## NEW STUDY: COAL ASH WATER-CONTAMINATION MUCH WORSE THAN PREVIOUSLY ESTIMATED, WITH 39 ADDITIONAL TOXIC SITES IDENTIFIED IN 21 STATES

Total of 70 Problem Sites Identified by Groups Since February Is Over and Above the 67 EPA-Acknowledged Sites; New Report Identifies Water Contamination At Coal Ash Dump Sites in AR, CT, FL, IL, IA, KY, LA, MI, NE, NY, NC, ND, OH, OK, OR, PA, SD, TN, TX, VA, and WI.

WASHINGTON, D.C.//August 26, 2010//Days before the US Environmental Protection Agency (USEPA) kicks off a series of regional hearings across the United States on whether and how to regulate toxic coal ash waste from coal-fired power plants, a major new study identifies 39 additional coal-ash dump sites in 21 states that are contaminating drinking water or surface water with arsenic and other heavy metals. The report by the Environmental Integrity Project (EIP), Earthjustice and the Sierra Club documents the fact that state governments are not adequately monitoring the coal combustion waste (CCW) disposal sites and that the USEPA needs to enact strong new regulations to protect the public.

The new EIP/Earthjustice/Sierra Club report shows that, at every one of the coal ash dump sites equipped with groundwater monitoring wells, concentrations of heavy metals such as arsenic or lead exceed federal health-based standards for drinking water, with concentrations at Hatfield's Ferry site in Pennsylvania reaching as high as 341 times the federal standard for arsenic. (See study highlights below.) The new report is available online at <a href="http://www.environmentalintegrity.org">http://www.environmentalintegrity.org</a>.

A February 2010 EIP/Earthjustice report documented 31 coal ash dump sites in 14 states. The 39 additional sites in today's report along with the 67 already identified by the USEPA bring the total number of known toxic contamination sites from coal ash pollution to 137 in 34 states. Together, the independent reports and USEPA's own findings make clear the growing number of waters known to be poisoned by poor management of the toxic ash left over after coal is burned for electricity.

The 21 states containing the 39 damage sites identified in the new report are: Arkansas (2 sites, Independence and Flint Creek); Connecticut (1 site, Montville); Florida (1 site, McIntosh); Illinois (3 sites, Joliet 9, Venice, and Marion); Iowa (3 sites, Lansing, Neal North, and Neal South); Kentucky (3 sites, Spurlock, Mill Creek, and TVA Shawnee); Louisiana (3 sites, Dolet Hills, Big Cajun, and Rodemacher); Michigan (1 site, Whiting); Nebraska (1 site, Sheldon); New York (1 site, Cayuga); North Carolina (1 site, Dan River); North Dakota (2 sites, Leland Olds, and Antelope Valley); Ohio (4 sites, Uniontown aka Industrial Excess Landfill, Cardinal, Gavin, and Muskingum); Oklahoma (1 site, Northeastern); Oregon (1 site, Boardman); Pennsylvania (2 sites, Hatfield's Ferry and Bruce Mansfield aka Little Blue); South Dakota (1 site, Big Stone); Tennessee (3 sites, TVA Johnsonville, TVA Cumberland, and TVA Gallatin); Texas (1 site, LCRA Fayette Power Project); Virginia (2 sites, Glen Lyn and Clinch River); and Wisconsin (2 sites, Oak Creek aka Caledonia and Columbia).

The first public hearing on the pending EPA coal ash rule is set for August 30, 2010 in Arlington, VA. Additional public hearings will follow in: Denver, CO on September 2; Dallas, TX on September 8; Charlotte, NC on September 14; Chicago, IL on September 16; Pittsburgh, PA on September 21; and Louisville, KY on September 28.

