

# TOXIC BY DESIGN

Understanding Coal Ash Pollution in Iowa

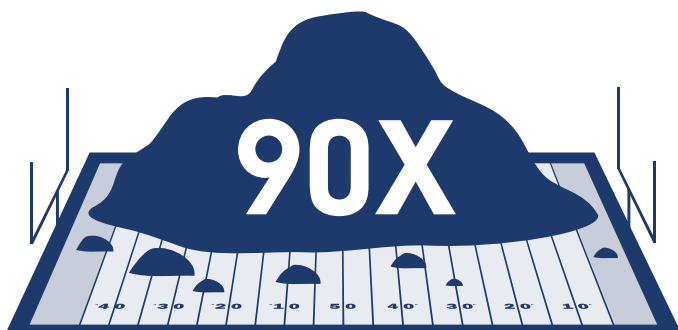


Iowa  
Environmental  
Council

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**Coal ash, also called coal combustion residuals (CCR), is a byproduct of burning coal and is one of the largest industrial waste streams in the United States. Despite containing toxic substances such as arsenic, selenium, mercury, and lead, coal ash is not classified as hazardous waste under federal law. While air pollution controls have reduced smokestack emissions, coal ash continues to silently poison both air and water, often with limited scrutiny.**

In Iowa and across much of the U.S., coal plants have generated ash for more than a century, but most monitoring and regulation began only a decade ago. As of today, 69 known utility coal ash disposal sites span 16 Iowa counties, including both active and legacy ash ponds and landfills. Not all are subject to federal CCR regulation, leaving significant gaps in oversight.



This report finds that Iowa's coal ash management system is failing to protect communities and natural resources. Key findings and observed trends include:

- **Nine of 12** coal power plants — either operational or recently retired — have regulated coal ash disposal sites with groundwater contamination **exceeding federal health standards**, according to analysis of 2024 data. These sites are operated by **MidAmerican Energy** and **Interstate Power and Light**, both of which have failed to take adequate corrective action for several sites despite years of **documented exceedances**.
- **Nearly 75%** of Iowa coal plants with ash sites are in counties with **cancer rates above the state average** — **and Iowa ranks second nationally** in new cancer diagnoses. This is concerning given that long-term exposure to coal ash pollution is linked to various forms of cancer.

An estimated **19 million cubic yards** of coal ash are currently stored at federally regulated disposal sites in Iowa. This amount could **fill the MidAmerican Energy Field at Jack Trice Stadium nearly 90 times**, though the volume of coal ash is likely underreported.

- **Legacy sites** (inactive disposal areas at long-retired coal plants) are often **unlined** and continue to leach toxic pollutants into ground and surface waters. While many sites remain largely outside the scope of federal CCR regulation, even the existing rules face the **threat of weakening or repeal**.
- Coal ash is still being used in **construction, agriculture, and landscaping**, including parks and playgrounds, under the term of “beneficial reuse.” In Iowa, nearly 200,000 tons of coal ash were repurposed for construction use in 2024 — enough to fill more than 60 Olympic-sized swimming pools. This practice introduces toxicants into the everyday environment while the reuse industry expands with **minimal to no oversight**, effectively extending the lifespans of dirty and expensive coal power.

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These findings signal a pressing call for action. Stronger enforcement, full transparency, and a long-term strategy for managing both active and legacy coal ash sites are urgently needed. Iowa communities — particularly those living near disposal sites — deserve better protection from the ongoing threat of toxic coal ash.



This data comes from a new report by the Iowa Environmental Council. The report offers an overview of coal ash, examines Iowa's coal ash landscape, and explores its impacts on human health and the environment. A full copy of the report is available at <https://www.iaenvironment.org/news-resources/publications/>

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