ENVIRONMENTAL INTEGRITY PROJECT

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The Honorable James L. Oberstar
Chairman
Committee on Transportation and Infrastructure
U.S. House of Representatives
2165 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

Thank you for your efforts to investigate the spill of coal ash at the Tennessee Valley Authority's (TVA) Kingston plant, as well as subsequent cleanup efforts. Unfortunately, the Kingston spill is only the most recent and most dramatic evidence of the harm to water quality that is occurring from unregulated coal ash dumps across the United States.

TVA's own Clean Water Act permit applications show that wastewater discharged from ash and scrubber sludge ponds at six different plants contains heavy metals at levels that are either toxic to aquatic life or which may make fish caught in adjacent rivers or lakes unsafe to eat. The attached chart provides data from Clean Water Act permit applications filed by six TVA plants: Allen, Cumberland, Gallatin, Johnsonville, and Kingston in Tennessee, and Widows Creek in Alabama, and includes some additional sampling by the US Environmental Protection Agency (EPA) at the Widows Creek plant. Among the highlights:

1) *Selenium/Chronic Toxicity:* Chronic exposure to selenium at or above 5.0 micrograms per liter can also poison aquatic life, according to the EPA. All six TVA plants examined – Allen, Cumberland, Gallatin, Johnsonville and Kingston in Tennessee, and Widows Creek in Alabama – reported at least one sample exceeding this level in permit applications filed for these plants. For example, selenium levels average 26 micrograms per liter in 13 discharge samples from the Gallatin plant, or 5 times the recommended limit.

2) *Selenium/Acute Toxicity:* Water quality criteria for Alabama and Tennessee assume that selenium can be acutely toxic to aquatic life at or above 20 micrograms per liter. Yet Clean Water Act permit applications filed by TVA indicate that selenium measured in discharges from ash ponds exceed this level, not only at the Kingston plant, but also at the Allen, Cumberland, and Gallatin facilities in Tennessee, and the Widows Creek plant in Alabama. Discharges from the Cumberland and Widows Creek plant measured 130 micrograms of selenium per liter, more than 6 times the state standard for acute toxicity.

3) *Arsenic/Fish Consumption:* The EPA has found that arsenic at levels as low as 0.14 micrograms per liter can eventually make fish unsafe to eat, because the toxic metal bioaccumulates as it moves up the food chain. The State of Tennessee has determined that arsenic levels above 10 micrograms per liter can threaten recreational uses of rivers and streams. Arsenic levels at all six TVA plants exceed the EPA threshold, and all but one plant (Cumberland) exceeds Tennessee's recreational standard of 10.0 micrograms per liter. The Johnsonville plant recorded a long-term average arsenic level of 153 micrograms per liter: 15 times Tennessee's standard, and more than 1500 times the EPA threshold for keeping fish safe to eat.

4) *Aluminum/Acute and Chronic Toxicity:* EPA has found that short-term exposures to aluminum at levels above 750 micrograms per liter can be acutely toxic to aquatic life. Permit applications for five of the six plants report aluminum discharges from ash or scrubber sludge ponds at levels well above this threshold. Johnsonville reported one discharge as high as 3,400 micrograms per liter, with a long-term average discharge of 1,640 micrograms of aluminum per liter. The Widows Creek plant reported one discharge of aluminum at 2,600 micrograms per liter.

The attached chart provides only a snapshot of the available data and is based largely on permit applications submitted by TVA for the various plants between 2002 and 2005. We have just received discharge monitoring reports from other TVA facilities, which we are beginning to analyze, although these new reports already confirm that there are no required reporting limits for many of the toxic metals typically associated with coal ash. These reports contain very limited sampling data for toxic metals like selenium and arsenic, but that data appears consistent with toxic discharges reported in TVA's permit applications.

Even this limited information suggests that TVA plants are routinely discharging toxic metals at levels that are predicted to damage aquatic ecosystems or make fish unsafe to eat. EPA's analysis shows that scrubber sludges generated from air pollution control equipment often contain high levels of pollutants like arsenic and selenium. Unless appropriate wastewater limits are developed, efforts to comply with the Clean Air Act will add to the problem by shifting at least some toxic pollutants from air to water.

We understand that the EPA is considering establishing new effluent limitation guidelines (ELG) that would restrict the discharge of these contaminants, and we hope you will encourage the agency to expedite these efforts. But EPA need not wait until the promulgation of new ELGs to prohibit this harmful, ongoing pollution of our waterways. We respectfully request that you ask the agency to act now to limit this pollution, rather than wait for completion of a lengthy rulemaking process. Section 301(a) of the Clean Water Act prohibits the discharge of pollutants without a permit, and any unpermitted discharges ought to be treated as a violation of federal law. Meanwhile, until industry-wide standards are developed, federal and state permit writers are authorized to exercise their best professional judgment in setting discharge limits.

An EPA study completed last year shows that some plants have managed to avoid releasing any wastewater from scrubber sludges, which suggests that a "no discharge" standard is feasible for many power plants. At the very least, TVA and other power companies should not be allowed to release toxic metals at levels that both EPA and state agencies have agreed are harmful to aquatic life and to human health.

Sincerely,

Eric Schaeffer
Director
Environmental Integrity Project

Lisa Evans
Project Attorney
Earthjustice

cc: Honorable John L. Mica
Ranking Republican Member
Committee on Transportation and Infrastructure
U.S. House of Representatives