Jeff Stant, director, Coal Combustion Waste Initiative, Environmental Integrity Project, said: "The contamination of water supplies, threats to people, and damage to the environment documented in this report illustrate very real and dangerous harms that are prohibited by federal law but are going on in a largely unchecked fashion at today's coal ash dump sites. Contamination of the environment and water supplies with toxic levels of arsenic, lead and other chemicals is a pervasive reality at America's coal ash disposal sites because states are not preventing it. The case for a national regulation setting common sense safeguards for states to meet, such as liners, monitoring and cleanup standards, could not be more persuasive. The need for more direct EPA involvement is clear; leaving enforcement to the same states that have refused to do their jobs for the last 40 years is simply not a responsible course of action."

Lisa Evans, senior administrative counsel, Earthjustice, said: "There is no greater reason for coal ash regulation than preventing the poisoning of our water. We now have 39 more good reasons for a national coal ash rule. The mounting number of contaminated sites demonstrates that the states are unable or unwilling to solve this problem."

Lyndsay Moseley, federal policy representative, Sierra Club, said: "The health risks from exposure to this toxic waste are real and we cannot afford to ignore them any longer. It is clear from this report that the closer we look the worse this problem becomes. The only real solution is for the EPA to adopt federally enforceable protections as part of its push to improve public health. We're talking about people's lives here."

## REPORT HIGHLIGHTS

The pollution in coal ash poses serious health risks. People living near unlined coal ash ponds can have an extremely high one in 50 risk of cancer. That's more than 2,000 times higher than what USEPA considers acceptable. The toxins found in coal ash have also been linked to organ disease, respiratory illness, neurological damage, and developmental problems.

- Coal ash contamination of water is pervasive in the United States. The total number of sites polluted by coal ash (including scrubber) sludge now is at least 137 in 34 states. These contaminated sites represent a substantial percentage (29 percent) of the approximately 467 plants that dispose of coal ash onsite or offsite.
- Coal ash is putting drinking water from private wells is at risk. Contaminated groundwater underneath at least 15 of the 39 sites is moving toward private water wells within two miles of site boundaries, according to monitoring data and public information on private well locations at the following dumpsites: Independence (AR), Lansing (MI), Joliet 9 (IL), Cayuga (NY), Cardinal (OH), Muskingum (OH), Gavin (OH), Uniontown (OH), Northeastern (OK), Boardman (OR), Bruce Mansfield (PA), Hatfield's Ferry (PA), Big Stone (SD), Oak Creek (WI) and Fayette Power (TX). Public information on private drinking water wells is often incomplete, limited or out of date, but for at least eight of these sites-- Lansing, Joliet 9, Muskingum, Gavin, Uniontown, Bruce Mansfield, Oak Creek, and Fayette Power, there are 25 or more private drinking water wells at or within two miles of the site. At the Joliet 9 and Uniontown sites there are 90 or more private drinking water wells within a mile of the contaminated site.
- Coal ash threatens public water wells and intakes. At least 18 of the 39 contaminated sites are located within five miles of a public groundwater well that could potentially be affected by pollutants from these sites. At nine of those sites, there are at least five public water wells within a five-mile radius: Flint Creek (AR); Montville (CT); Lansing (IA); George Neal North (IA); George Neal South (IA); Big Cajun (LA); Dan River (NC); Cardinal (OH); and Fayette Power Project (TX).
- Coal ash toxins are threatening surface waters. In several cases (e.g., Hatfield's Ferry (PA), Gallatin, and Johnsonville in TN), coal ash dump sites are leaking their toxic cargo into rivers just upstream from the intakes for public water systems. Often, metals like arsenic are discharged to rivers through adjacent groundwater. For example, monitoring wells in an aquifer that flows from the Hatfield's Ferry (PA) site to the Monongahela River, less than half a mile away, have consistently measured arsenic at levels substantially above the MCL for the last five years. Lax regulation of ash disposal sites that drain into large rivers such as TVA's Shawnee (KY), Gallatin and Johnsonville (TN) sites along the Ohio, Cumberland and Tennessee Rivers respectively, the Big Cajun (LA) and Lansing (IA) sites along the Mississippi River or Leland Olds (ND) site along the Missouri River assumes that harmful concentrations of metals in groundwater or surface water discharges from ash sites will be diluted to safe levels in the river water but ignores the long-term build-up of metals from such discharges in river ecosystems.

