



Study: Coal Slurry Contaminated Prenter Hollow Water

January 17, 2012, /The State Journal/ A collaborative project of regional environmental groups called the Sludge Safety Project rallied at the Capitol rotunda Jan. 17 to share results of a study concluding coal slurry contaminated water supplies in Prenter.

Two studies by environmental consultant Yoram Eckstein demonstrating a “clear hydrochemical pathway” from sites where Massey Energy injected coal slurry at the head of Laurel Creek and Sand Lick to wells in the surrounding community. The study reports that discharges from the mines compared to monitoring of groundwater and residential wells found similar chemical signatures.

Jennifer Massey, resident of the Prenter area, spoke at the Capitol, citing first-hand knowledge of water contamination in Boone County.

“It’s very nice to hear the science behind what our community has learned the hard way,” Massey told the crowd gathered in the rotunda.

She said her community experienced a “brain-tumor cluster.” She said six people in a neighborhood with 10 houses were diagnosed with brain cancer. Four of them died; she said. People affected by the tumors ranged in age from 11 to 55 she said.

“It doesn’t take a brain surgeon to figure out those numbers aren’t in line with the national average, the national average is one per 10,000,” Massey said.

She said an informal assessment of her community found an unusually high number of multiple diseases in her community.

Residents of Prenter are currently attempting to sue for damage allegedly caused by the fracturing of the geological strata around where underground coal slurry is stored. The report was commissioned by the Sutter Law Firm as expert testimony for the lawsuit.

“Ground water contamination within and around Laurel Lick and Sand Lick watersheds results from combined practices of coal mining, post-mining land restoration activities and disposal of

coal slurry,” the study states. “Precipitation runoff and any fluids, whether releases within the NPDES permits or leaking out of the underground impoundments, percolate from higher to lower elevations within the watersheds.”

However, not everyone agrees with the idea that coal slurry injection has caused water problems at Prenter.

“We studied specifically the possibility that slurry injection had migrated into the water, and there’s not a geological connection between where it was store and where their problem is,” Department of Environmental Protection Director Randy Huffman told the Associated Press. “The injection site in Prenter is not the source of their problems.”

According to the study, acidic precipitation runoff and fluids from mining operations continuously leach metals from the aquifer, resulting in increased concentrations of metals in resident water wells.

Coal mining in the Laurel and Sand Lick creek watersheds has been conducted for many years and valley fills of surface mined materials and disposal of liquid waste from coal processing plants in abandoned coal mines was common in the area, the study said.

Laura Merner, Ph.D. candidate in hydrology at the University of Maryland and a Sludge Safety Project volunteer presented Eckstein’s findings at the Capitol.

“Findings state definitively that mining in the area has led to negative impacts on local water resources,” Merner said. “In Laurel Creek, for example, findings show that between 1974 and 2009, sulfate levels in groundwater there increased by over 1,300 percent while iron increases by over 25,000 percent.”

Merner said the study found significant increases in a number of water contaminants as a result of mining practices of Massey Energy. Massey recently was purchases by Alpha Natural Resources.

“The researchers demonstrated that blasting and removing of overburden on mine sites caused fracturing in the ground,” Merner said. “These large cracks, which are often between 100 and 300 feet long, alter the groundwater movement through the creation of new flow paths.”

Merner said the study contradicts DEP and industry claims that such mine cracks are sealed and migration of slurry does not occur.

Arsenic, cadmium and other toxic substances, Merner said, were all found in local residential water supplies.

Coal slurry is a frequent attack of environmentalists. The liquid waste of coal processing plants, coal slurry has been linked to a number of ill health effects as well as environmental catastrophe.

Nearly 40 years ago, three coal slurry dams failed in Logan County causing the Buffalo Creek Flood, which killed 125 people. Other coal slurry impoundment disasters have occurred in Martin County, Ky., and near Harriman, Tenn.

According to materials from the Sludge Safety Projects, Ben Stout, a biology professor at Wheeling Jesuit University, tested 10 of 250 Prenter wells and found antimony, lead, iron, manganese, barium, aluminum and other toxic materials.

“The community has bad water,” Stout is quoted as saying. “Not only should they not drink it, but community-wide, they shouldn’t bathe in it either. You certainly don’t want expose your children to water like that.”

The study is not the first to show that storing coal slurry in underground mines can contaminate water. Studies from the EPA, West Virginia University, and the West Virginia Department of Environmental Protection have all documented cases in which coal slurry injection was believed to be the source of groundwater contamination. Specifically the DEP said coal slurry injection was the cause of water quality problems in Rawl, which is in Mingo County, but not in Prenter.