Arizona and Coal Ash Disposal in Ponds and Landfills

Summary:[1]

Plant	Operator	Site	County
Apache Station Combustion Waste Disposal Facility	Arizona Electric Power Coop Inc	10 ponds	Cochise
Cholla Power Station	Arizona Public Service Co	4 ponds	Navajo
Navajo (SRP) Power Station	Salt River Project Ag I & P Dist	landfill*	Coconino
Coronado Power Station	Salt River Project Ag I & P Dist	1 pond/landfill*	Apache
Springerville Generating Station	Tucson Electric Power Co.	landfill*	Apache
H Wilson Sundt Generating Station	Tucson Electric Power Co.	landfill*	Pima

*indicates one or more coal ash landfills.[2]

Amount of coal ash generated per year: 2.7 million tons. Arizona ranks 14th 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, two surface impoundments and landfills in Arizona—the Cholla station and the Springerville station—have no liners.[4]

Information on Arizona Coal Ash Ponds

Number of Coal Ash Ponds: 15 ponds at 3 plants.[5]

Pond Ratings: Nine rated "high hazard." One rated "significant hazard."[6]

Age of Ponds: 5 ponds are over 30 years old.[7] All ponds built in 1995 are rated "high hazard." The age of these ponds makes it unlikely that they have safeguards like liners and leachate collection systems.

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[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.*

Capacity and releases: The EPA surface impoundment database contains storage capacity data for seven of the 15 ponds in AZ. For these seven sites, located at the Apache Station, the Cholla Station and the Coronado Station, storage capacity is 21,537 acre feet.
Damage Cases: According to the U.S. EPA damage case assessment, potential damage cases in Arizona include: [8]

- Arizona Public Service Co., Cholla Steam Electric Generating Station. "Monitoring data at this site show levels of sulfate, total dissolved solids, chloride, and fluoride in excess of their secondary MCLs. These exceedances are found in a well located directly at the foot of the fly ash pond. The affected aquifer has 'naturally poor water quality,' but no background or up-gradient data are available."[9]

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