



TOXIC COAL ASH IN NORTH DAKOTA

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.

North Dakota has 37 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.

North Dakota remains one of the nation's top coal ash-generating states, ranking tenth in ash production in 2020.³ North Dakota utilities operate **16 regulated coal ash ponds and landfills** at seven plants that contain more than 58 million cubic yards of toxic waste (Table 1). Coal ash has caused significant groundwater contamination at all but one North Dakota plant. Despite the widespread and serious contamination, no North Dakota plant

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

has developed a groundwater cleanup plan, and most plants in the state no longer even monitor the groundwater for toxic heavy metals.

In addition, North Dakota hosts at least **21 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 North Dakota communities are protected from coal ash pollution.

FOR ADDITIONAL INFORMATION

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Table 1: 16 Regulated Coal Ash Disposal Sites in North Dakota

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁵
Antelope Valley	Beulah	Basin Electric	1 landfill	Molybdenum (x1)
Coal Creek	Underwood	Great River	3 lined ponds, 1 landfill	Arsenic (x2), Boron (x15), Cobalt (x5), Lead (x2), Lithium (x17), Sulfate (x11)
Coyote	Beulah	Otter Tail	3 unlined ponds, 1 landfill	Arsenic (x1), Boron (x2), Cobalt (x5), Selenium (x2), Sulfate (x10)
Leland Olds	Stanton	Basin Electric	2 unlined ponds, 1 landfill	Arsenic (x1), Boron (x2), Fluoride (x1), Lithium (x3), Molybdenum (x2), Sulfate (x4)
Milton Young	Center	Minnkota Power Coop	1 lined pond	No contaminants exceeding federal standards
RM Heskett	Mandan	MT-Dakota Utilities	1 landfill	Lithium (x54), Sulfate (x22)
Stanton	Stanton	Great River Energy	1 lined pond, 1 landfill	Arsenic (x17), Boron (x2), Lead (x1), Molybdenum (x2)

For more information on regulated coal ash sites in North Dakota and throughout the U.S., see earthjustice.org/coalash/map.

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Table 2: 21 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in North Dakota (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
Antelope Valley	Beulah	Basin Electric	0	1	Yes- Industry data
Coal Creek	Underwood	Great River	0	5	Yes – Industry data, EPA damage case
Coyote	Beulah	Otter Tail	0	3	Yes – Industry data
Leland Olds	Stanton	Basin Electric	0	1	Yes – Industry data, EPA damage case
Milton Young	Center	Minnkota Power Coop	0	7	No known contamination
RM Heskett	Mandan	MT-Dakota Utilities	0	1	Yes – Industry data, EPA damage case
Stanton	Stanton	Great River Energy	0	2	Yes – Industry data
WJ Neal	Velva	Basin Electric Power Coop	1	0	Yes – EPA damage case

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 [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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