

THE COSTLY CONSEQUENCES OF AN ASH POND FAILURE

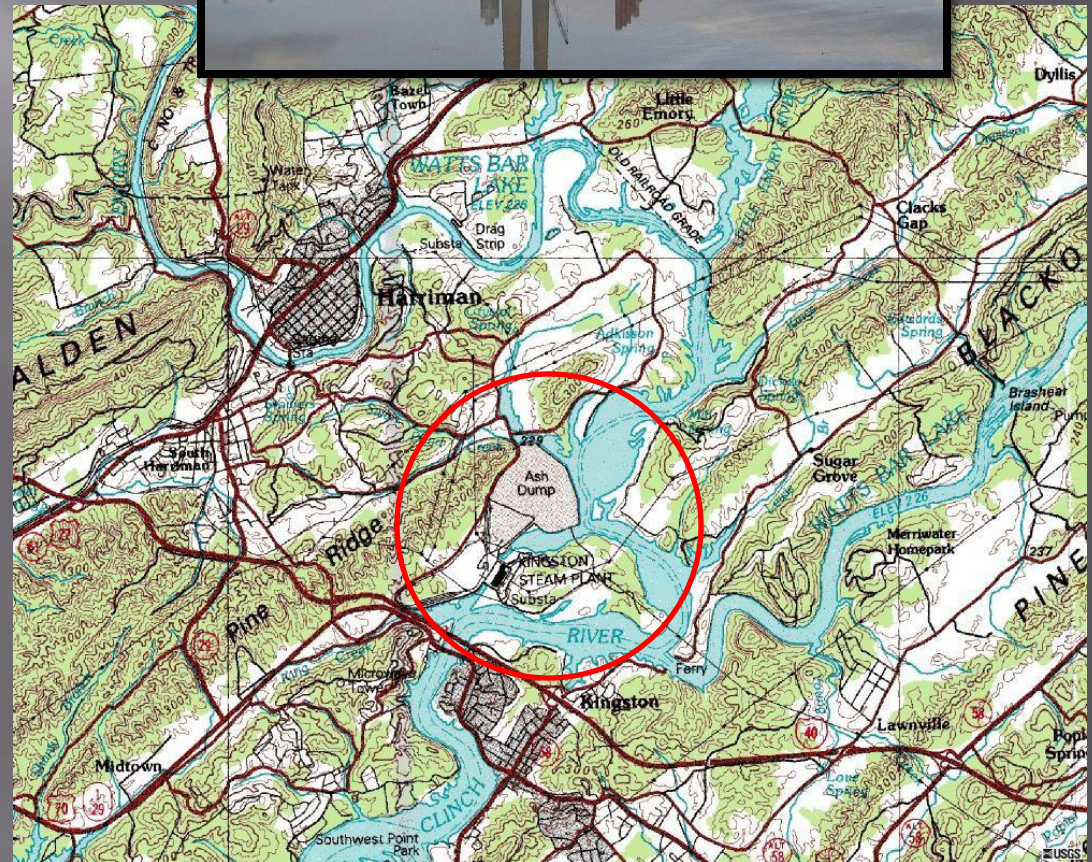
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TVA Kingston Power Plant

Located in East Central Tennessee adjacent to the Watts Bar Reservoir

Constructed in 1955, it generates 1,500 megawatts of power and burns 14,000 tons of coal per day



