

EPA FINDS COMPOUND USED IN FRACKING IN WYOMING AQUIFER



As the country awaits results from a nationwide safety study on the natural gas drilling process of fracking, a separate government investigation into contamination in a place where residents have long complained that drilling fouled their water has turned up alarming levels of underground pollution.

A pair of environmental monitoring wells drilled deep into an aquifer in Pavillion, Wyo., contains high levels of cancer-causing compounds and at least one chemical commonly used in hydraulic fracturing, according to new water test results released yesterday by the Environmental Protection Agency.

The findings are consistent with water samples the EPA has collected from at least 42 homes in the area since 2008, when ProPublica began reporting [3] on foul water and health concerns in Pavillion and the agency started investigating reports of contamination there.

Last year -- after warning residents not to drink [4] or cook with the water and to ventilate their homes when they showered -- the EPA drilled the monitoring wells to get a more precise picture of the extent of the contamination.

The Pavillion area has been drilled extensively for natural gas over the last two decades and is home to hundreds of gas wells. Residents have alleged for nearly a decade [1] that the drilling -- and hydraulic fracturing in particular -- has caused their water to turn black and smell like gasoline. Some residents say they suffer neurological impairment , loss of smell, and nerve pain they associate with exposure to pollutants.

The gas industry -- led by the Canadian company EnCana, which owns the wells in Pavillion -- has denied that its activities are responsible for the contamination.

EnCana has, however, supplied drinking water to residents.

The information released yesterday by the EPA was limited to raw sampling data:

The agency did not interpret the findings or make any attempt to identify the source of the pollution.

From the start of its investigation, the EPA has been careful to consider all possible causes of the contamination and to distance its inquiry from the controversy around hydraulic fracturing.

Still, the chemical compounds the EPA detected are consistent with those produced from drilling processes, including one -- a solvent called 2-Butoxyethanol (2-BE) - - widely used in the process of hydraulic fracturing. The agency said it had not found contaminants such as nitrates and fertilizers that would have signaled that agricultural activities were to blame.

The wells also contained benzene at 50 times the level that is considered safe for people, as well as phenols -- another dangerous human carcinogen -- acetone, toluene, naphthalene and traces of diesel fuel.

The EPA said the water samples were saturated with methane gas that matched the deep layers of natural gas being drilled for energy. The gas did not match the shallower methane that the gas industry says is naturally occurring in water, a signal that the contamination was related to drilling and was less likely to have come from drilling waste spilled above ground.

EnCana has recently agreed to sell its wells in the Pavillion area to Texas-based oil and gas company Legacy Reserves for a reported \$45 million, but has pledged to continue to cooperate with the EPA's investigation. EnCana bought many of the wells in 2004, after the first problems with groundwater contamination had been reported.

The EPA's research in Wyoming is separate from the agency's ongoing national study of hydraulic fracturing's effect on water supplies, and is being funded through the Superfund cleanup program.

Source: <http://earthandindustry.com/2011/11/epa-finds-compound-used-in-fracking-in-wyoming-aquifer/>