

Natural Gas Frack Drilling in Pennsylvania

Why Our Faith Communities Need to Be Concerned

*Join us for Blessing the Waters, Sept. 7, 2011
Penn Treaty Park, Philadelphia, 5:30PM*

Natural gas drilling, through a new technique called hydrofracking, is now the fastest growing industry in Pennsylvania. Hundreds of wells have been started, and tens of thousands are planned in every part of the state except the southeast corner. It has been hailed as the cure for oil dependency, and as a clean fuel. Like most things that sound to good to be true, it is.

What is it?

Hydrofracking is a technique of drilling down up to 1.5 miles, then turning the drill and going underground horizontally for up to two miles through shale. The shale contains gas which is clinging tightly to the rock. To loosen the gas, so that it will flow out of the well, huge volumes of water, chemicals and explosives are forced down the well and ignited. The explosions create mini-earthquakes, **fracturing** the rock structure to create cracks and chemically loosen the gas, which then flows through the newly opened channels and up the well. (provided it doesn't find its way to the nearest household or municipal water well.)

Why is it happening now?

This geologic formation has been known for decades. It is being drilled now because:

- 1) Easier-to-reach conventional gas resources are tapped out to the point that they cannot meet the demand.
- 2) In 2005, vice president Dick Cheney got Congress to exempt gas drilling from all environmental regulation – the Clean Water Act, the Clean Air Act, the Safe Drinking Water Act, and many others. These exemptions dramatically reduce the cost of drilling, making it both highly profitable and making it much harder for us to monitor or stop the toxic side effects.

What can go wrong?

This technology is a major public health threat-- natural gas is not clean energy. The fracking fluid includes hundreds of highly toxic chemicals, which are released into the air, water and soil. Health studies have shown dramatic increases in asthma and other respiratory disorders, cancer, and neurological disorders in areas where fracking is already in widespread use in the western U.S. Many fracking chemicals are known as carcinogens. (Articles available upon request)

There is no safe way to dispose of or decontaminate the millions of gallons of contaminated frack fluid which returns to the surface, bringing additional poisonous compounds with it, including radium and radon. "Accidental" spills have occurred hundreds of times, while frack "water" stored in open pits evaporates VOC's into the air. Surface water resources have already been contaminated in several areas of Pennsylvania.

The frack fluid which remains underground can escape through many routes into ground and surface water resources. Water wells in several areas, including Dimock, Pennsylvania, have so much gas in them that faucet flows can be lit with a match. Dimock is now completely dependent on bottled water for drinking, cooking, and bathing.

The possibility of long term pollution of the Delaware, Susquehanna and Ohio River basins, the three major watersheds of Pennsylvania, beyond the capacity of water purification systems to remediate, is very real.

This technology threatens our state economy. Many Northeastern Pennsylvanians remember how the coal industry destroyed our landscapes, then left generations of economic depression when it ended. Acid mine drainage is still a problem. The anthracite industry sustained the region for almost 100 years, but the oil boom is likely to last only a decade, yet leave an even bigger mess in its wake. Frack wells deplete very rapidly. Many of the high tech jobs are filled by migratory teams of trained workers, not local residents. Employment needs drop rapidly after the well is drilled. The support jobs for drillers and truckers – convenience stores, restaurants, hotels, prostitution – offer nothing of lasting value, while the loss of value for farmers, forest industries, tourists and fisherman will last long after the drilling is done.

This investment deters investment in longer term, more sustainable industries, such as sustainable forestry, recreation, renewable energy, and agriculture. (With food prices rising and the local food movement growing, southern Pennsylvania has already turned a corner on the prospects for family farms).

This technology has nothing to do with energy independence. The gas from Pennsylvania will go into pipelines that can take it anywhere – including to harbors where it can be compressed, loaded on ships, and sold to the highest bidder, possibly China. In a global market, operated by private companies, there is no guarantee where this gas will be sold or used.

This technology threatens Pennsylvania's state forest land. The well pads occupy up to 5-7 acres, in addition to access roads and pipeline rights of way. Compressor stations, also exempt from environmental regulation, constantly emit dangerous levels of noise, and leak gas and chemicals. Thousands of these wells are planned for Pennsylvania's state forests, turning them into checkerboards of cleared and wooded land. Habitat will be destroyed, fish streams poisoned, and recreation essentially ended in drilling regions, if this program is allowed to continue. As a result of fracking, air quality in rural areas of Western states is now worse than our smoggiest cities.

The gas industry has launched a powerful propaganda campaign to promote gas drilling in Pennsylvania.

To learn more about the dangers and politics of fracking:

1. Listen to This American Life Episode on Fracking
<http://www.thisamericanlife.org/radio-archives/episode/440/game-changer>
2. Follow news updates and take action through protectingourwaters.wordpress.com
3. Watch the documentary [Gasland](#)

What should we do?

Get educated and involved in demanding a statewide moratorium on fracking in Pennsylvania. Anti-fracking organizations include: Protecting Our Waters (protectingourwaters.com) in Philadelphia and Gas Drilling Awareness Coalition (gdacoalition.org) in northeast Pennsylvania. Rally and activists' conference September 7-8, for more information: shalegasoutrage.org