

TOXIC COAL ASH IN ILLINOIS

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.

Illinois has 76 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.

Illinois is one of the nation's top coal ash-generating states, ranking seventh in ash production in 2020.³ Utilities operate **45 coal ash ponds and landfills**, containing more than 109 million cubic yards of toxic waste at 19 coal plants (Table 1), that industry admits are federally regulated. Coal ash has caused significant groundwater contamination

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

at nearly all the state's regulated dumpsites. To date, however, only one Illinois plant has selected a cleanup plan.

In addition, Illinois hosts at least **31 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 Illinois communities are protected from coal ash pollution.

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Table 1: 45 Coal Ash Disposal Sites in Illinois 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 ⁵
Baldwin	Baldwin	Luminant	4 unlined ponds	Boron (x3), Lithium (x3), Molybdenum (x1), Sulfate (x2)
Coffeen	Coffeen	Luminant	3 unlined ponds, 1 lined pond, 1 landfill	Arsenic (x3), Boron (x6), Cadmium (x1), Cobalt (x50), Lead (x2), Lithium (x3), Sulfate (x6)
Dallman	Springfield	City, Water, Light & Power	2 unlined ponds, 1 landfill	Arsenic (x14), Boron (x10), Sulfate (x1)
Duck Creek	Springfield	Luminant	3 unlined ponds, 1 lined pond, 1 landfill	Arsenic (x2), Cobalt (x6), Lead (x6), Lithium (x2)
Edwards	Bartonville	Luminant	1 unlined pond	Arsenic (x2), Cobalt (x6), Lead (x2), Lithium (x4)
Grand Tower Energy Ctr	Grand Tower	Main Line Gen	1 unlined pond	Not evaluated
Havana	Havana	Luminant	1 unlined pond	No exceedances reported
Hennepin	Hennepin	Luminant	4 unlined ponds, 1 landfill	Arsenic (x3), Boron (x4), Cobalt (x1), Lithium (x2), Molybdenum (x8), Selenium (x1)
Joliet #29	Joliet	NRG	1 unlined pond	Cobalt (x1)
Joliet #9	Joliet	NRG	1 unlined pond	Arsenic (x12), Boron (x6), Lithium (x4), Molybdenum (x27), Sulfate (x1)
Joppa	Joppa	Luminant	1 unlined pond, 1 landfill	Cobalt (x3), Lead (x1)
Kincaid	Kincaid	Luminant	1 unlined pond	Boron (x2)
Marion	Marion	SIPC	1 unlined pond	Arsenic (x5), Boron (x7), Cobalt (x63), Selenium (x2), Sulfate (x2), Thallium (x46)

(Table continues on the next page)

* There are two plants in Illinois, Prairie Power’s Pearl Station and Union Electric Co’s Venice, that operate inactive coal ash ponds at the facility according to historical reporting data to EPA, but the owners have not complied with the CCR rule’s requirements that apply to these ponds, including groundwater monitoring, closure, and corrective action.

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Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁵
Newton	Newton	Luminant	1 unlined pond, 1 landfill	Arsenic (x7), Cobalt (x1)
Powerton	Pekin	NRG	3 unlined ponds	Arsenic (x21), Molybdenum (x2), Sulfate (x1), Thallium x2
Prairie State	Marissa	We Energies	1 landfill	No exceedances reported
Waukegan	Waukegan	NRG	2 unlined ponds	Sulfate (x1)
Will County	Romeoville	NRG	2 unlined ponds	Arsenic (x2), Molybdenum (x2)
Wood River	Alton	Luminant	4 unlined ponds	Arsenic (x4), Boron (x33), Molybdenum (x15), Sulfate (x2)

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

Table 2: 31 Coal Ash Legacy Ponds and Inactive Landfills in Illinois for which Federal Regulations Have Not Yet Been Adopted⁶

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁷
Baldwin	Baldwin	Luminant	0	1	Yes – industry data ^a
Hennepin	Hennepin	Luminant	0	1	Yes – EPA damage case
Coffeen	Coffeen	Luminant	0	1	Yes – EPA damage case
Crawford	Chicago	First Energy	1 ^c	0	Yes – industry data ^b

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Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁷
Dallman	Springfield	City, Water, Light & Power	0	1	Yes – EPA damage case
Fisk	Chicago	Midwest Gen	3	0	Unknown – no data
Hutsonville	Hutsonville	Ameren Energy Gen	5	0	Yes – EPA damage case
Joliet #29	Joliet	NRG	0	1	Yes – EPA damage case
Joppa	Joppa	Luminant	0	1	Yes – EPA damage case
Kincaid	Kincaid	Luminant	0	1	Yes – industry data ^a
Marion	Marion	So. IL Power Coop	0	2	Yes – EPA damage case
Meredosia	Meredosia	Ameren Energy Generating Co	5	0	Yes – EPA damage case
Newton	Newton	Luminant (formerly Dynegy)	0	1	Yes – industry data ^b
Vermilion	Oakwood	Dynegy Midwest Gen	5	1	Yes – EPA damage case
Waukegan	Waukegan	NRG	0	1	Yes – EPA damage case

^a Industry monitoring data posted on the plant's CCR Compliance Data and Information website.

^b Industry monitoring is the basis of a finding of contamination as described on [Ashtracker.org](https://www.ashtracker.org).

^c Owner claims to have removed all coal ash in the pond by excavation before 2015.

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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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