Leaks from Ameren toxic waste pond in Labadie stir fears

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BY JEFFREY TOMICH • jtomich@post-dispatch.com > 314-340-8320 STLtoday.com | Posted: Thursday, September 1, 2011 12:07 am | (19) Comments

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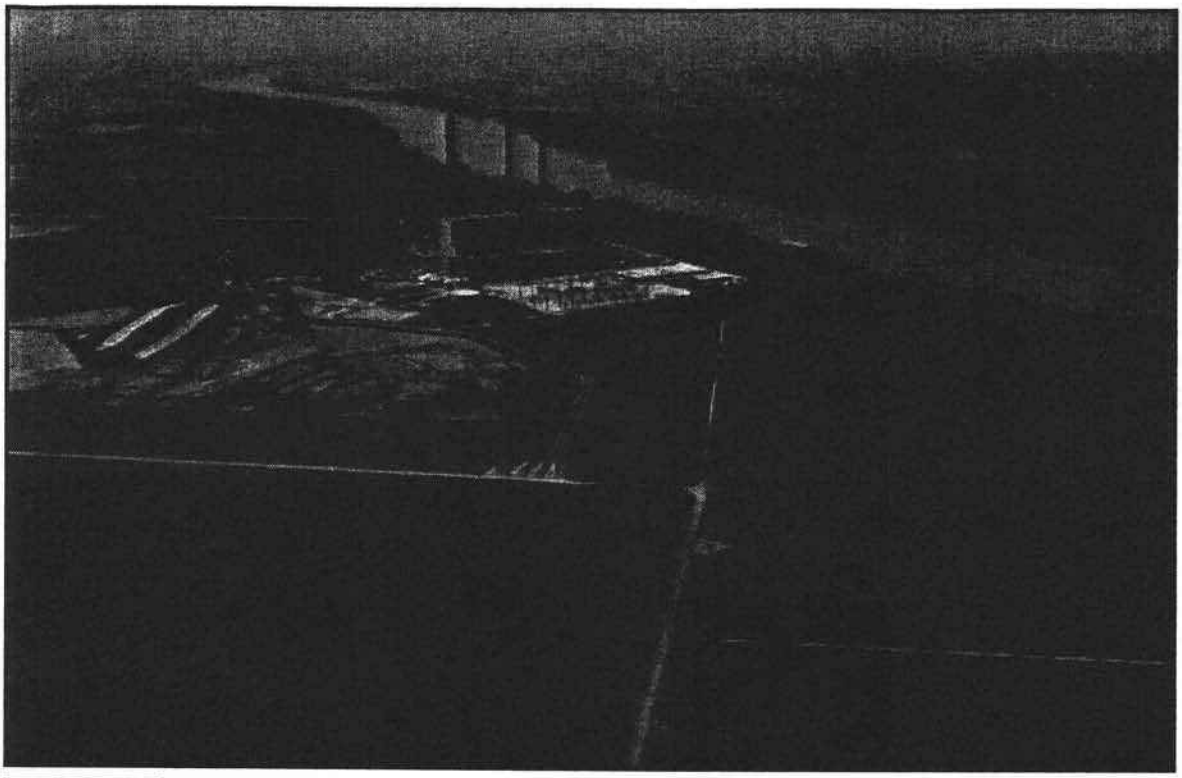

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Ameren Missouri's Labadie power plant with the Missouri River to the west on Tuesday, July 5, 2011. To the left of the plant is a coal ash containment area. J.B. Forbes jforbes@post-dispatch.com

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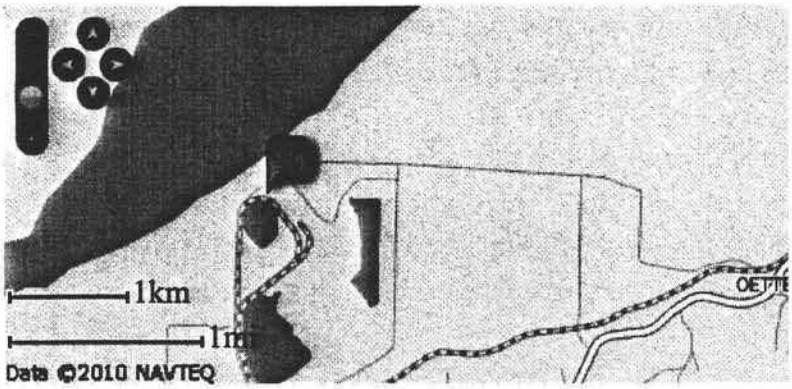
Map



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LABADIE • Since 1992, a coal ash pond next to the Ameren power plant here has been 'seeping," as the company puts it, leaking into the surrounding area, according to state records.

