

Wyoming and Coal Ash Disposal in Ponds and Landfills

Summary:¹

Facility	Operator	Site	County
Laramie River Power Station	Basin Electric Power Coop	2 ponds/landfill*	Platte
Naughton Power Station	PacifiCorp	4 ponds	Lincoln
Dave Johnston Power Station	PacifiCorp	8 ponds/landfill*	Converse
Wyodak Power Station	PacifiCorp	1 ponds	Campbell
Jim Bridger Power Station	PacifiCorp	2 ponds/landfill*	Sweetwater

*indicates one or more coal ash landfills.²

Amount of coal ash generated per year: 2.1 million tons.³

The U.S. EPA has not yet gathered information on coal ash disposal in landfills, so a detailed breakdown is not available. However, according to a 2007 EPA risk assessment, four surface impoundments and landfills in Wyoming are unlined and two are only clay-lined. Of these sites, four do not have a leachate collection system installed.⁴

Information on Wyoming Coal Ash Ponds

Number of Coal Ash Ponds: 17 ponds at 5 plants.⁵

Pond Ratings: Three rated “significant hazard.”⁶

Age of Ponds: 11 ponds are over 30 years old, and 4 of those are over 40 years old.⁷

Capacity and releases: The EPA surface impoundment database contains storage capacity data for 15 of the 17 ponds in Wyoming. These 15 ponds combine for storage capacity of 20,497 acre feet, or over 6.6 billion gallons of coal ash. One pond at the Jim Bridger Power Station alone has a storage capacity of 11,534 acre feet. Historic releases at Wyoming coal ash ponds include:⁸

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).

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 *Id.*

- 55,000 cubic yards of fly ash was spilled outside pond boundaries at one of the ponds at Naughton Power Station.
- In January 2009 14,400 gallons of process water overflowed the canal at a pond at the Dave Johnston Power Station.
- Seepage on the south side of one pond and seepage on the north side of a second pond that is estimate at 10,000 gallons per month, which is pumped back into the pond at the Jim Bridger Power Station.

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

- Dave Johnston Power Plant: “Exceedances of the primary MCL for cadmium and the secondary MCLs for manganese and sulfate were observed in ground water up-gradient and down-gradient of the site. Interpretations of sampling results were difficult to make because other potential sources of contamination exist, such as other waste disposal areas at the site; contaminants naturally occurring in the soil which is highly mineralized around the Johnston site; and uncertainties with regard to what degree leachate from the two landfills had reached the down-gradient wells.”

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