- Most damaged sites are still active and virtually all show recent evidence of contamination. The damaged sites identified cannot be dismissed as a legacy of past practices that are no longer allowed today. Almost all of the facilities described in the report are active disposal sites. The contamination is documented by recent data (from 2007 or later) at 32 of the 35 sites for which groundwater monitoring results are available. Even the few closed sites show that contamination often continues and even worsens for generations after disposal ceases. For example, nearly 40 years after coal ash disposal stopped at the Montville site (CT), average concentrations of arsenic in groundwater collected in 2007-2009 still exceed the MCL by 21 times and are higher than measurements taken ten years ago.
- Illegal open dumping in violation of federal law may be occurring. As many as 27 of the 35 sites where groundwater is contaminated may be illegal open dumps according to federal law, based on the high levels of metals found in the groundwater. When such standards are exceeded, federal law requires that the operator close the dump, stop the flow of contamination, or obtain a waiver from the state that allows the facility to pollute the underlying aquifer. However, USEPA has no authority to enforce these standards. Even though states have the primary authority to enforce these standards, it appears that they have routinely ignored the federal open dumping guidelines for coal ash dumps and allowed illegal dumps to operate and contaminate potential drinking water sources.
- Many states require no groundwater monitoring at all. Large coal ash-generating states like Alabama, Arizona, Georgia, Indiana, Ohio, Mississippi, Missouri, New Mexico, and Tennessee, to name a few, require no monitoring by law at ash ponds. Although data were available for the Lower Colorado River Authority's ash pond, most coal ash dump sites in Texas are exempt from any regulation or monitoring by the state. States whose regulations fail to require monitoring at ash ponds, both old and new, accounted for approximately 70 percent of the coal combustion waste generated nationwide in 2008. A few of these states require monitoring only at new ponds, but since 75 percent of waste ponds are over 25 years old and 10 percent are over 50 years old, these state regulations leave a large and dangerous gap.
- States agencies have not required polluters to cleanup even as contamination increases. Power companies that own or operate sites that contaminate groundwater ought to be required to clean them up. At 21 sites examined in this study, the evidence of groundwater contamination was serious enough to cause the state agency to require additional monitoring and some assessment of its causes. Too often, state agencies routinely accept claims by utilities that contaminant increases are the result of sampling anomalies, or that "nature" is responsible for heavy metal concentrations that are in fact far above background levels. Without further investigation of the flimsy evidence, states let operators return to reduced monitoring or stop monitoring altogether. In the meantime, the utilities may quietly purchase surrounding property where wells are contaminated, often without alerting the state or the community that a danger exists. At no site did a state require the utility company to stop the contamination, let alone clean it up.

Commenting on the report, J. Russell Boulding, environmental scientist, Boulding Soil-Water Consulting, states: "We have still only scratched the surface in defining the extent of serious contamination of groundwater and surface water at coal combustion waste disposal sites around the country."

## **ABOUT THE GROUPS**

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 industries, accountable for failing to enforce or comply with environmental laws; and 3) to help local communities obtain the protection of environmental laws.

Earthjustice (<a href="http://www.earthjustice.org">http://www.earthjustice.org</a>) is a non-profit public interest law firm dedicated to protecting the magnificent places, natural resources, and wildlife of this earth, and to defending the right of all people to a healthy environment. Earthjustice works through the courts on behalf of citizen groups, scientists, and other parties to ensure government agencies and private interests follow the law. On Capitol Hill, Earthjustice works to protect and strengthen federal environmental laws and preserve special places, like the Arctic.

The Sierra Club (<a href="http://www.sierraclub.org">http://www.sierraclub.org</a>) is America's largest, oldest and most influential grassroots environmental organization. Inspired by nature, our 1.3 million members are working together to protect our communities and the planet.

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**EDITOR'S NOTE:** A streaming audio recording of the news event will be available on the Web as of 4 p.m. EDT on August 26, 2010 at http://www.environmentalintegrity.org.