

Lawsuit -- 'Fracking' fluid from gas drilling in Marcellus Shale tainted water wells in NE Pa.

Michael Rubinkam and Mary Esch, Associated Press, 9-16-10

ALLENTOWN, PA. — Thirteen families in the heart of the gas-rich Marcellus Shale say their water wells have been contaminated by poisonous fluids blasted deep underground by a drilling company using a technique at the center of a fierce nationwide debate.

A faulty gas well drilled by Houston-based Southwestern Energy Co. leaked toxic fracking fluid into local groundwater in northeastern Pennsylvania's Susquehanna County, exposing residents to dangerous chemicals and sickening a child, according to a lawsuit filed Tuesday.

The lawsuit — one of the first in the nation to link hydraulic fracturing, or fracking, to tainted groundwater — said the well's cement casing was defective. It also cites spills of industrial waste, diesel fuel and other hazardous substances.

"The fracking fluid leaked into the aquifer and contaminated wells within several thousand feet, if not more," said plaintiffs' attorney Peter Cambs of Port Washington, N.Y.

A Southwestern official denied any problems with the well and state environmental officials said they found no link between the well and any contamination.

Fracking is the process by which natural gas is extracted from dense shale deposits, including the vast Marcellus Shale in the Northeast. Millions of gallons of water, mixed with chemicals and sand, are pumped at high pressure thousands of feet underground to create fissures in the rock and release the gas.

Pennsylvania and West Virginia have seen thousands of wells drilled in recent years as the riches of the Marcellus Shale have become more accessible with the fracking technique. Some geologists estimate the Marcellus, which also lies beneath New York and Ohio, contains more than 500 trillion cubic feet of natural gas.

The oil and gas industry says hydraulic fracturing has been used safely for decades and that there has never been a proven case of groundwater contamination caused by fracking. Environmentalists fear otherwise.

The Susquehanna County claims come as the Environmental Protection Agency — just 40 miles away in Binghamton, N.Y. — holds the last of four national hearings on the impact of fracking on water and public health. Fracking is currently exempt from EPA regulation; the agency is considering how to structure a study requested by Congress, where bills are pending that would reverse the exemption.

The environmental group Riverkeeper released a report to EPA on Wednesday summarizing more than 100 cases of contamination related to natural gas drilling around the country. The report cites cases where federal and state regulators identified gas drilling operations as the known or suspected cause of groundwater, drinking water, and surface water contamination.

Riverkeeper documented more than 20 cases of tainted drinking water in Pennsylvania; more than 30 cases of groundwater and drinking water contamination in Colorado and Wyoming; and more than 10 surface water spills of drilling fluid in the Marcellus Shale region. Pennsylvania's Department of Environmental Protection

has logged 1,435 violations of the state's oil and gas laws in the Marcellus Shale in the last two and a half years, the report says.

The report also documents more than 30 investigations of stray gas migration from new and abandoned wells in Pennsylvania and five explosions between 2006 and 2010 that contaminated ground or surface water.

"Despite industry rhetoric to the contrary, the environmental impacts of hydraulic fracturing are real," said Craig Michaels, an author of the report.

The lawsuit filed in Susquehanna County said water wells became contaminated with high levels of barium, manganese and strontium after Southwestern, in 2008, drilled its Price No. 1 well in Lenox Township. The contaminated water wells are less than 2,000 feet from the gas well.

The plaintiffs seek monetary damages, environmental cleanup and medical monitoring. The suit said the child who has been sickened has shown neurological symptoms "consistent with toxic exposure to heavy metals." A lawyer would not elaborate on the child's ailments.

John Nicholas, who oversees Marcellus development for Southwestern, told The Associated Press that the well is mechanically sound and that there's no evidence its drilling operations have harmed water supplies.

He said the company and state environmental regulators investigated complaints by residents living near the well, "and we failed to find any tie between our operations and these local water problems." He said the company tested the Price No. 1 well and found that "the mechanical integrity of the well is good."

Nicholas declined comment on the suit itself, saying the company has not seen it.

The Pennsylvania DEP sampled a plaintiff's well about two years ago and found an elevated level of manganese. DEP told the resident it was unable to establish that drilling "contributed to the degradation of your water supply," according to a letter from DEP provided by Cambs, the plaintiffs attorney.

"The data that we had from our samples did not allow us to conclude that the well had been contaminated by gas well drilling," DEP spokeswoman Helen Humphries said Wednesday.

More recent testing of the plaintiff's well by an independent lab, Appalachia Hydrogeologic and Environmental Consulting of Hallstead, Pa., found elevated levels of barium, iron, manganese and strontium.

"Appalachia recommends that water from the potable well NOT be used as a drinking water source until the barium and strontium levels are remedied," according to Appalachia's report.

Plaintiff Mary Donovan, 39, said she's drunk nothing but bottled water since Appalachia's April tests.

"The only thing I can do (with well water) is bathe with it and wash my clothes, and God knows if that's harmful to me," she said.

"These people don't care what they're doing to the environment and to people," she said.

The Lenox Township developments recall the situation in nearby Dimock Township, where state regulators say Houston-based Cabot Oil & Gas Corp. drilled faulty wells that allowed methane gas to escape into residential

groundwater supplies. More than a dozen families in Dimock have filed suit. Cabot claims the high levels of methane detected in the wells might be naturally occurring.

Some of the cases in the Riverkeeper report were also included in a report submitted to the EPA last year by the Cadmus Group, hired by the agency to analyze reports of contamination believed to be related to hydraulic fracturing.

The Cadmus report identified 12 cases in six states — Colorado, New Mexico, Ohio, Pennsylvania, Texas and Wyoming — that may have such links. The report said there was insufficient information to definitively confirm or rule out hydraulic fracturing as the cause.