Appendix II: Safe Disposal Practices for Coal Combustion Wastes

1) To address the highest toxic risks posed by coal combustion waste (CCW) as outlined in the USEPA Risk Assessment released in August 2008 and demonstrated by the catastrophe at TVA's Kingston Power Plant, wet storage of CCW must be phased out. All containment structures around CCW surface impoundments should be examined immediately to ensure their structural stability and contained waste must be transported to landfills outside of floodplains. Existing surface impoundments should be emptied within the next two years. Monitoring and cleanup standards should be required for impoundments already closed with ash left in place. Waste should be excavated from such impoundments within five years.

2) EPA should keep its promises made in 2000 to develop national regulations for CCW landfills. EPA must also work with the Office of Surface Mining to ensure that regulations for the minefilling of CCW are developed that afford protection to people, water supplies, and the environment from CCW in coal mines that is equal to the protection afforded by the national landfill regulations. As reconfirmed by the National Research Council (NRC) in *Managing Coal Combustion Residues in Mines* (2006), a national minefilling regulation is needed to set minimum enforceable standards for all states to meet when placing CCW in coal mines whether for disposal or "beneficial use." For example, this regulation should encourage safe reuse of CCW in the manufacture of concrete, asphalt and wall board before CCW is minefilled. Beneficial use of CCW as "structural fill" should not circumvent the requirements of national CCW regulations.

3) National regulations for landfilling and minefilling of CCW should include the following components:

a) Siting requirements to keep CCW landfills out of locations with a high vunerability to contamination such as flood plains, wetlands, and karst zones;
b) Meaningful characterization of the CCW that includes test measures called for by the NRC 2006 Report and recommended by USEPA's Science Advisory Board to demonstrate the safety of CCW in the disposal site in question;
c) Characterization of disposal sites that enable site operators to understand and protect the environment and water resources surrounding their sites;
d) Ground and surface water protection by isolating CCW from water by placing CCW above water tables, using composite liners and covering the CCW regularly to prevent leachate creation and blowing dust from dry CCW;
e) Leachate collection;
f) Monitoring for CCW contaminants from enough points, in proper locations, and for sufficient durations to ensure that all contamination of ground and surface waters is detected and blowing dust is prevented;
g) Performance requirements that ensure that contamination is addressed;
h) Financial assurance from site owners and operators to ensure that disposal sites will be monitored and any contamination addressed from the beginning of operations through 30 years after closure; and
i) Public notice and input in site permitting and provisions for citizen enforcement of regulations in keeping with federal environmental laws.