

Solids/Fly Ash Facts for Kingston Fossil Plant Vicinity

Background

Coal ash is used in many products encountered on a daily basis, such as the basic ingredient of most concrete, mortar, stucco, and most non-specialty grouts in the world. Coal, in its natural state, contains various metals that can be retained in the ash after burning for power production. These metals are typically bound within the ash. The samples were tested for these naturally occurring metals.

Ash Sampling and Testing

- TVA has sampled the ash remaining in the Kingston ash pond to characterize the released materials. Samples collected include five surface samples to a depth of approximately thirty inches (30") and a continuous vertical core sample to a depth of approximately fifty-two feet (52').
- Twenty-eight laboratory analyses were performed on the individual surface samples and on the material in the core sample at approximately two-foot (2') intervals.
- Analyses were performed to determine the total concentrations of metals naturally occurring in the ash. The ash results were compared to the range of concentrations for those metals naturally occurring in the Tennessee soils.

Results of Third-party Certified Testing

- Results show that the total concentrations of metals in the ash are generally within or near the range of concentrations reported in naturally occurring soils in Tennessee.
- Results also show arsenic levels are within the range for naturally occurring soils, but above average levels for the area.
- Additional sampling and testing will continue to further characterize the released materials and their impacts on the environment.
- Additional testing of the ash demonstrates, as was expected, that metals are well below (on the order of 10-100 times) the limits for classification as a hazardous waste.

Summaries of data to date can be found at:

<http://www.tva.gov/emergency/solids/index.htm>