

## **TVA COAL ASH: TOXIC POLLUTION WIDESPREAD FIVE YEARS AFTER KINGSTON SPILL, GROUNDWATER CONTAMINATED AT 11 POWER PLANTS**

**New EIP Report Describes TVA Coal Ash Pollutants Measured Over the Past Five Years, Including Arsenic, Boron and Cobalt; Many Pollutant Levels Exceed Health Guidelines.**

**WASHINGTON, D.C. (November 7, 2013)** Five years after the billion-gallon coal ash spill in Kingston, TN, a new report from Environmental Integrity Project (EIP) shows that decades of mismanagement have led to toxic groundwater pollution at all 11 Tennessee Valley Authority (TVA) coal plants, with concentrations of arsenic, boron, cobalt, manganese, and other pollutants exceeding health-based guidelines in dozens of downgradient wells. The affected groundwater is now unsafe for human consumption. As it migrates into local surface water, the contamination also threatens aquatic ecosystems. The EIP report, which is based primarily on Freedom of Information Act requests, also shows that TVA is not adequately monitoring much of the groundwater around its ash disposal areas.

The EIP analysis details TVA pollutants that exceed health-based guidelines and peak concentrations of toxic chemicals measured over the past five years. Contaminated groundwater under and around TVA facilities is widespread and includes boron, cobalt, manganese, and sulfate – all toxic pollutants known to be associated with coal ash.

EIP Director Eric Schaeffer said: **“As we approach the five-year anniversary of the nation’s worst coal ash spill, TVA ought to be leading the effort to clean up groundwater contamination from its leaking landfills and ponds. Instead, the records show patchwork monitoring, and no real effort to contain the damage at these sites. TVA needs a comprehensive plan to monitor and clean up the groundwater contamination caused by years of slipshod disposal practices.”**

Abel Russ, an EIP attorney and the author of the report, continued: **“We were particularly surprised to see that TVA often fails to measure the pollutants most closely associated with coal ash. Not only are these pollutants unsafe, they also provide early warnings of leakage from ash disposal areas. A groundwater monitoring network that doesn’t focus on these pollutants is simply inadequate.”**

The EIP report shows that these coal ash indicator pollutants are now widespread. For example:

- Arsenic has been linked to cancers of the skin, bladder, kidneys and other organs. Average concentrations exceeded the Safe Drinking Water Act Maximum Contaminant Level at five TVA plants: Allen, Bull Run, Colbert, Cumberland Paradise, and John Sevier.
- Boron may harm developing fetuses and contribute to testicular atrophy. Average boron concentrations have exceeded EPA’s recommended limit in over thirty monitoring wells at nine of TVA’s eleven plants.
- Manganese at high doses can cause neurological toxicity. Average manganese concentrations have exceeded EPA’s recommended limit in fifty wells at ten TVA plants.

Concentrations of these and other pollutants frequently reach very high levels. Schaeffer continued: **“Some of the spikes we see in the report are sky-high – peak concentrations of arsenic in one TVA monitoring well were nearly eight times above the Safe Drinking Water Act standard, while manganese concentrations in another were 700 times above the health advisory for lifetime exposure.”**

The report also shows that TVA frequently stops monitoring areas that it knows to be contaminated. For example, TVA installed seven wells around the fly ash and bottom ash ponds at the Paradise plant in Kentucky in 2010, found high concentrations of several pollutants in 2011, and then stopped monitoring all seven wells. Other areas, including abandoned ash disposal units at the Allen, Bull Run, John Sevier, and Johnsonville plants, have not been monitored at all in recent years. Report author Abel Russ said: **“Where TVA does conduct monitoring, they find widespread contamination. We assume that there is even more contamination in the unmonitored areas. TVA has the burden of proof on this issue, and they should fill these major data gaps.”**

The EIP report is not news to other environmental groups working in the TVA region. Angela Garrone, attorney with the Southern Alliance for Clean Energy, said: **“For too long TVA has been irresponsible in its management of coal combustion waste and this report validates our concerns that each of their 11 coal plants is endangering our water supply and public health through improper maintenance and monitoring. As we approach the 5 year anniversary of the Kingston disaster, we urge TVA to clean up their coal ash problems and store this waste in ways that do not threaten the drinking water supply or the lives of those living in the Tennessee Valley.”**

And Frank Holleman of the Southern Environmental Law Center observed: **“Coal ash groundwater pollution is contaminating rivers, fishing lakes, and drinking water across the southeast. This is a crisis that is growing in magnitude as we learn more about it.”**

The full text of the new EIP analysis is available online at <http://www.environmentalintegrity.org>.

### **ABOUT EIP**

The Environmental Integrity Project (<http://www.environmentalintegrity.org>) is a nonpartisan, nonprofit organization established in March of 2002 by former EPA enforcement attorneys to advocate for effective enforcement of environmental laws. EIP has three goals: (1) to provide objective analyses of how the failure to enforce or implement environmental laws increases pollution and affects public health; (2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and (3) to help local communities obtain the protection of environmental laws.

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