

Hydraulic Fracturing

Sources of Law and Information

By Barbara H. Garavaglia

Hydraulic fracturing—also known as fracking—has become increasingly controversial in the United States over the past several years, especially in states such as Michigan with large shale gas deposits that were previously unextractable. In 2012, a Michigan fracking ban initiative failed to make it onto the November statewide ballot,¹ but citizens groups are presently collecting signatures in an attempt to get the initiative onto the November 2014 ballot as an “initiated state statute.”² And, more recently, state auctions of drilling permits have been the scenes of citizen protests driven by concerns about the potential environmental impacts of hydraulic fracturing.³

Hydraulic fracturing has been used by the oil and gas industry since the late 1940s when most hydraulic fracturing was done using “vertical fracturing.”⁴ Over time, as the oil and gas industry sought ways to extract previously unrecoverable shale gas, newer technologies emerged, including methods that are currently the cause of increased concern:

A relatively recent innovation in HF [horizontal fracturing], however, incorporates horizontal drilling and multistage fractures to get at what otherwise would be uneconomical sources of gas that lie in unconventional reservoirs.

...

The use of this technique and the gas drilling boom that has resulted from its use has, however, led to some controversy and environmental worries. Concern centers not only around air emissions and potential water contamination associated with fracking chemicals used, but also around the substantial amount of water necessary to make the wells productive. Additionally, apprehension extends to chemical waste management practices, the large land footprint of drill-

ing operations, and the necessary infrastructure required to support these large drilling operations....Concern over HF drilling in shale gas plays has led to grassroots movements, political opposition, and calls for regulatory action at the local, state, and national levels.⁵

A review of news stories and websites clearly illustrates the divide between proponents who laud hydraulic fracturing as a safe and low-risk way to create jobs and achieve energy independence⁶ and opponents who decry the practice as a high-risk, environmentally damaging activity that must be strictly regulated or banned altogether.⁷ Property owners and homeowners are also increasingly worried that their insurance policies may not cover damage caused by hydraulic fracturing.⁸ And the insurance industry has been discussing its “increased exposure” to risks and the rise in covered losses that might result from claims relating to fracking.⁹

While a simple Google search for “hydraulic fracturing” or “fracking” will yield a large number of hits, those more interested in legal and scientific information are best served by beginning their research on federal and state agency websites and other more neutral sites. Before beginning research on this topic, it should be noted that the regulation of hydraulic fracturing is currently a mix of federal and state law, and there is ambiguity regarding whether sole federal or sole state control would be most effective. It should also be noted that hydraulic fracturing is currently exempt from the provisions of some federal environmental laws, for example, the Safe Drinking Water Act.¹⁰

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At the federal level, the United States Environmental Protection Agency has a fairly

comprehensive website that provides information about federal laws, regulations, and proposed regulations applicable to hydraulic fracturing with links to relevant notices in the *Federal Register* at <http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/hydraulic-fracturing.cfm>. The EPA website also provides scientific data about fracking, including information about its ongoing *Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources* found online at <http://www2.epa.gov/hfstudy>. The EPA also has a blog on the topic at <http://blog.epa.gov/science/2013/05/epas-hydraulic-fracturing-drinking-water-study-whats-the-latest>. And, for those interested in becoming involved with the EPA study, the website lists webinars and information about working with federal, state, and tribal government agencies at <http://www2.epa.gov/hfstudy/how-get-involved-epas-study-hydraulic-fracturing>.

Michigan statutes and regulations relating to hydraulic fracturing are available on the Michigan Department of Environmental Quality website at http://www.michigan.gov/deq/0,1607,7-135-3311_4111_4231-9245--,00.html. In the scientific realm, the state of Michigan is involved in a collaborative study of hydraulic fracturing and its impact in a variety of areas called *Hydraulic Fracturing in Michigan Integrated Assessment*.¹¹ This collaborative effort includes the University of Michigan Graham Environmental Sustainability Institute, other units of the University of Michigan, oil and industry representatives, state legislators, industry organizations, and environmental groups.¹²

As previously noted, the controversy regarding newer hydraulic fracturing methods is not limited to Michigan. Legislative and regulatory actions are underway in most states in which hydraulic fracturing is taking place. An excellent starting point

for discovering and tracking current legislative activities in other states is the National Conference of State Legislatures' Fracking Update page at <http://www.ncsl.org/issues-research/energyhome/fracking-update-what-states-are-doing.aspx>. Although this page lists pending legislation, it does not provide links to the full text of proposed bills. The National Conference website does, however, provide a State Legislatures Internet Links directory at <http://www.ncsl.org/about-us/ncslservice/state-legislative-websites-directory.aspx> so researchers can locate the bills listed in the update by visiting each state's legislative website and searching by bill number or keyword.