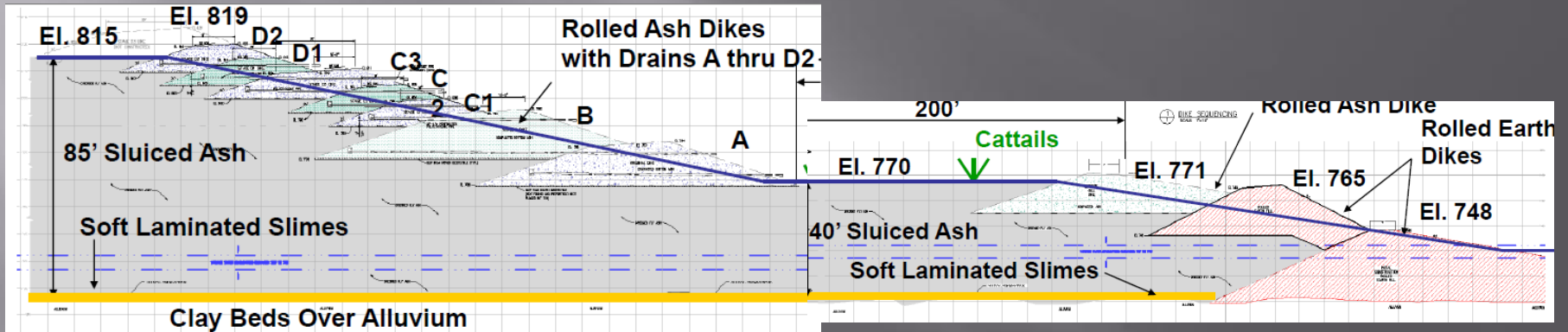
Ash Pond Area Prior to Construction



Ash Disposal - 2008



Pond Cross-Section



December 22, 2008

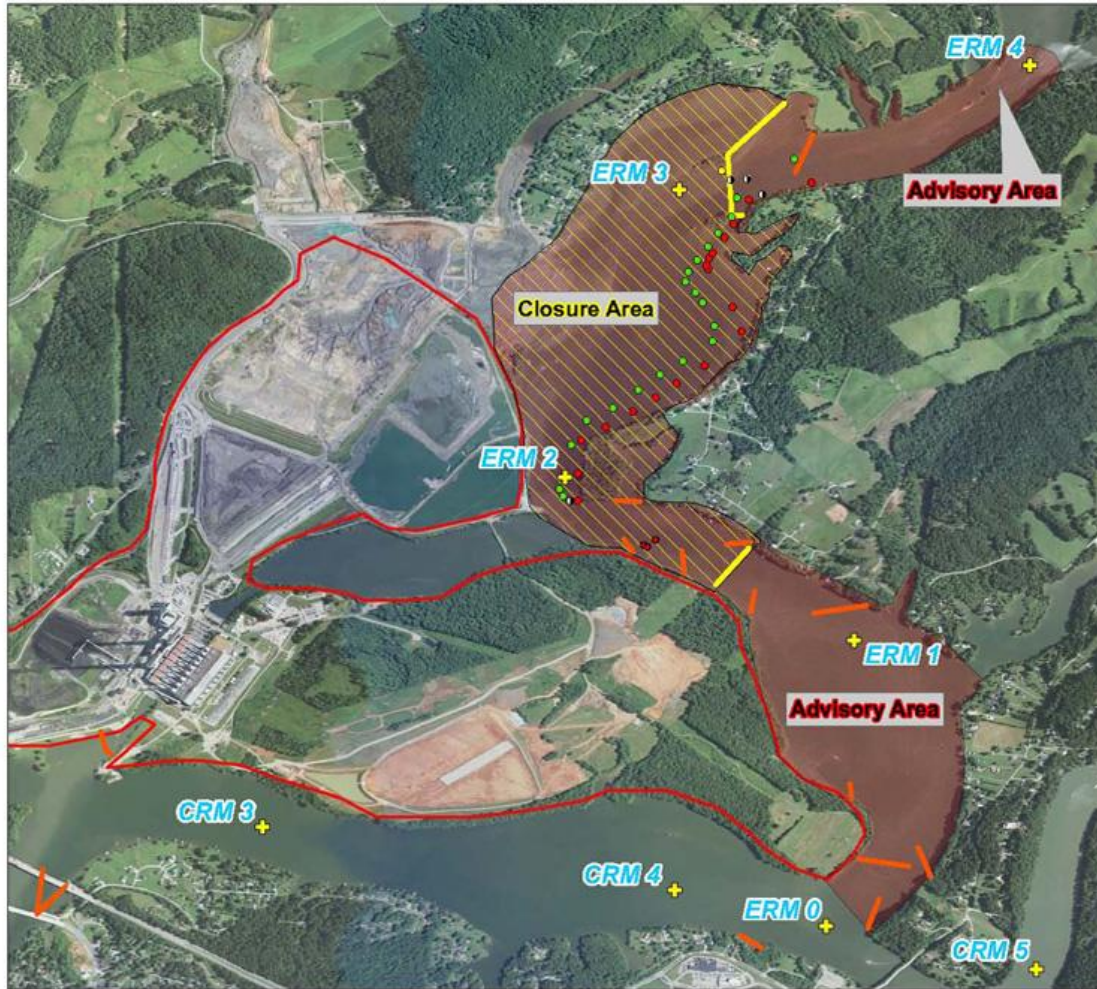


-5.4 million cubic yards of ash lost from containment area

-300 acres of land and reservoir covered with ash

-15 homes damaged or destroyed

Extent of Spill



Legend

- Danger Buoy
- Green Buoy
- Hazard Buoy
- No Wake Buoy
- Red Buoy
- ✚ River Miles
- Closure Booms
- Other Booms
- Closure Area
- Advisory Area
- TVA Kingston Facility

Note:
ERM - Emory River Mile
CRM - Clinch River Mile



United States Environmental Protection Agency

**TVA KINGSTON FOSSIL PLANT
HARRIMAN, ROANE COUNTY, TENNESSEE
TDD No. TNA-05-001-0079**

**EMORY RIVER CLOSURE
AUGUST 03, 2009**

U.S. Department of Energy



Cleanup Operations

Ash removed from land areas using heavy earthmoving equipment

Material in rivers dredged to settling basins

Wet ash spread on beds of coarse gravel to reduce moisture content



Ash Transport

Ash Loaded into open rail cars with fabric liner

Transported approximately 300 miles from plant to disposal facility in central Alabama

Ash removed by clamshell bucket

Empty cars are vacuummed, the pressure washed prior to leaving landfill site

Ash transported by dump trucks to waste cells



Disposal Operations

Arrowhead Landfill near Selma, Alabama

Subtitle D lined facility with composite clay/HDPE liner and leachate collection system



Summary

- ▣ Estimated clean-up cost over \$1 billion
- ▣ TVA to convert all wet sluicing operations to dry stacks
- ▣ Legislation being considered to impose greater regulations on ash disposal
- ▣ Publicity has created misperception that beneficial use of ash creates hazards to the public