

US EPA ARCHIVE DOCUMENT

Fact Sheet
EPA Region IX
Coal Combustion Residuals (CCR)
Surface Impoundments

- On December 22, 2008, a failure of the northeastern dike used to contain fly ash occurred at the dewatering area of the Tennessee Valley Authority (TVA) Kingston Fossil Plant in Harriman, Roane County, Tennessee. Subsequent to the dike failure, approximately 5.4 million cubic yards of fly ash sludge was released into a branch of the Emory River.
- The National Inventory of Dams hazard potential ratings address the potential consequences of failure or mis-operation of the dam. A high hazard potential rating indicates that a failure will probably cause loss of human life. The rating is not an indication of the structural integrity of the unit or the possibility that a failure will occur in the future; it merely allows dam safety and other officials to determine where significant damage or loss of life may occur if there is a structural failure of the unit. Additional information regarding the hazard potential rating system can be found at the following link:
<http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys/faqs.htm#dam>.
- In response to the TVA Kingston dike failure, EPA developed a program to evaluate all CCR surface impoundments located within United States with a high hazard potential rating.
- EPA has identified nationwide approximately 427 units managing slurried CCRs. Of those 427 units, 12 CCR units with either a high or significant hazard rating have been identified for the EPA Region IX area (see attached table).
- In Arizona, dam safety inspections are performed by the Arizona Department of Water Resources, Dam Safety and Flood Mitigation (<http://www.azwater.gov/AzDWR/SurfaceWater/DamSafety>).
- In New Mexico, dam safety inspections are performed by the Office of the State Engineer, Dam Safety Bureau (http://www.ose.state.nm.us/water_info_dam_safety.html).
- Assessments of the 12 CCR management units were completed in 2009 (see attached table) The purpose of the CCR assessments is summarized below:
 - Determine conditions, if any, that may adversely affect the structural stability and functionality of the surface impoundments and associated appurtenant structures;
 - Identify the extent of deterioration, if present;
 - Evaluate status of maintenance and/or a need for immediate repair;
 - Evaluate conformity with current design and construction practices;
 - Determine or verify the hazard potential classification for the surface impoundments not currently classified by the utility, the state, or other federal agency

- EPA determined that the operations and design of the 12 CCR units assessed by EPA were satisfactory. Links to the final assessment report prepared for each of the facilities are found in the attached table.
- EPA is currently clarifying and refining a proposed CCR rule. Anticipated timeframe EPA will publish the proposed rule in the *Federal Register* is April- May 2010.

Table 1
 Region XI
 Assessed Coal Combustion Residuals
 Surface Impoundments

Utility	Facility Name	Unit Name	City - State	Hazard Potential Rating	Date Assessed	Link to CCR SI Assessment Report
Arizona Electric Power Cooperative, Inc.	Apache Generating Station	Ash Pond 4	Cochise, AZ	High	9/2-3/09	http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys2/aepco-final.pdf
		Ash Pond 1				
		Ash Pond 3				
		Scrubber Pond 2				
		Scrubber Pond 1				
		Evaporation 1				
	Ash Pond 2					
Arizona Public Service Company	Cholla Generating Station	Bottom Ash Pond	Joseph City, AZ	High	9/2/09	http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys2/apsc-cholla-final.pdf
		Fly Ash Pond				
Arizona Public Service Company	Four Corners Generating Station	Coal Ash Impoundment	Fruitland, NM ¹	Significant	5/19 & 20/09	http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys2/aps4c-rn-final.pdf
		Water Impoundment				
Salt River Project	Coronado Generating Station	Evaporation Pond	St. Johns, AZ	Significant	9/10 & 11/09	http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys2/coronado-final.pdf

¹ Located on property leased from the Navajo Nation.