



Iowa and Coal Ash Disposal in Ponds and Landfills

Summary of Coal Ash Generating Facilities in IA

Power Plant	Operator	Coal Ash Disposal Site	County
George Neal North Power Station	Mid American Energy Co.	3 ponds/landfill*	Sioux City
Burlington Generating Station	Interstate Power & Light Co	5 ponds	Burlington
Dubuque Generating Station	Interstate Power & Light Co	1 pond	Dubuque
M.L. Kapp Generating Station	Interstate Power & Light Co	4 ponds	Clinton
Ottumwa Generating Station	Interstate Power & Light Co	2 ponds	Ottumwa
Ottuma-Midland CCR Landfill	Interstate Power & Light Co	2 ponds	Linn
Prairie Creek Generating Station	Interstate Power & Light Co	12 ponds	Linn
Sixth Street Generating Station	Interstate Power & Light Co	4 ponds	Cedar Rapids
Sutherland Generating Station	Interstate Power & Light Co	3 ponds	Marshall
Lansing Power Station	Interstate Power & Light Co	2 ponds	Allamakee
Louisa Power Station	Mid American Energy Co.	1 pond/landfill*	Louisa
Riverside Generating Station	Mid American Energy Co.	2 ponds	Scott
Walter Scott Junior Energy Center	Mid American Energy Co.	2 ponds	Pottawattami e
Archer Daniels Midland Cedar Rapids	Archer Daniels Midland Co.	none	Linn
George Neal South	Mid American Energy Co.	landfill*	Woodbury
Muscatine Plant #1	Board of Water, Electric & Communications	landfill*	Muscatine
Fair Station	Central Iowa Power Cooperative	Landfill*	Muscatine

*indicates one or more coal ash landfills.ⁱ

Amount of coal ash generated per year: Over 1.1 million tons. IA ranks 33nd in the country for coal ash generation.ⁱⁱ

According to a 2007 EPA risk assessment, at least four surface impoundments and landfills are unlined, and three sites are only clay-lined. Of these sites, five sites do not have a leachate collection system and three do not have groundwater monitoring.ⁱⁱⁱ

Information on Iowa Coal Ash Ponds

Number of Coal Ash Ponds: 43 ponds at 13 plants.^{iv}

Age of Ponds: The average age of ponds in Iowa is 49 years. The ponds at the Sixth Street Generating Station are estimated to be over 75 years old. 34 ponds are over 30 years old, and 27 ponds are over 40 years old.

Capacity and Releases: According to EPA data, Iowa coal ash ponds have a storage capacity of 6,761 acre feet and cover over 638 acres. One pond at the Ottumwa Generating Station has the

capacity to store over 2.8 billion gallons of coal ash. The Ottumwa pond could hold enough coal ash to flow continuously over Niagara Falls for an hour.

On April 14, 2002, the South Surface Impoundment at the Riverside Generating Station reported an unauthorized release due to Mississippi River flooding, according to EPA data.^v

Documented Damage at Coal Ash Disposal Sites: There are nine documented cases of water contamination from coal ash dumping in Iowa, including several sites that are contaminated with arsenic, boron, antimony and lead:

- **Muscatine County Landfill:** Exceedances of the secondary MCL for sulfate and possibly a health-based standard (primary MCL for selenium) were documented in wells located on-site at the landfill.^{vi}
- **Fair Station:** Groundwater monitoring data from 1995 to 2008 show an average concentration above the MCL in a downgradient well. Manganese and sulfate also consistently exceed health advisories.^{vii}
- **Prairie Creek:** The concentration of arsenic has steadily increased downgradient of this facility, exceeding MCLs in the two most recent years of monitoring data. Health standards have also been exceeded for boron, sulfate, and manganese.^{viii}
- **Sutherland Generating Station:** Groundwater monitoring data obtained through a recent Freedom of Information Act request show a history of exceedances of state and/or federal standards for boron, iron, manganese, and pH.
- **Riverside Generating Station:** Groundwater monitoring data obtained through a recent Freedom of Information Act request show a history of exceedances of state and/or federal standards for antimony and lead.
- **Walter Scott Jr. Energy Center:** Groundwater monitoring data obtained through a recent Freedom of Information Act request show a history of exceedances of state and/or federal standards for antimony and lead.
- **George Neal Station North:** Groundwater exceeds federal standards for arsenic.
- **George Neal Station South:** Groundwater exceeds federal standards for arsenic
- **Lansing Power Station:** Groundwater exceeds federal standards for arsenic.^{ix}

Regulatory Deficiencies in Iowa Laws governing Coal Ash: The State of Iowa does not require basic health-protective safeguards at all of its coal ash ponds and landfills. Iowa regulations do not require groundwater monitoring, composite liners, dust controls, daily cover for landfills and financial assurance at all disposal units.

ⁱ U.S. Department of Energy's Energy Information Administration, Form EIA-767, Annual Steam-Electric Plant Operation and Design Data. 2005.

ⁱⁱ U.S. EPA and United States Department of Energy (U.S. DOE). *Coal Combustion Waste Management at Landfills and Surface Impoundments, 1994-2004* (August 2006).

ⁱⁱⁱ RTI International. *Human and Ecological Risk Assessment of Coal Combustion Wastes, Draft* (August 6, 2007), prepared for the US Environmental Protection Agency.

^{iv} U.S. EPA. Database of coal combustion waste surface impoundments (2009).

^v U.S. EPA. Database of coal combustion waste surface impoundments (2009).

^{vi} U.S. EPA, Office of Solid Waste, *Coal Combustion Waste Damage Case Assessments* (July 9, 2007).

^{vii} EIP, *Risky Business: Coal Ash Threatens America's Groundwater Resources at 19 More Sites* (Dec. 2011), available at <http://www.environmentalintegrity.org/documents/121311EIPThirdDamageReport.pdf>.

^{viii} *Id.*

^{ix} Earthjustice, *In Harm's Way* (Aug. 2010), available at http://www.environmentalintegrity.org/news_reports/documents/INHARMSWAY_FINAL.pdf.