The FracFocus Chemical Disclosure Registry at <http://fracfocus.org> is useful for locating state fracking regulations as well as the sites of hydraulic fracturing wells. The site was created and is maintained by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. The stated purpose of the site is:

[T]o provide factual information concerning hydraulic fracturing and groundwater protection. It is not intended to argue either for or against the use of hydraulic fracturing as a technology. It is also not intended to provide a scientific analysis of risk associated with hydraulic fracturing. While FracFocus is not intended to replace or supplant any state governmental information systems it is being used by a number of states as a means of official state chemical disclosure. Currently, ten states: Colorado, Oklahoma, Louisiana, Texas, North Dakota, Montana, Mississippi, Utah, Ohio and Pennsylvania use FracFocus in this manner.¹³

FracFocus provides an interactive United States map that leads researchers to state fracking regulations. Simply click on a state in the map at <http://fracfocus.org/regulations-state> and then click on the resulting link; for example, click View Michigan Regulations to find Michigan's oil and gas regulations on the MDEQ web page. The FracFocus page also permits researchers to locate wells within areas of interest by using the Find a Well search page at <http://www.fracfocusdata.org/DisclosureSearch/MapSearch.aspx>.

The controversy surrounding hydraulic fracturing will undoubtedly persist as the

U.S. continues to confront the often conflicting demands for energy and a clean and healthy environment. Access to legal and scientific information should help to facilitate the development of a legal infrastructure that accounts for both. ■



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ENDNOTES

1. BallotPedia, *Michigan Fracking Ban Amendment (2012)* <[http://ballotpedia.org/wiki/index.php/Michigan_Fracking_Ban_Amendment_\(2012\)](http://ballotpedia.org/wiki/index.php/Michigan_Fracking_Ban_Amendment_(2012))>. All websites cited in this article were accessed June 18, 2013.
2. BallotPedia, *Michigan Fracking Ban Amendment (2014)* <[http://ballotpedia.org/wiki/index.php/Michigan_Fracking_Ban_Initiative_\(2014\)](http://ballotpedia.org/wiki/index.php/Michigan_Fracking_Ban_Initiative_(2014))>.
3. See Heinlein, *Fracking critics protest Michigan's oil, gas exploration lease auction*, The Detroit News, May 10, 2013, available at <<http://www.detroitnews.com/article/20130510/METRO/305100354>>.
4. Rahm, *Regulating hydraulic fracture in shale gas plays: The case of Texas*, 39 Energy Policy J 2974 (2011).
5. *Id.* at 2974-2975.
6. EnergyFromShale, *Benefits of Fracking* <<http://www.energyfromshale.org/fracking-benefits>>.
7. National Resources Defense Council, *Risky Gas Drilling Threatens Health, Water Supplies* <<http://www.nrdc.org/energy/gasdrilling/>>.
8. See Esh, *Nationwide Insurance: Fracking Damage Won't Be Covered* <http://www.huffingtonpost.com/2012/07/13/nationwide-insurance-fracking_n_1669775.html>.
9. National Association of Insurance Commissioners, *Hydraulic Fracturing (Fracking)* <http://www.naic.org/cipr_topics/topic_hydraulic_fracturing.htm>.
10. Environmental Protection Agency, *Regulation of Hydraulic Fracturing Under the Safe Drinking Water Act* <http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_hydroreg.cfm>.
11. Graham Environmental Sustainability Institute, *Hydraulic Fracturing in Michigan Integrated Assessment*, available at <<http://www.graham.umich.edu/pdf/HydraulicFracturing-QandA.pdf>>.
12. Technical reports are now available for review and comment at the Graham Environmental Sustainability Institute website, in the section on Hydraulic Fracturing in Michigan <<http://www.graham.umich.edu/knowledge/ia/hydraulic-fracturing>>.
13. FracFocus Chemical Disclosure Registry, *About Us* <<http://fracfocus.org/welcome>>.