

Don't Frack Michigan



You Can't Drink Natural Gas! P.O. Box 65, Afton, Michigan 49705 www.DontFrackMichigan.org

Why Regulations Cannot Protect Us

***No regulation** can prevent the extraordinary squandering of fresh water, 5 ½ million gallons average per well, 100% of which becomes contaminated - permanently- and removed from the natural water cycle. This in an era of critically diminishing supplies of fresh water in the US and around the world. According to Dr. Tony Ingraffea, Cornell University Rock Fracture Specialist, the oil and gas industry intends to drill tens of thousands of wells in the Marcellus Shale in the northeast. Add to this the number it may drill in other shales and sandstones, including the Collingwood-Utica Shale in Michigan where half a million acres of state land have been leased. This staggeringly huge waste of fresh water is unsustainable.

***Deep shale deposits** contain naturally-occurring salts, heavy metals and radioactive substances. These materials are loosened from the shale through the fracking process. **No regulation** can prevent a portion of these toxic materials from coming to the surface with the fracking fluids as flowback.

***No regulation** can prevent these chemicals, salts, heavy metals and radioactive substances, now loosened and mixed by the fracking process, from becoming a toxic underground plume that can migrate into existing fissures as well as into new fractures created by the drilling.

***No regulation** can predict or control the underground migration of these toxic plumes. Such plumes are already oozing under Sublette County, Wyoming; Endicott, New York; and Greenpoint, Brooklyn.

***No regulation** can predict or control the time frame - years, decades, millennia - over which such plumes will migrate.

***No regulation** can prevent the deterioration of the steel and cement casing intended to protect drinking water over the decades and centuries ahead.

***No regulation** can prevent the risk of high-pressure disposal of millions and millions of gallons of contaminated water and chemicals in injection wells. In Arkansas, this type of disposal has resulted in over 800 earthquakes from September 2010 to January 2011, when use of injection wells was temporarily banned. These earthquakes have not only damaged homes, but fracture rock, allowing for the upward migration of fluids from the injection wells. Several fault lines run through Northern Michigan. But, even without earthquakes, over 58,000 oil and

gas wells have been drilled in the last century. Not all have been properly capped, and could allow for the upward migration of toxic fluids.

***No regulation** can prevent air pollution from the normal venting process, pipeline compressors and continuous truck traffic. Some rural areas have recorded ozone levels higher than those found in Los Angeles, resulting in watery eyes, shortness of breath, nosebleeds, increases in asthma, heart and lung disease and cancer.

***No regulation** can prevent the industrialization of large swaths of rural and farm land to drill wells. Regulations cannot change the need for thousands of tanker truck trips needed to haul water and chemicals, and remove flowback fluid, the damage to county roads and costs passed onto taxpayers. Regulations cannot prevent its negative effect on tourism in Michigan.

***Only a drastic change in existing regulation** can thwart eminent domain abuse. Michigan can use “forced pooling” to force landowners who do not wish to lease to participate anyway. Until this is repaired, local and often poor citizens can be manipulated by wealthy corporations and powerful local and state agencies. Fixing this would leave all other vulnerabilities intact.

***No regulation** can require that gas produced will contribute to “energy independence.” The gas will be shipped overseas if it is more profitable to export than to sell domestically. Asian, European and Canadian corporations already own significant pieces of US drilling companies, land and leases (including in Michigan). Thus, some profit may already be going beyond our borders.

***No regulation** can guarantee enforcement. Without 24/7 oversight, drillers will not obey the grossly inadequate rules now in place to safeguard the safety and health of people, other living things or the environment. A trail of ruined lives and landscapes is documented in thousands of articles, videos and films. One such film, “Gasland,” was nominated for an Oscar.

Adapted from a document by Carl Arnold from the Gas Drilling Awareness Coalition of New York.

For more information, contact Don't Frack Michigan at www.dontfrackmichigan.org.