

Baseline Testing

Is the Most Important Thing You Can Do Before Fracking Starts

SAFE www.dontfractureillinois.net

Baseline Water Well and Flow Testing:

Testing your water for flow rate and chemical contaminants prior to high-volume horizontal hydraulic fracturing in your community provides evidence should future issues arise. Water wells within at least 1.5 miles from fracking sites should be tested. Residents even further from any fracking site should also consider getting their water tested. For fracking wells that fall under the state's definition of high-volume fracking, the first 1500 feet from the fracking site will be tested by the industry as required by state law. However, the well bore may extend horizontally about 1.5 miles (7920 feet) in any direction. Fractures and contaminant migration may extend the risk radius even further. If your water becomes contaminated after fracking, baseline testing (prior to fracking) is necessary to have a chance of holding the industry accountable. It should also be noted that the state provides no baseline water testing for fracking wells which do not fall under the state's definition of high-volume fracking, so it may be advisable to have your water tested if there are any oil/gas wells in your area.

What the tests should include:

- VOCs (Volatile Organic Compounds), PAHs (Polycyclic Aromatic Hydrocarbons), alcohols, BTEX/naphthalene, lead, chloride, sulfate, methane, and water soluble radium, uranium, cesium and thorium are some of the main chemicals to test for. A basic chemical test will cost about \$400 depending on what laboratory you've chosen. Laboratories themselves will likely have suggestions what to test for.
- The state is requiring industry to test for the following substances for anyone living within 1500 feet of a high-volume fracking site: pH; total dissolved solids, dissolved methane, dissolved propane, dissolved ethane, alkalinity, and specific conductance; chloride, sulfate, arsenic, barium, calcium, chromium, iron, magnesium, selenium, cadmium, lead, manganese, mercury, and silver; BTEX; and gross alpha and beta particles to determine the presence of any naturally occurring radioactive materials.
- Also pertinent: a baseline mineral test from the Illinois State Water Survey (ISWS) starts at \$35. It does not indicate industrial pollutants, but will show mineral content, total dissolved solids, and pH, all of which can change if your water becomes contaminated. For more information, please contact the ISWS Public Service Laboratory at (217) 333-9321.
- After fracking begins, routine in-home testing can be done to help determine if your water needs to be retested in a lab. A conductivity tester or a pH level testing kit will help indicate changes in water quality.
- Please visit our website for more information on water, air and soil testing, including laboratories in Illinois which perform testing: <http://www.dontfractureillinois.net/baseline-testing/>

Air Quality and Radon Testing:

- Air pollution is common in fracking areas. Test your air quality before fracking begins.
- A simple home radon testing kit can be installed. During the process of fracking, radon can be released. It is recommended to install a radon monitor prior to fracking. Baseline air monitoring for PAHs and VOCs is also available through independent testing laboratories. See our website for details. Prerecorded evidence and testing verifies a healthy environment to your insurance company and officials if you file a complaint.

Volatile Organic Compound Blood Testing:

Baseline blood tests ensure that you have not been exposed to industrial frack chemicals commonly used. The tests are not covered by insurance and must be done prior to fracking beginning. If, after exposure to fracking operations, blood work shows a rise in fracking-related chemicals, it may help prove that the elevated levels are related to fracking. Your physician must order the kit and lab work to be performed. These tests run about \$200.

Other preventive measures:

- Make a detailed record using photos and videos of your community, nearby roads and your home. Include audio recordings to compare noise levels before and during fracking operations. Video areas around you at night. Take notice of wildlife in the surrounding areas.

- Nonstop truck traffic can destroy roads. 24-hour operation of compressors, lights & flares will light up the countryside and present noise pollution. Fracking “quakes” can cause damage to interior spaces of homes. Wildlife will be displaced. Evidence should be compiled before fracking begins in case you want to file a complaint in the future.
- Recent science has proven that fracking and its subsequent disposal of waste into injection wells increases the likelihood of earthquakes. It is advised to check with your homeowners insurance agent about earthquake coverage. (Enhanced Remote Earthquake Triggering at Fluid-Injection Sites in the Midwestern United States, Nicholas J. van der Elst et al. Science 341, 164 (2013))

Local governing:

Ask your local elected officials about noise & light ordinances, road weights & limits, and pollution control. Local governments have the authority to put bans and ordinances in place. Ask about first responders. Are they properly equipped and trained to handle fracking accidents, spills and fires? Do they know what to do if illegal dumping occurs? Drilling mud and waste should not be dumped in local landfills or buried near the site. Are the local landfills equipped with radiation detectors? Furthermore, industry has been known to dispose of toxic processed water by spraying it on gravel roads as a dust deterrent, even though this is illegal. This spray is loaded with dangerous chemicals, salts and radioactive elements, such as radium, strontium, & uranium. (<http://pubs.usgs.gov/fs/fs-0142-99/fs-0142-99.pdf>)

Contesting permits:

The new laws allow for residents near proposed frack sites, as well as town and county officials, to contest a permit if there is reasonable cause. After the Department of Natural Resources files the rules, more will be known about how the process will work. We do not know when the rules will be complete and approved. It could be anywhere from a few months to a year. It is advised that you seek legal advice in this process.

Landowner Rights:

Make sure you have a clear understanding of your legal rights, whether you’ve signed a lease or own your mineral rights, you may have room to negotiate. Know your rights as a tax paying property owner regarding forced integration. Forced integration, also known as forced pooling, occurs when a property owner is forced into allowing his property to be used by the fracking company. It is best to seek legal advice for property issues. Visit our website for information.

Reporting Problems:

Because the state lacks adequate staff to monitor drilling activities, the IL Attorney General’s office has indicated that citizens should be vigilant and watchful. Understand the laws and your rights. Pay attention to disposal wells on or near your property. Ask to have them inspected. If you’re aware of an accident, surface spill, illegal dumping or water well contamination call the numbers below. Write down the name of the person who received your report, plus the date & time of your call.

IL EPA, Benton, IL: 888-372-1996, 618-993-7200

US EPA-Region 5: 312-353-2000

IL Dept. of Natural Resources, Marc Miller: 217-782-6302 IL Dept. of Natural Resources, Doug Schutt: 217-782-7756 IL Attorney General: 888-288-9436

ISWS water test: 217-333-9321

IL Emergency Management Agency: 217-782-2700 Governor Quinn: 217-782-0244

Please make sure your local and state elected officials are also aware of any report you file. SAFE would also like to hear from you so that we can compile reports and help with follow up.
report@dontfractureillinois.net or 217-273-1000

Note: The material in this handout is intended for informational purposes only. SAFE is not responsible for the choices or actions of individuals. The ideas presented are suggestions, and do not constitute specific or professional recommendations.

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