

TOXIC COAL ASH IN MICHIGAN

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.

Michigan has 52 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.

Michigan utilities operate **30 regulated coal ash ponds and landfills** containing more than 79 million cubic yards of toxic waste at 15 coal plants (Table 1). Coal ash has caused significant groundwater contamination at nearly all of the state's regulated dumpsites. To date, only one Michigan plant has even selected a cleanup plan.

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

In addition, Michigan hosts at least **22 unregulated inactive coal ash landfills and legacy ponds** at 12 coal plants or landfill sites that escape federal regulation (Table 2). The exact number of unregulated dumps is unknown because utilities are not required

to report them. At most of these sites in Michigan, EPA determined that coal ash has contaminated underlying groundwater with toxic substances since at least 2014.

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 Michigan communities are protected from coal ash pollution.

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Table 1: 30 Regulated Coal Ash Disposal Sites in Michigan

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash
				Magnitude of exceedance above federal health-based guidelines ⁴
BC Cobb	Muskegon	Consumers Energy	2 unlined ponds	Arsenic (x2), Boron (x6), Lithium (x3), Molybdenum (x2), Radium 226+228 (x1)
Belle River	China Twp	DTE	1 unlined pond, 1 landfill	Boron (x1), Cobalt (x1), Lithium (x2), Molybdenum (x2)
DE Karn	Essexville	Consumers Energy	1 unlined pond	Arsenic (x45), Boron (x2), Lead (x2), Molybdenum (x1), Sulfate (x1)
Erickson	Delta Twp	BWL	3 unlined ponds	Coal ash caused drinking water well contamination in nearby residences ⁵
James DeYoung	Holland	Holland Bd of Public Works	3 unlined ponds	Lithium (x3), Sulfate (x2)
JB Sims	Grand Haven	Grand Haven Board of Light	2 unlined ponds	Arsenic (x12), Boron (x75), Cobalt (x1), Fluoride (x4), Lithium (x50), Sulfate (x2)
JC Weadock	Essexville	Consumer Energy	1 unlined pond, 1 landfill	Arsenic (x8), Beryllium (x3), Boron (x2), Cobalt (x2), Lithium (x6), Molybdenum (x3), Sulfate (x4), Thallium (x1)
JH Campbell	West Olive	Consumers Energy	3 unlined ponds, 1 landfill	Antimony (x3), Arsenic (x29), Cobalt (x2), Lithium (x2), Molybdenum (x3), Selenium (x1), Thallium (x1)
JR Whiting	Erie	Consumers Energy	2 unlined ponds	Cobalt (x1), Lithium (x2), Thallium (x1)
Monroe	Monroe	DTE	2 unlined ponds, 1 landfill	Boron (x1), Lithium (x3), Sulfate (x3)
Presque Isle	Marquette	We Energies	1 landfill	No exceedances
River Rouge	River Rouge	DTE	1 unlined pond	Arsenic (x8), Boron (x1), Lithium (x1), Molybdenum (x1)
Shiras	Marquette	Marquette Bd Light & Power	1 unlined pond	Cobalt (x1), Lead (x2)
St Clair	E. China Twp	Luminant	2 unlined ponds	Boron (x1), Lithium (x2)
Trenton	Trenton	NRG	1 landfill	Arsenic (x38), Boron (x1), Lithium (x6), Radium 226+228 (x9), Sulfate (x7)

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

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Table 2: 22 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Michigan (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
DE Karn	Essexville	Consumers Energy Co	0	1	Yes – EPA damage case
Eckert	Lansing	Lansing Bd of Water & Light	1	1	Unknown
Harbor Beach	Harbor Beach	Detroit Edison Co	3	0	Unknown
JH Campbell	West Olive	Consumers Energy	0	6	Yes – EPA damage case
JR Whiting	Erie	Consumers Energy	0	2	Yes – EPA damage case
James DeYoung	Holland	Holland Bd of Public Works	0	1	Yes – Industry data*
John Warden Ash Site	L'Anse, Baraga Co.	Unknown	0	1	Yes – EPA damage case
Muskegon County Type III Landfill	Muskegon Co	Unknown	0	1	Yes – EPA damage case
North Lansing Landfill	North Lansing	Lansing Bd of Water & Light	0	1	Yes – EPA damage case
Pine Hill Landfill	Negaunee Twp	Marquette Bd of Power & Light	0	1	Yes – EPA damage case
Presque Isle	Marquette	We Energies	0	2	Yes – EPA damage case
Range Road Landfill	East China Twp	DTE	0	1	Yes – EPA damage case

* Industry monitoring data are the basis of a finding of contamination. See 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://acaa-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 “Elevated levels of boron found in private wells near Erickson Station near Delta Twp,” Lansing State Journal, Feb 11, 2022, <https://www.lansingstatejournal.com/story/news/2022/02/11/elevated-levels-boron-found-private-wells-near-erickson-station/6753416001/>.
- 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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