Put another way, one of the plant's two ponds storing toxic coal waste has been hemorrhaging up to 35 gallons a minute for two decades.

There's no evidence the leaks have fouled the groundwater or the drinking water of nearby homes. And critics say that's precisely the problem — neither the state nor the company has ever tested the area for contamination.

"The government hasn't required Ameren to do anything," said Maxine Lipeles, co-director of the Washington University Interdisciplinary Environmental Law Clinic, which represents the Labadie Environmental Organization in opposing a new, 400-acre coal ash landfill at the site. "On the other hand, Ameren has known about it. ... And as far as we know, they haven't done any testing in the area."

The Missouri Department of Natural Resources, the agency charged with regulating coal ash ponds and enforcing the Clean Water Act in the state, isn't required to monitor groundwater at the site under current state laws. But it has legal authority to do so under the plant's water permit and hasn't — despite learning of the leaks from Ameren 19 years ago, according to utility filings with the DNR.

What's more, the water discharge permit for the state's largest coal-fired power plant, a hulking 2,300-megawatt facility, expired 12 years ago. Ameren applied for a permit renewal in 1998, but the department has yet to finish its review. Yet under state law, the plant can legally continue operating under the existing 1994 permit.

DNR officials declined to be interviewed about the leaking ash ponds. Spokeswoman Renee Bungart said only that the agency has not monitored the site because the law doesn't require it. The department has required groundwater monitoring at ash disposal sites since 1997 and is now taking a new look at how it regulates older coal waste impoundments.

Bungart also said the agency has asked Ameren to resubmit its water permit application. She provided no timeline for completing the application and no reason for the 12-year delay except to say that 'some permits are more complex than others."

REASONS FOR WORRY

Members of the Labadie Environmental Organization, who have opposed the new landfill proposal for a variety of reasons, say they fear the worst in light of dozens of coal ash contamination cases across the country.

At many sites, trace metals in coal ash including lead, mercury, arsenic and selenium have been found in groundwater at levels that exceed drinking water standards. Contamination at those sites was discovered only because regulators required groundwater monitoring.

Most recently, the Tennessee Valley Authority Office of Inspector General reported that coal ash has contaminated groundwater at eight of nine sites where tests were conducted in Tennessee, Kentucky and Alabama.

In 2007, a U.S. Environmental Protection Agency report identified 63 sites in 26 states where the water was contaminated by heavy metals from coal ash dumps. That was more than a year before an estimated 5.4 million cubic yards of coal ash sludge escaped an impoundment in Kingston, Tenn. The sludge spread across 300 acres, and 3 million cubic yards spilled into a river.

The disaster compelled an EPA review of coal ash disposal sites across the country, and ultimately a proposed rule to regulate coal waste disposal.

Since the EPA's 2007 report, advocacy groups including Earthjustice and the Environmental Integrity Project have identified dozens more sites that they say should be added to the list of damage cases.

Among the contaminated coal ash disposal sites is Ameren Illinois' Venice power plant, just across the Mississippi River on the Madison-St. Clair County line. The plant burned coal until the mid-1970s, when it switched to oil. The plant was subsequently converted to run on natural gas, but the legacy of its coal ash pits, which still hold 1.4 million tons of coal waste, remains.

The state of Illinois has required groundwater monitoring at Venice since 1996, and data from a network of 17 monitoring wells revealed levels of iron, arsenic, boron and manganese that exceeded drinking water standards.

In Labadie, environmental organization members cite similarities between Venice and Labadie that they say underscore the need for monitoring. The ash ponds at Venice, constructed in the 1950s, are unlined like the leaking pond at Labadie. The Venice ponds sit in the same kind alluvial soil — a fine mix of silt, sand and clay that's an easy pathway for contamination to migrate via water.

The Illinois EPA has approved a plan submitted by Ameren to cap the Venice ash ponds to prevent storm water from serving as a carrier for contaminants. The plan also includes a groundwater management zone with monitoring wells to ensure pollution doesn't spread further.

Ameren and the state say the contamination found at Venice can't specifically be tied to the ash ponds because the long history of industrial waste being discharged in the area. Further, it poses no risk to human health because nearby towns have passed ordinances prohibiting the use of groundwater for drinking, they say.

The same isn't true at Labadie, they say. In fact, a report prepared by Robert Criss, a Washington University professor, identified several dozen private wells along the bluffs near Labadie Bottoms that could be at risk of contamination. Contaminants could infiltrate from shallow alluvial soils to the deeper Ozark aquifer tapped by residents for drinking water, according to the report.

50,000 GALLONS A DAY

The waste is created from burning coal to create electricity. At Labadie's ash ponds, it's composed of fly ash, a fine, talc-like powder that's captured by filters in the plant's stacks to reduce pollutants released into the air, and bottom ash, a coarser material that falls to the bottom of coal boilers.

