

TVA Kingston Ash Recovery Project

TVA, with the assistance and review of local, state and federal agencies, continues to work on recovery and clean up of the ash spill at TVA's Kingston Fossil Plant in East Tennessee. TVA's priorities in the effort include maintaining the health and safety of the public, recovering the ash and restoring the site, rebuilding trust with the residents of Roane County, and using lessons learned to ensure a spill does not happen again.



Background Information

On Monday, December 22, a dike failed at the Tennessee Valley Authority's Kingston Fossil Plant releasing about 5.4 million cubic yards of coal ash that now cover about 300 acres, or less than half a square mile. Most of the affected area is property managed by TVA. No injuries occurred. TVA and Roane County Office of Emergency Management and Homeland Security responded immediately, and response and recovery continue.

TVA's Kingston Fossil Plant is located on the Emory River portion of Watts Bar Reservoir, close to where the Clinch and Tennessee Rivers meet near Kingston, Tennessee. Construction of the plant began in 1951 and was completed in 1955.

Kingston generates 10 billion kilowatt-hours of electricity a year, enough to supply the needs of about 670,000 homes in the Tennessee Valley. The plant burns about 14,000 tons of coal every day when operating at full power, which results in about 1000 tons of fly ash.

Ash Containment Area

Ash, a by-product of a coal-fired power plant, is stored on-site in containment areas. Failure of the dike caused about 60 acres of ash in the 84-acre containment area to escape.

At the time of the spill, the area contained about 9.4 million cubic yards of ash. The Kingston ash ponds are visually inspected each day. Quarterly solid waste inspections are completed by State personnel in accordance with permitting requirements. Kingston plant personnel conduct seep inspections of the dikes quarterly. Detailed inspections of the ash handling and storage dikes are done annually by TVA engineering staff with written reports that include findings and recommendations.

The most recent annual inspection at Kingston was conducted in October 2008. There were no significant problems found that indicated the dikes were unstable to the point of failure.

Community Outreach

TVA organized five community outreach teams made up of plant employees and retirees to reach out to homeowners in the affected areas. These teams continue to work with homeowners and community groups to answer their questions and listen to their concerns.

The Community Outreach Center at 509 North Kentucky Street in Kingston remains open from 2 p.m. to 7 p.m. Monday through Friday. The local phone number for the Outreach Center is (865) 632-1700. If residents are unable to come to the center, they can call (800) 257-2675 to report their claims.

TVA has implemented an update line that provides pre-recorded messages on the progress of work at the site. The number for the line is (865) 632-7777.



Recovery Operations

Ash Removal Plan Information

A Phase I Ash Removal Plan has been submitted to the Tennessee Department of Environment and Conservation, the EPA and the U.S. Army Corps of Engineers for their approval.

The purpose of the Phase I plan is to begin removing ash from the Emory River channel to help reduce flood risk, improve water quality and mitigate impacts to the aquatic community.

TVA has proposed dredging ash from the river channel using hydraulic dredges. The proposal includes pumping the material through a pipe and allowing it to dry, and then moving it to a temporary storage location onsite.



Air Quality

More than 11,300 mobile air monitoring samples have been collected. All sample results have been within the National Ambient Air Quality Standards for Particulate Matter established by the U.S. Environmental Protection Agency's (EPA).

Water Quality

EPA Region 4, Tennessee Department of Environment and Conservation (TDEC), and TVA crews have been conducting water sampling and assessing water quality of public drinking water supplies, private wells, river water (both near the ash slide and at multiple downstream locations) as well as local springs. Each agency is using certified laboratories for their analyses.

All EPA, TDEC and TVA water treatment facility sampling results from Rockwood, Harriman, Cumberland and Kingston continue to meet water quality standards for drinking water.

Solids/Ash Sampling

Preliminary testing of the Kingston ash samples shows that concentrations of heavy metals are well below the limits for classification as a hazardous waste. The data shows that the concentrations of most metals in the ash are not dramatically different from concentrations found in natural soils in Tennessee, with the exception of arsenic. Total arsenic results were above the average concentrations that occur naturally in soil but well below levels found in soils that are well fertilized and significantly below the limits that are used to classify materials as hazardous wastes.

Cleanup Costs

On February 12, 2009, TVA filed its fiscal year 2009 first quarter report with the U.S. Securities & Exchange Commission, reporting a net loss of \$305 million—in part a result of the Kingston Fossil Plant ash-spill recovery efforts.

At the end of the first quarter that ended December 31, 2008, TVA recognized expenses of \$525 million for estimated costs related to the ash recovery project. Current estimates on clean-up costs range from \$525 million to \$825 million, depending on the method of ash disposal that is assumed. The range does not include costs for items such as regulatory actions, litigation or long-term environmental remediation.

Additional background information including air, water, and solids sampling data is available on TVA's Web site at www.tva.gov.