

HYDRAULIC FRACTURING

THE RIGHT TO KNOW ACT

An exploratory gas well is drilled in Sweet Grass County 800 feet from a landowner's home. About 20% of Sweet Grass County has been leased for gas development.



Northern Plains Resource Council's campaign to ensure that oil and gas companies are good neighbors by publicly revealing toxic drilling chemicals that endanger human health and the rights of landowners.

We deserve to know what's in our water

Fracking facts

- State and federal laws allow drillers to list fracking fluid ingredients as "proprietary" or "no hazardous ingredients" even if it is not the case. Wyoming is the only state where this is not allowed.
- 83% of chemicals used in fracking fluids in Montana have adverse effects on people, including damage to skin, eyes, ears and mouth;
- 1 to 8 million gallons of water are used for every hydraulic fracturing. A well can be fracked as many as 30 times;
- Nearly 30% of fracking fluids remain underground after fracking is completed;
- Many fluids are stored and evaporated in unlined pits near the gas or oil wells. The solid materials left over are buried on-site.

Hydraulic fracturing, or "fracking," is a process in which oil and gas development that involves fracturing rock and pumping toxic chemicals and synthetic sand under high pressure into the ground. These chemicals, many of which can cause severe health problems to humans, can get into the drinking water through a variety of ways. Unfortunately, these chemicals compositions are kept secret from the public.

The federal Safe Drinking Water Act (SDWA) was enacted in 1974 to protect drinking water quality in the United States. This law applies to all surface and ground waters actually or potentially used for drinking water. In 2005 the SDWA was amended to exempt oil and gas drilling from disclosure or regulation of fracking. As a result, if chemicals migrate into drinking water sources, no one is held liable.

Fracking fluids found in water

Residents in Alabama, Colorado, New Mexico, Pennsylvania, Virginia, West Virginia, and Wyoming have reported changes in water quality following fracking operations near their homes. Common problems include cloudy water, sediment, iron precipitates, black jelly-like grease, floating particles, diesel fuel or petroleum odors, increased methane in water, rashes from taking showers, gassy taste, and decreased or complete loss of water. In Pavillion, Wyoming, the Environmental Protection Agency found fracking chemicals in 3 residential wells, and 11 wells have trace amounts of oil, gas, and metals. Fracking is done in eastern Montana's Bakken oilfield and in Sweet Grass and Park counties for methane gas.

Fracking disclosure bill (SB 86) the right solution

Northern Plains is supporting a bill in the 2011 legislative session that will require written notice of fracking chemicals within 20 days to landowners, as well as public disclosure and chemical information to emergency workers. Wyoming has recently, through a rule-making process, begun disclosure of fracking fluids with great success and few complaints from the industry. This is a common sense protection for the health of our citizens. And if the fracking fluids are safe, as industry claims, disclosure will show that.



An Alberta homeowner ignites gas trapped in water from her well. A test showed strong similarities between the gas and drilling fluids used at a nearby gas well.

Photo by Will Andruschack

What to do

- Baseline testing is essential for proving your water quality prior to oil and gas development. The secrecy of fracking chemicals places a huge burden of proof on landowners;
- Keep complete logs of the levels of your well water;
- Document your land. Video footage, aerial photos, or on-the-ground photos taken in every season are all extremely important;
- Join Northern Plains and other concerned citizens in the fight to protect your drinking water!
- Call your legislator and ask them to support the Right to Know Act to disclose fracking chemicals. Go to <http://www.leg.mt.gov/css/contact.us.asp>

Fracking fluids remain a mystery

In natural gas fracturing, also known as fracking, 435 chemical products are known to be used. Out of that, only 5% of the specific chemicals have been publicly disclosed.

Fracking fluids have been known to travel 3,000 feet away from a drilling well. While there is an effort to bring fracking fluids back to the surface and properly dispose of it, between 20-70% of the fluids remain underground.

Out of the chemicals known to be used in fracking for which basic information is available, 96% provide warnings about eye and/or skin harm, 94% warn about respiratory

system harm, and 49% warn about brain or neurological harm that can occur either when the chemicals are inhaled or when they come into contact with skin.

For example, methanol and formaldehyde are known fracking chemicals. The side effects of methanol exposure include adverse reproductive and fetal effects, central nervous system depression, digestive tract irritation, respiratory tract irritation, liver, kidney and heart damage, blindness, and death. The effects from formaldehyde exposure include skin disorders, respiratory problems, and cancer.

Fracking incidents occur across the country

Here are a few incidents of well contamination from fracking:

Colorado: The water well of the Amos family, near Silt, blew out during hydraulic fracturing of nearby gas wells. Their drinking water turned gray, had strong smells, and bubbled. The Colorado Oil and Gas Conservation Commission determined that the Amos well was contaminated due to inadequate gas well structure that resulted in higher than normal well pressures and gas migration into groundwater. Water testing found methane had migrated to the Amos water well. Two years later, Laura Amos was diagnosed with primary hyperaldosteronism, a rare condition linked in laboratory testing to 2-butoxyethanol – a

chemical she learned had been used in the hydraulic fracturing near her home.

Wyoming: In the Pinedale Anticline and Jonah natural gas fields, 89 industrial water wells and one livestock well have been contaminated with hydrocarbons; 15 have had levels of carcinogenic benzene above federal health standards, including one that is 1,500 times the level considered safe for human consumption. This well, and at least 12 others, has been plugged by the operators, making it impossible to monitor and track the movement of pollutants underground.

These and other incidences spurred the EPA to initiate a nationwide study.

Keep informed! Take action!

Join

Northern Plains Resource Council is a grassroots conservation and family agriculture group that organizes Montana citizens to protect our water quality, family farms and ranches, and our unique quality of life.

**220 S. 27th St.
Suite A
Billings, MT 59101**
Tel: (406) 248-1154

Visit our website at
www.northernplains.org



I want to be a monthly donor: (Also for membership; credit/debit card withdrawal available)
 \$50/month \$25/month \$20/month \$15/month \$10/month Other___

A one-time membership donation is better for me right now:
 Rider of the Big Sky \$500+ Bottom Line Rider \$200+ Rough Rider \$100+
 Range Rider \$50+ General \$40 Living Lightly \$15

I'm paying by: Check (payable to Northern Plains) Credit/Debit Card

Card Type _____ Card # _____ Code _____

Expires _____ Name on Card _____ Signature _____

Withdraw from my Bank Account (please include VOIDED check and sign above)

NAME _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____ EMAIL _____