

# In N. C. A Dozen Coal-ash Ponds threaten lives—Matt Ehlers and John Murawski

- The EPA says that this state has more “high-hazard’ sites than any other state; the industry calls them safe.

Six months after a dam burst near a power plant in Tennessee, spilling more than 5 million cubic yards of ashy sludge across the countryside, much of the disasters nastiness still lingers.

Cattle can’t graze on pastures covered with the stuff, which is a by-product of burning coal to generate electricity. Landowners are fighting with the company over payments related to the accident, which will cost an estimated \$1 billion dollars to clean up. No one was injured, but three houses were destroyed in the flood of sludge that erupted from a coal-ash pond and flowed more than a half-mile.

In North Carolina, 19 such ponds are active. The Tennessee accident and its aftermath focused attention on a part of the electricity-making that most people never think about, sent power companies into public relations mode and invigorated environmental activists groups. The news reports faded, but last week the Environmental Protection Agency released a list of 44 potentially high-hazard coal ash ponds across the country. The EPA also promised to process new ash-hazard ponds rules by the end of this year. North Carolina is home to 12 potentially high-hazard ponds, more than any other state. The EPA’s high-hazard designation means people would probably die if a dam failed, not that the agency has found any structural problems.

North Carolina Power Company officials say that the ash ponds are a safe and economical way to dispose of the waste. There have been no ash-pond catastrophes in North Carolina, and the state law requires that independent inspectors file reports on the dams every five years. In addition, Raleigh-based Progress Energy in Raleigh and Charlotte based Duke Energy inspect their ponds much more often.

Others want more oversight of the dams and the coal ash sludge, which contains arsenic, lead and mercury.

“I view it as a real public health problem and a potential disaster,” said state Rep. Pricey Harrison of Greensboro, who this year sponsored legislation that would tightly regulate North Carolina ponds. “ I feel like it is a ticking time bomb for the state.”

At the Progress owned Mayo plant in Person County, a 90-foot-tall, 2,300-foot-long earthen dam contains the coal ash and water. From a distance it looks like a normal pond, with grass growing on its edge and trees sprouting from a small rocky island in the middle. A closer look shows a couple of pipes gurgling dark sludge from the factory into the pond.

The plant, which is about 40 miles north of Durham at the Virginia line, last year burned about 2 million tons of coal. At 14 plants across the state, Duke and Progress Energy burned about 31 million tons of the fossil fuel.

About 10 percent or 3.1 million tons was turned into ash. Utilities traditionally dispose of their coal-ash waste by mixing it with water and pumping it into the ponds adjacent to their power plants. Some plants have more than one pond. In time the ash sinks to the bottom.

There are two types of ash; bottom ash, which falls to the bottom of the giant boilers, and fly ash, which is trapped in the plant's pollution-control devices.

Both Duke and Progress are converting some of their plants to dry fly ash disposal, with the fly ash buried in landfills. But it is cheaper to mix water with the ash and pump it into ponds than it is to blow dry ash into storage containers before trucking it away.

The companies are able to divert some ash from the ponds by recycling it. It is sold mainly to the construction market, where it is used as a filler in concrete, among other uses.

The Tennessee disaster was the industry's worst catastrophe, said Dave Mitchell, who oversees environmental issues at Duke Energy. Officials from Progress and Duke acknowledged a handful of pond accidents in recent years. In 2001, 1.6 million gallons, most of it water, escaped over the top of a dike at a Progress Energy plant in Robeson County. Some made its way to the Lumber River, but Progress officials said the environmental impact was minimal.

The coal-pond process works, Mitchell said.

"Our dams have done their job."

Two Progress ponds are on the high-hazard list, both adjacent to its Asheville plant. One is active, the other closed. According to the most recent five-year inspection report, a dam failure at the active pond would send ash and water toward Interstate 26 and into the French Broad River.

Environmentalists are pushing for the elimination of wet ash disposal. "The wet storage of ash presents many more dangers to human health and the environment than dry storage in a landfill," said coal-ash expert Lisa Evans, an attorney for Earth justice, a nonprofit based in California..

Coal ash can contain a variety of metals, including arsenic, selenium, lead and mercury, although generally in low concentrations, according to the EPA. Environmentalists fear that ponds will leach chemicals into ground water.

Right now, there are no federal regulations regarding the disposal of coal ash. That task is handled by each state. In North Carolina, the state Utilities Commission oversees the facilities.

Mercury runs high

After the Tennessee accident, Duke geochemistry professor Avner Vengosh traveled twice to the disaster site to take samples of the coal-ash waste. In March, he testified before a U.S. House of Representatives subcommittee about what he found, including increased mercury levels in nearby streams, which threaten the ecosystem. For people, the main threat is inhaling the dried ash, Vengosh said:

"If this ash becomes airborne and you inhale it, you would expose yourself to a high level of radioactivity."

Evans would like to see the EPA set federal guidelines for the construction and maintenance of coal-ash facilities, and to shut down facilities judged unsafe.

"This is not creating something that is out of the box for EPA. This is what the EPA does," Evans said.

EPA spokeswoman Latisha Petteway wrote in an e-mail message that the EPA defines coal ash as non-hazardous. When the EPA releases its proposed rules by the end of the year , that could change.

Harrison, the Greensboro Democrat who proposed tighter legislation in the state House this year, said a state law could complement any new federal rules.

No law necessary, they say

Utility companies have lobbied against it.

"Our general position is that no additional legislation is necessary," said Mike Hughes, a Progress spokesman. "The existing means of ensuring safety and security at ash ponds is sufficient."

Harrison, who also is concerned about the coal-ash products that are recycled into construction and commercial products, says she thinks power companies don't want the added expense of new laws.

"It's troubling to argue that we shouldn't regulate coal ash because it might raise power bills," she said. "From my perspective, this stuff is very dangerous and toxic and is a public health hazard, and we ought to be doing something to limit the public's exposure to it."

The EPA has visited some Progress and Duke plants across the state. The agency plans to release a more thorough report on the potential high-hazard plants by the end of the year.

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