



Engineering Sciences Section – 2010

C11 Characterization of Coal Ash From TVA Spill and Other Investigations

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After attending this presentation, attendees will understand how microscopy plays a part in tracking coal ash/fly ash particles from its source to various locations in waterways and inside homes.

This presentation will impact the forensic science community by increasing the general knowledge of how coal particles and coal ash can be identified in samples of dust, water, and sludge.

In December of 2008, a dam of a landfill holding flyash at the Tennessee Valley Authority Kingston power plant broke, releasing about 5.4 million cubic yards of ash into the surrounding area. It is estimated that the spill will cost up to \$975 million to clean up. Questions about how the flyash particles might disperse into local waterways and adjacent properties led to the need for environmental forensic microscopy to identify the flyash particles in samples of water, sludge, and household dust.

Fly Ash, Cenosphere, Microscopy