Horizontal Fracking - Unacceptable Risks

Hydraulic horizontal fracking poses unacceptable risks to public health, safety and the environment. The number of documented spills, blowouts, leaks, trucking accidents and pollution from normal drilling activities is shocking. Below is an abbreviated list…

*Colorado - 206 chemical spills were linked to 48 cases of water contamination in 2008 alone. In Parachutte, CO, 1.6 million gallons of fracking fluid leaked and were transported by groundwater. According to state records, it seeped out the side of a cliff, forming a frozen waterfall 200 feet high. It melted into a tributary of the Colorado River. (ProPublica and Vanity Fair).

*Durango, Colorado - an emergency room nurse almost died of organ failure after handling the clothes of a rig worker who had been splashed in a fracking fluid spill. The doctors were unable to learn the chemical makeup of the fluid because the information is proprietary - companies are not required to disclose the contents of chemicals used. (ProPublica, 11/13/08, Abrahm Lustgarten)

*New Mexico - toxic fluids seeped into water supplies at over 800 drilling sites in 2008. (Vanity Fair, "A Colossal Fracking Mess" June 21, 2010).

*Wyoming - benzene, a common chemical used in fracking, was discovered throughout a 28-mile long aquifer. (ProPublica, 12/31/09)

*Wyoming - Upper Green River Basin reported ozone levels above those of Los Angeles on its worst days. The Wyoming Department of Environmental Quality urged the elderly and children to avoid strenuous outdoor activity. (AP news article printed in TC Record Eagle, March 2011)

*Sublette, Wyoming - toxic compounds used in fracking including benzene were found at 1500 times safe level in 88 drinking water wells, documented by the US Bureau of Land Management in July, 2008. Researchers returned in September to take more samples. They were unable to open the water wells - monitors showed they contained so much flammable gas that they were likely to explode. (Pro Publica, "Buried Secrets: Is Natural Gas Drilling Endangering US Water Supplies?" Abrahm Lustgarten, Nov 13, 2008).

*Dish, Texas - Mayor Calvin Tillman describes how carcinogenic air pollution from drilling has ruined the quality of life for residents, who report problems with nausea, headaches, breathing difficulties, chronic eye and throat irritation and brain disorders. Trees are dying and horses have fallen ill. The town hired an environmental firm to collect air samples and found high levels of 15 chemicals used in fracking fluid, including benzene, toluene and xylene. In June, 2010, tests by the Texas Railroad Commission showed high levels of arsenic, barium, chromium, lead and selenium in residential water wells. (Texas Oil and Gas Accountability Project).

*Texas Commission on Environmental Quality found pollutants from methane gas drilling in the Barnett Shale were greater than those produced by all vehicular traffic in the Dallas/Fort Worth area.

*Texas - a hospital system in six counties with gas drilling reported a 25% asthma rate for children. This is over three times the state average. (New York Times article 2/26/11, "Regulation Lax As Gas Wells Tainted Water Hits Rivers")

*Texas - The Endocrine Disruption Exchange (TDEX) independent research organization based in Colorado analyzed the health effects of 61 chemicals used in fracking in Texas in April, 2009. Of the tested chemicals, ¼ were classified as volatile, meaning they can become airborne and can be swallowed, inhaled, or can reach skin. More than 90% are harmful to brain, nerves, lungs and digestive system. 80% affect the heart, blood and kidneys. 67% affect the immune system. (Texas Oil and Gas Accountability Project).

*Arkansas - The US Geological Survey has reported more than 800 earthquakes in central Arkansas from

September 2010 to January 2011. The earthquakes have caused damage to homes such as cracks in walls and driveways. Geologists believe the earthquakes could be the result of frack fluid waste disposal in injection wells. A 6-month moratorium was established in January on the building of new injection wells.

Louisiana - 16 cattle mysteriously and abruptly dropped dead after drinking fluid adjacent to a gas drilling rig. (ProPublica, Abrahm Lustgarten, 4/30/09).

*Clearville, Pennsylvannia - livestock dropped dead after suffering motor skill breakdowns, likely resulting from high arsenic levels in the soil due to flowback fluid leaks.

*Dimock, PA - New Years Day, 2009, a well exploded from leaked gasses due to improper cementing of the well casing (according to the PA Department of environmental Protection.) A similar explosion which occurred in Ohio blew a house off its foundations and left a neighborhood with no drinkable water.

*Dimock, PA - in Sept., 2009, 8,000 gallons of fracking fluid leaked from faulty supply pipes into wetlands, poisoning streams and killing fish. Drinking water turned brown and corrosive and would ignite when a match was held to it as it came out the tap. People reported dizziness, headaches and skin sores from showering. In October 2009, the PA Dept. of Environmental Protection shut down water wells in the area due to major contamination of the aquifer. (Source Watch - Marcellus Shale).

*Clearfield County, PA - June 2010, a gas well blew out, releasing over one million gallons of gas and drilling fluid before being contained nearly 16 hours later.

*Avella, PA - fumes escaping from tanks holding 21,000 gallons of flammable fluid exploded, producing 200-foot flames and burning for 6 hours. Three workers were injured.

*Bradford County, PA - A Chesapeake Energy well blew near the surface, probably from a cracked well casing. Thousands of gallons of fracking fluid spilled over the containment walls into fields, farms, areas where cattle graze. Some of the fluid found its way into Towanda Creek, a tributary to the Susquehanna River. Seven families were evacuated from their homes. (4/20/11 AP news and Huffington Post).

*New York Times 2/27/11 - internal documents obtained from the EPA revealed that wastewater from deep shale drilling contains radioactivity at hundreds or even thousands of times the maximum allowed by the federal standard for drinking water. This wastewater is often hauled to sewage plants which are not designed to treat it, and then discharged into rivers. Here in Michigan, the wastewater or flowback fluid will be dumped into injection wells where the upward migration into drinking water and aquifer is highly possible (refer to Arkansas earthquakes - two fault lines run through Northern Michigan. Also refer to Chris Groebbel paper on injection wells in Michigan. Thousands of previously drilled wells could act as a conduit for the upward migration of toxic and radioactive fracking waste into ground water aquifers).

*Horizontal fracking is increasing in use. Every year, thousands of new wells are drilled. According to ProPublica, 12/31/09, Abrahm Lustgarten, “The government estimates that companies will drill at least 32,000 new gas wells annually by 2012. That could mean more than 100 billion gallons of hazardous fluids will be used and disposed of each year…” Billions and billions of gallons of fresh groundwater will be contaminated and removed FOREVER from the hydrologic cycle.

Do we really want this in Michigan???

Information compiled by Anne Zukowski