

## **FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY**

### **INITIAL EMERGENCY RESPONSE ACTIONS FOR THE KINGSTON FOSSIL PLANT ASH DIKE FAILURE**

#### **Proposed Action and Need**

On Monday, December 22, 2008, a dike containing dredge cells at Tennessee Valley Authority's (TVA) Kingston Fossil Plant (KIF) collapsed, releasing about 5.4 million cubic yards of fly ash and bottom ash. Ash was released from about 60 acres of the 84-acre dredge cell complex. The spilled material now covers about 300 acres of adjacent parts of Watts Bar Reservoir, including most of Swan Pond Creek embayment, and reservoir shorelands. Swan Pond Road, Swan Pond Circle, and portions of the rail line serving KIF were covered with ash; and water, electrical, and gas services to the adjacent area were interrupted.

TVA has undertaken several emergency actions in response to the ash dike failure at KIF in order to control the immediate effects of the emergency. These actions are explained in an environmental assessment (EA) prepared by TVA. The EA is attached and incorporated by reference. Specific actions include repair and restoration of railroad and roadway, installation of underwater weir and dikes, stabilization of the slide area, demolition of damaged homes, clean up of debris, fugitive dust control, and collection of cenospheres.

The actions covered in the EA fall under the emergency provisions in the Council on Environmental Quality's (CEQ) regulations found in 40 Code of Federal Regulations Part 1500, specifically Section 1506.11. TVA followed the CEQ guidance for Preparing Focused, Concise, and Timely Environmental Assessments in preparing the attached EA.

#### **Alternatives**

The Action Alternative for this EA includes the construction of three temporary rock structures (Weir #1, Dike #2, and Dike #3), management of the Swan Pond Creek embayment stream inflow, roadway and railway cleanup, ash dust control, river flow management, cenosphere containment, and monitoring of air, water, and ash. The No Action Alternative consists of not taking these emergency response measures, which would result in the downstream migration of the spilled ash and increase the damage to natural, cultural, and economic resources.

#### **Impacts Assessment**

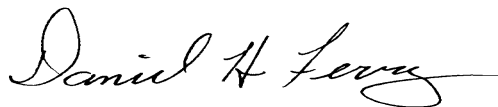
The construction of the temporary rock structures and ash drainage structures would minimize the downstream movement of ash in Watts Bar Reservoir and reduce further impact to natural and cultural resources and the human environment. Until the ash and Weir #1 are removed, there is an increased risk of flooding for some riverfront properties. The change in the flood elevation is only a temporary one until TVA removes the ash and underwater weir from the river. After the ash and weir are removed, the flood elevations will return to levels established before the spill. To mitigate these temporary impacts, TVA will perform individual home floor elevation surveys. TVA will be financially responsible for flood damages to homes that would not have occurred under normal conditions, in the absence of the ash in the river and the temporary weir until the ash and weir are removed. TVA's financial responsibility related to flood damages will also end at this time.

No additional impacts to navigation are expected to result from the proposed activities. Repair of Swan Pond Road and the affected portion of the railroad would be visually beneficial. Other visual impacts as a result of the emergency actions would be temporary. The proposed actions would not result in any additional impacts to wetlands in the spill area. Because construction would take place in areas that have been directly affected by the ash spill, few to no aquatic animals are likely to be present. The proposed actions would have no adverse effect on either terrestrial vegetation or wildlife, would minimize additional adverse effects on wildlife that could result from downstream migration of the ash, and would not affect any listed species. The proposal would not result in any additional impacts, beyond the impact of the spill itself, to the two natural areas on the KIF site or impact the other natural areas in the vicinity. Further, the proposed actions would not result in any additional negative impacts on recreation in the KIF area and would reduce the potential for impacts to recreation downstream of KIF. Any impact to Archaeological Site 40RE430, while constructing Dike #2, would be minimized through prudent construction techniques that minimize disturbance.

### **Conclusion and Findings**

The purpose of the proposed action is to minimize the further downstream movement of spilled ash and to control the immediate impacts from the ash spill. There would be no effect to any federally listed species. Based on the findings listed above and the analyses in the EA, we conclude that the proposed action would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. The mitigation measures identified to minimize the impact of the emergency actions are:

1. Remove Weir #1 after removal of the ash in the Emory River east of Dike #2 such that flood elevations on the Emory River are returned to prespill conditions.
2. TVA will perform individual home floor elevation surveys. TVA will be financially responsible for flood damages to homes that would not have occurred under normal conditions, in the absence of the ash in the river and the temporary weir until the ash and weir are removed. TVA's financial responsibility related to flood damages will also end at this time.
3. Access roads and equipment laydown areas will be designed to avoid impacts to the Adkisson Cemetery.



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Date Signed