

The Environmental Protection Agency (EPA) issued a proposed rule in June of 2010 to regulate coal ash, the toxic waste left behind after coal is burned for energy. Coal ash contains elevated concentrations of metals like lead, mercury and arsenic and is a risk to human health and the environment. EPA's proposal gives two options for governance of coal ash. One option, known as Subtitle C, would create robust standards for regulating coal ash as a special hazardous waste. The second option, unbelievably, would treat coal ash like household garbage and EPA would merely set advisory guidelines that industry could choose to ignore and states could choose not to enforce.

Human Health Assessments

- ✓ A number of organizations have reported on the environmental and health effects of the 2008 Kingston coal ash disaster. It is important to understand the questions these reports ask and the methods they use.
- ✓ Oak Ridge Associated Universities (ORAU) released [Baseline Medical Screening Results](#) (BMSR) in August 2010. Industry advocates used this report to argue that the Kingston disaster did not result in any environmental or health problems. These conclusions are misplaced.
 - ✓ The BMSR was not a formal study of the effects of coal ash. Rather, the BMSR was merely a medical screening of self-identified and voluntary participants. The BMSR states that it **“is a screening program and is not a research project.”** (pg. 10) **Thus, the individual results cannot be extrapolated to the wider population.**
 - ✓ The report looked only at the effect of the spilled ash from the Kingston disaster. Much of the report found pre-existing health and environmental conditions that were not the result of the spill, but may have arisen because of long-term exposure to coal ash constituents resulting from living near the coal ash impoundment for many years. (pg. 1)
 - ✓ The BMSR recognizes that “Factors such as future exposure, environmental changes, and individual health status must be assessed in order to fully establish whether there is a chronic risk to the community.” (pg. 6) The BMSR was not intended to and does not imply that it addressed these factors.
 - ✓ The report recommends “that a repeat evaluation of [the 214 subjects] be performed after a period of time to assess whether there have been any changes in health that may be related to the fly ash spill.” (pg. 24) **Thus, the report recognizes that the health implications of the Kingston disaster cannot be fully understood at this time because of the possibility of toxics accumulating in food, water and the human body over time.**

The Oak Ridge Associated Universities' Assessment states:
“The disaster significantly impacted the natural environment as well as the general well-being of the community.”

- ✓ Less than one year after the Kingston disaster the Tennessee Department of Health (TDH) [conducted a health assessment](#).
 - ✓ The assessment found, among other things, that ash had not yet entered private wells or public water sources and had not increased particulate matter or metal concentrations in the air around the site. (pg. xvii) However, there is still potential for dissolution and migration of ash constituents. Likewise, while particulate matter and metal concentrations did not increase, this does not suggest that background levels were safe.
- ✓ While TDH recognizes that “Environmental regulatory agencies are concerned with the health of ecosystems and fish in the Emory River,” this particular assessment only focuses on human health. (pgs. xvi, 1, 60).

The Tennessee Department of Health states:

“The spill has dramatically affected the environment and disrupted citizens’ lives.”
 Additionally, the report finds that “Water quality in the Emory River at the site of the ash spill has been impaired and the aquatic habitat has been destroyed.”

- ✓ TDH reports that high levels of various contaminants were found in surface waters but because TDH did not anticipate anybody swimming in or drinking the contaminated waters, they could not conclude that there would be human health impacts. (pgs. 60, 61, 62)
- ✓ The TDH report, consistent with other reports, found that the coal ash spill released levels of radioactive waste above the background levels of radioactivity in the environment. (pg. 54)
- ✓ TDH found lower health threats from contaminated leachate because they use an outdated test method known as TCLP. Newer testing methods are available, and one report that used such a method found increased risks from leachate. (pg. 59)
- ✓ TDH concludes that many people could have been killed or injured as a result of this disaster if it had happened on a summer day rather than a winter night.

Neither the TDH assessment nor the BMSR address the general dangers associated with typical coal ash storage. In addition, they only tangentially address the physical damage caused by the Kingston disaster. **Coal ash poses dangers when it leaches into groundwater and surface water and accumulates in food sources or well water.** These dangers exist regardless of a physical disaster such as Kingston and these reports do not purport to minimize such problems. Further, **the Kingston disaster resulted in severe property damage, literally pulling homes off their foundations. These very real economic and personal consequences were not directly addressed in either study.**

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