlined pond, 1 lined pond, 1 landfill	Arsenic (x2), Boron (x7), Cobalt (x1), Lithium (x2), Molybdenum (x38), Sulfate (x28), Thallium (x1)
Bailly	Chesterton	NIPSCO	4 unlined ponds	Arsenic (x8), Cadmium (x2), Lithium (x2), Molybdenum (x16), Thallium (x5)
Cayuga*	Cayuga	Duke Energy	3 unlined ponds, 1 landfill	Arsenic (x5), Boron (x5), Cobalt (x4), Lead (x4), Lithium (x11), Molybdenum (x45), Sulfate (x2)
Clifty Creek	Madison	Indiana-KY Electric Coop	2 unlined ponds, 1 landfill	Arsenic (x7), Boron (x5), Lithium (x14), Molybdenum (x64), Sulfate (x2)
Eagle Valley*	Martinsville	IPL	3 unlined ponds	Arsenic (x9), Boron (x4), Lithium (x3), Molybdenum (x6)
FB Culley	Newburgh	Vectren	2 unlined ponds	Arsenic (x9), Boron (x27), Cobalt (x1), Lithium (x6), Molybdenum (x24), Sulfate (x3)
Gallagher*	New Albany	Duke Energy	3 unlined ponds, 1 landfill	Arsenic (x6), Boron (x11), Cobalt (x2), Lithium (x1), Molybdenum (x31), Sulfate (x1)
Gibson*	Owensville	Duke Energy	4 unlined ponds, 1 landfill	Arsenic (x10), Boron (x22), Cobalt (x3), Lithium (x24), Molybdenum (x35), Selenium (x2), Sulfate (x3)
Harding St.*	Indianapolis	IPL	4 unlined ponds	Antimony (x2), Arsenic (x45), Boron (x21), Lithium (x13), Molybdenum (x18), Sulfate (x3)
Merom	Sullivan	Hallador Energy Company	1 landfill	Fluoride (x1)
Michigan City*	Michigan City	NIPSCO	2 unlined ponds	Arsenic (x4), Boron (x2), Selenium (x1), Thallium (x2)
Petersburg*	Petersburg	IPL	3 unlined ponds, 1 landfill	Arsenic (x6), Beryllium (x1), Boron (x18), Cadmium (x2), Cobalt (x65), Lithium (x51), Molybdenum (x64), Sulfate (x2), Thallium (x13)
RM Schahfer	Wheatfield	NIPSCO	4 unlined ponds, 1 landfill	Arsenic (x6), Boron (x17), Cobalt (x6), Fluoride (x10), Lithium (x7), Molybdenum (x76), Radium 226+228 (x2), Sulfate (x15)

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Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁶
Rockport	Rockport	AEP	1 unlined pond, 1 landfill	Arsenic (x2), Boron (x13)
Wabash*	Terre Haute	Duke	4 unlined ponds	Arsenic (x2), Boron (x25), Cobalt (x3), Lead (x1), Lithium (x5), Molybdenum (x39), Sulfate (x3)
Whitewater Valley	Richmond	Richmond P&L	1 unlined pond	Mercury (x6), Molybdenum (x3)

* This plant operates inactive coal ash ponds at the facility but has not reported the ponds in its CCR Rule Compliance Data and Information website nor has the owner complied with the CCR rule’s requirements that apply to these ponds, including groundwater monitoring, closure, and corrective action.

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

Table 2: 49 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Indiana for which Federal Regulations Have Not Yet Been Adopted⁷

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁸
Bailly	Chesterton	NIPSCO	0	2	Yes – EPA damage case
Breed	Fairbanks Twp	Indiana & MI Power Co	0	1	Unknown
Clifty Creek	Madison	Indiana-KY Electric Coop	0	1	Yes – EPA damage case
Dean H Mitchell	Gary	NIPSCO	8	0	Unknown
Edwardsport	Edwardsport	Duke Energy	2	1	Unknown
Frank E Ratts	Petersburg	Hoosier Energy R E C, Inc	8	2	Unknown
Gibson	Owensville	Duke Energy	0	1	Yes – EPA damage case
Merom	Sullivan	Hallador Energy Company	0	2	Yes – EPA damage case

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Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁸
Michigan City	Michigan City	NIPSCO	0	1	Yes – EPA damage case
Noblesville	Hamilton Co	Duke Energy	0	1	Unknown
Gallagher	New Albany	Duke Energy	0	11*	Yes – Industry data
State Line Energy	Hammond	State Line Energy LLC	1	0	Unknown – no data
Tanners Creek	Lawrenceburg	Tanners Creek Development LLC	5	1	Yes – in litigation
Warrick	Newburgh	So Indiana Gas & Elec. Co	1	0	Unknown – no data

* In EPA’s [2010 Steam Electric Questionnaire](#), Duke identified 12 landfills at Gallagher, one of which aligns with the regulated unit, and provided no information on location or size of the other 11 units.

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, “Poisonous Coverup,” *supra*, at Table A4, Summary of Contamination by Site.

⁵ See endnote 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 [CCR Compliance Data and Information 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>.

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