

Illinois and Coal Ash Disposal in Ponds and Landfills

Summary:¹

Plant	Operator	Site	County
Havana Power Station	Dynegy Inc.	2 ponds	Mason
Hutsonville Power Station	Ameren Energy Resources	4 ponds	Crawford
Lakeside	City of Springfield	1 pond	Springfield
Hennepin Power Station	Dynegy Inc.	1 pond	Putnam
Vermilion Power Station	Dynegy Inc.	2 ponds	Vermilion
Wood River Power Station	Dynegy Inc.	2 ponds	Madison
Duck Creek Power Station	Ameren Energy Resources	2 ponds	Fulton
E.D. Edwards Power Station	Ameren Energy Resources	1 pond	Peoria
Meredosia Power Station	Ameren Energy Resources	2 ponds	Morgan
Newton Power Station	Ameren Energy Resources	2 ponds/landfill*	Jasper
Dallman Power Station	City of Springfield	1 pond	Sangamon
Baldwin Energy Complex	Dynegy Inc.	1 pond	Randolph
Marion (SPIC)	Southern Illinois Power Co-op	none	Williamson
Archer Daniels Midland Decatur (ADM)	Archer Daniels Midland Co.	none	Macon
Powerton Generating Station	Edison Mission Energy	none	Tazewell
Coffeen	Ameren Energy Resources	none	Montgomery
Joppa Steam	Electric Energy Inc.	none	Massac
Kincaid Generation LLC	Dominion Energy NUGs	none	Christian
Waukegan (MIDGEN)	Edison Mission Energy	none	Lake
Will County	Edison Mission Energy	none	Will
Joliet 29	Edison Mission Energy	none	Will
Crawford (MIDGEN)	Edison Mission Energy	none	Cook
Joliet 9	Edison Mission Energy	none	Will

*indicates one or more coal ash landfills.²

Amount of coal ash generated per year: Over 4.4 million tons. IL ranks 8th in the country for coal ash generation.³

The U.S. EPA has not yet gathered information on coal ash disposal in landfills, so a detailed breakdown is not yet available. However, according to a 2007 EPA risk assessment, eight surface

¹ United States Environmental Protection Agency (U.S. EPA). Database of coal combustion waste surface impoundments (2009). Information collected by EPA from industry responses to Information Collection Request letters issued to the companies on March 9, 2009.

² U.S. Department of Energy's Energy Information Administration, Form EIA-767, Annual Steam-Electric Plant Operation and Design Data. 2005.

³ 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).

impoundments and landfills in Illinois are unlined; six sites are only clay-lined. Of these sites, 11 have no leachate collection system and five have no groundwater monitoring.⁴

Information on Illinois Coal Ash Ponds

Number of Coal Ash Ponds: 21 ponds at 12 plants.⁵

Pond Ratings: 2 ponds rated “high hazard.”⁶

Age of Ponds: 12 ponds are over 30 years old, and 5 of those are over 40 years old.⁷ The age of these ponds makes it unlikely that they have safeguards like liners and leachate collection systems.

Capacity and releases: The EPA surface impoundment database contains storage capacity data for 18 of the 21 ponds in IL. These 18 ponds have a capacity of 25.4 million cubic yards. The 21 ponds for which size data are available cover an area of 4,258 acres. The pond at the Lakeside complex has had seepage problems at its northern embankment, and the fly ash pond at the Meredosia Power Station had a spill in 2006.⁸

Damage Cases: According to the U.S. EPA damage case assessment, potential damage cases in Illinois include:⁹

- Commonwealth Edison Powerton Plant – Mahoney Landfill, Tazewell County. “There were exceedances of primary MCLs for cadmium, lead, and nitrate and secondary MCLs for iron, manganese, and sulfate in ground water and surface water at the site. The exceedances of secondary MCLs in ground water appear attributable to management of CCW.”
- Central Illinois Light Co. Duck Creek Station. “Monitoring data at this site from April 1999 showed levels of sulfate, total dissolved solids, chloride, manganese, and iron in excess of their secondary MCLs.”
- Illinois Power Co. Hennepin Power Station. “Monitoring data at this site from between 1997 and 1999 showed levels of sulfate and total dissolved solids in down-gradient wells in excess of their secondary MCLs.”
- Illinois Power Co. Havana Power Plant. “Monitoring data at this site between 1997 and 1999 showed levels of manganese down-gradient of the south ash impoundment in excess of the secondary MCL.”
- Illinois Power, Vermillion Power Station. “Monitoring data at this site showed levels of sulfate and total dissolved solids in down-gradient wells in excess of their secondary MCLs.”
- Central Illinois Public Service Co., Hutsonville Power Station. “Monitoring data at this site showed levels of sulfate, total dissolved solids, and manganese in excess of their secondary MCLs.”
- Illinois Power Company, Wood River Power Station. “Monitoring data at this site showed levels of sulfate, total dissolved solids, chloride, manganese, and iron in excess of their secondary MCLs.”
- Coffeen/White & Brewer Trucking Fly Ash Landfill. “Monitoring data at this site showed levels of sulfate, total dissolved solids, and manganese in down-gradient wells in excess of their secondary MCLs.”

⁴ RTI International. *Human and Ecological Risk Assessment of Coal Combustion Wastes, Draft* (August 6, 2007), prepared for the US Environmental Protection Agency.

⁵ U.S. EPA. Database of coal combustion waste surface impoundments (2009).

⁶ *Id.*

⁷ *Id.*

⁸ U.S. EPA. Database of coal combustion waste surface impoundments (2009).

⁹ U.S. EPA. *Coal Combustion Waste Damage Case Assessments* (July 9, 2007).