

NRDC

TOXIC COAL ASH IN IOWA

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. **Iowa has 61 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.

Iowa utilities operate **40 federally regulated coal ash ponds and landfills** containing more than 18 million cubic yards of toxic waste at 12 facilities (Table 1). Coal ash has caused groundwater contamination at all of Iowa's regulated dumpsites. Some of these dumps are contaminating water at more than 20 times the safe levels of certain pollutants. Despite the serious and widespread water contamination, no Iowa company, to date, has

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

initiated a plant-wide cleanup to restore groundwater, despite the legal requirement to do so.

In addition, Iowa 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.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 Iowa communities are protected from coal ash pollution

Table 1: 40 Regulated Coal Ash Disposal Sites in Iowa

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁴
Ames Electric Services	Ames	City of Ames	1 unlined pond, 1 landfill	Molybdenum (x2), Sulfate (x2)
Burlington	Burlington	Interstate Power and Light Co.	4 unlined ponds	Arsenic (x8), Boron (x14), Lithium (x1), Molybdenum (x7), Sulfate (x1)
Lansing	Lansing	Interstate Power and Light Co.	1 unlined pond, 1 landfill	Arsenic (x4), Boron (x2), Molybdenum (x1)
Louisa	Muscatine	MidAmerican Energy Co.	1 unlined pond, 2 landfills	Molybdenum (x1), Sulfate (x1)
Milton L. Kapp	Clinton	Interstate Power and Light Co.	1 unlined pond	Molybdenum (x23), Sulfate (x1)
Muscatine Power & Water CCR Landfill	Muscatine	Muscatine Power and Water	1 landfill	Barium (x22), Boron (x10), Sulfate (x2), Thallium (x1)
George Neal North	Sergeant Bluff	MidAmerican Energy Co.	4 unlined ponds, 1 landfill	Arsenic (x8), Boron (x1), Cobalt (x1), Lithium (x6), Molybdenum (x3), Selenium (x5), Sulfate (x2)
George Neal South	Salix	MidAmerican Energy Co.	1 landfill	Arsenic (x5), Boron (x2), Cobalt (x1)
Ottumwa	Ottumwa	Interstate Power and Light Co.	2 unlined ponds, 2 landfills	Cobalt (x3), Sulfate (x2)
Prairie Creek	Cedar Rapids	Interstate Power and Light Co.	8 unlined ponds, 2 landfills	Arsenic (x14), Boron (x3), Molybdenum (x7)
Sutherland	Marshalltown	Interstate Power and Light Co.	4 unlined ponds	Arsenic (x1), Boron (x1), Sulfate (x1)
Walter Scott Jr.	Council Bluffs	MidAmerican Energy Co.	2 unlined ponds, 1 landfill	Arsenic (x34), Boron (x2), Lithium (x4), Molybdenum (x2), Sulfate (x2)

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

Table 2: 21 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Iowa (ash dumps exempted from the 2015 Coal Ash Rule)⁵

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁶
Dubuque	Dubuque	Interstate Power and Light Co.	1	0	Unknown
Earl F. Wisdom	Spencer	Corn Belt Power Coop	0	1	Unknown
Fair Station	Montpelier	Central Iowa Power Coop	2	1	Yes – EPA damage case
George Neal North	Sergeant Bluff	MidAmerican Energy Co.	0	5	Yes – EPA damage case and industry data ^a
Lansing	Lansing	Interstate Power and Light Co.	0	1	Yes – EPA damage case and industry data ^a
Riverside	Bettendorf	MidAmerican Energy Co.	3	0	Unknown
Sixth Street	Cedar Rapids	City of Holland	4	0	Unknown
Streeter Station	Cedar Falls	Cedar Falls Utilities	0	1	Unknown
Sutherland	Marshalltown	Interstate Power and Light Co.	0	2 ^b	Yes – Industry data ^a

^a Data derived from the utilities' publicly accessible <u>CCR Compliance Data and Information websites</u>, and exceedances were calculated by Environmental Integrity Project.

^b These two inactive landfills are located offsite and are named Marshalltown East and West landfills.

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 <u>CCR Compliance Data and Information</u> <u>websites</u>, and exceedances were calculated by Environmental Integrity Project.
- ⁵ 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.
- ⁶ "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.