Kingston Water Data

December 27, 2008

As previously reported, the dike failure at Kingston Fossil Plant resulted in the discharge of significant quantities of fly ash into the Emory River immediately north of the power plant. TVA continues to work to stabilize and recover the spilled material and to assess potential effects on human health and the environment.

While a large amount of material was released, most of the fly ash consists of inert material. Potentially harmful contaminants are present in the ash in minute quantities. As part of the impact assessment, TVA promptly began water sampling to determine the level of these contaminates in the water.

Here is an overview of the results so far:

- Samples closest to the Kingston Water Treatment Plant meet requirements for primary drinking water standards.
- At the site of the failure, all analyses show that water quality meets the level for Domestic Water Supply except for lead and thallium, which filter out through the normal water treatment process.
- Recreational use limits are set at or near to Drinking Water Limits for the potential for ingestion.
- Evaluation of all the sampling at the identified locations indicates that the concentrations of toxic metals were below levels established by the Tennessee Department of Environment and Conservation to protect and fish and aquatic life.

Water quality samples were collected by TVA on Monday and Tuesday, December 22 and 23, near the intake of the Kingston Water Treatment Plant and sent to a third-party laboratory for testing.

In addition, the results have been compared with data collected by the Tennessee Division of Water Pollution Control over the period of 2003 to 2008 in the vicinity upstream and downstream of the plant on the Emory River.

Kingston's water supply intake is located on the Tennessee River about one half mile upstream from its confluence with the Clinch River coming from TVA's Kingston plant. TVA has maintained flow at 24,000 cubic feet per second or greater between Fort Loudon and Watts Bar throughout the week. This flow down the Tennessee River through the Kinston area is expected to keep any ash that might be flowing down the Clinch River from moving upstream toward the water intake.

Monitoring of physical water conditions, including visual appearance, pH, and dissolved oxygen, has been ongoing since the material was released early Monday morning

- As would be expected, the sudden, accidental release of a large amount of material resulted in cloudiness and discoloration of the water in the Emory River near the failed ash pond. This condition dissipates quickly down the Emory River toward the junction with the Clinch River.

- Also, the force of the water during the initial event stranded some fish out of the water and they subsequently died. That was not related to water quality.