At Labadie, Ameren uses water to wash the waste to unlined ponds west of the plant. There, the waste sinks to the bottom, and the water drains through a permitted outfall into Labadie Creek and the Missouri River.

One pond, constructed in 1993, has a protective liner. The leaking 154-acre ash pond, which began receiving coal ash when Labadie began operation in 1970, actually has two leaks, according to information provided by Ameren to the DNR. The smaller one, flowing at a rate of up to 5 gallons a minute, is near the wastewater outfall and leaks into the creek. The other leak releases up to 30 gallons a minute on the south side of the pond. Combined, that's the equivalent of more than 50,000 gallons of water escaping the ponds each day, or nearly 350 million gallons over 19 years.

Ameren believes the leaks don't pose an environmental threat. But because of ongoing concerns, and because the EPA has asked the utility to monitor them, Ameren will make repairs to the ash pond by the end of the year, said Mike Menne, the utility's vice president of environmental services.

The smaller leak discharges into the creek near the permitted outfall, Menne said. Water from the larger seep is contained on Ameren property by a raised road bed encircling the plant and preventing any runoff. It will be repaired by installing a French drain — a trench — that will allow water that escapes the ash pond to drain back.

While 50,000 gallons a day sounds like a lot of water, it's a small fraction of 1 percent of the millions of gallons discharged from the ash ponds into Labadie Creek daily, Menne said. And it's unlikely that contaminants would reach deep enough or spread far enough in the direction of area homes and farms to pose a health risk, he said.

Lipeles disputes that. While the groundwater table is shallow — according to an Ameren study submitted to the DNR as part of its effort to win approval for the new coal ash landfill — it doesn't mean that any contamination hasn't migrated further. Besides, said Lipeles, there's an easy way to find out — test the groundwater.

"Let them do a thorough analysis of the groundwater at the site, and characterize it and present that to the public and say, 'See, you have nothing to worry about,'" he said.

RULES AT ISSUE

None of the contaminated coal ash sites identified by the EPA or environmental groups are located in Missouri. Critics say that may point more to lax state regulations or poor enforcement than a lack of actual contamination. The loose regulatory environment underscores the need for federal rules that give states less leeway to ignore potential problems, advocates argue.

"There is a direct relationship between how many sites we've identified and the presence and absence of regulations," said Lisa Evans, an attorney at Earthjustice, which earlier this month released a report identifying Missouri as among a dozen states with the weakest regulations for coal ash disposal.

Coal ash disposal sites are regulated by the DNR's Solid Waste Program. The Water Protection Program oversees water discharges.

Missouri imposed new restrictions on coal ash disposal sites beginning in 1997, treating them the same as municipal waste landfills that require liners and groundwater monitoring, Bungart said.

More recently, the state has given new thought to how older coal waste dumps are regulated because, as air quality rules become more stringent, pollutants such as mercury that are stripped from air emissions end up in the coal waste that's left behind.

For the first time in April, the state agency made groundwater monitoring a condition of a water discharge permit issued to a coal-fired power plant in Missouri's Bootheel.

Labadie environmental advocates say recent regulatory moves don't explain why the Department of Natural Resources — knowing of the leaks at Labadie — hasn't conducted groundwater tests there.

The group, along with other environmental advocates, continues to press the EPA to enact the tougher of two proposed coal ash rules under consideration. The agency was supposed to make a rule final this year but instead has delayed action until 2012 or 2013.

The more stringent of the proposed rules would designate coal ash as a hazardous waste and subject to federal safety standards. The other, favored by utilities, wouldn't require a hazardous designation for coal ash and would leave it up to states to decide whether to adopt EPA recommendations.

Evans and other environmental advocates fear states will ignore the recommendations unless they're required by law.

"If it's not mandatory, the states usually say their regs are adequate," she said.

All of this informs the debate over the proposed ash landfill in Franklin County, Labadie environmental advocates say.

Ameren says the proposed landfill would meet the anticipated federal standards. That material will be stored dry, not in a sludge pond, with just enough water added to make the ash harden like concrete. It

will be protected by multiple liners and a leachate collection system to contain any leaks. The site will also be protected by a berm that will be 3 feet higher than the level floodwater reached in 1993.

That the leaks were allowed to exist for almost two decades without testing for contamination displays Ameren's inability to responsibly manage its coal waste facilities and the state's inability to effectively oversee such operations, Lipeles said. The inaction should raise red flags for Franklin County commissioners, who are weighing land use regulations that would accommodate coal waste landfills.

It also makes Lipeles question how effectively state regulators would evaluate Ameren's application. "It raises huge concerns," he said.

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