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# Hydraulic Fracturing: Drilling Into the Issue

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In his State of the Union Address in January 2012, President Obama laid out the so-called *Blueprint for an America Built to Last*. This Blueprint emphasized the Administration's commitment to an "all-of-the-above approach" to energy independence aimed at developing every available source of American energy, including increased production of domestic oil and natural gas resources. The overarching goal of this Blueprint was to reduce the United States' dependence on foreign oil. The United States has only two percent of the world's oil reserves. By contrast, the Energy Information Administration estimates natural gas production in the United States to grow by more than eight trillion cubic feet by 2035. Accordingly, natural gas production will play an integral role in promoting energy independence. However, to fully realize this potential, the United States will need to optimize or develop the technology or processes to achieve it.

Hydraulic fracturing or "fracking" is a process used to exploit oil and gas formations previously deemed either too difficult to reach or unproductive due to greatly diminished output. Fracking is the process of pumping, under high pressure, engineered fluids containing chemical and natural additives into the natural gas or oil well. This process creates and holds open fractures in the oil or natural gas formation. These fractures, by increasing the exposed surface area of the rock in the formation, allow oil and gas to flow up through the well. Thus, fracking allows the extraction of oil or natural gas from previously unavailable sources, including tight sands, shale gas, coal bed methane (CBM), and other unconventional shale formations.

As the use of fracking has increased, so too have concerns about its safety and environmental impact. Concerns surrounding fracking include the chemical composition of fracking fluids, water resource quality and quantity, destruction of habitat, and even seismic activity. Information about and regulation of fracking is highly dynamic. Often a study released, which promotes the safety of fracking, will immediately be contradicted by one touting its risks.

This article surveys emerging federal and state legislative and regulatory trends relating to fracking. Acting in the void of substantive federal law, the states have taken the lead enacting legislation addressing the myriad of issues associated with fracking. The result is an emerging patchwork of disparate laws and regulations.

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## *Federal Regulation of Fracking*

Historically, the Environmental Protection Agency (EPA) did not regulate the underground injection of fluids used for fracking of oil or gas formations. In fact, oil and gas production processes, including fracking, are exempt from key provisions of the Safe Drinking Water Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Air Act, and the National Environmental Policy Act. However, in *Legal Environmental Assistance Foundation, Inc. (LEAF) v. U.S. Environmental Protection Agency*, 118 F.3d 1467, (11 Cir. 1997), the United States Court of Appeals for the 11th Circuit considered LEAF's petition to EPA to withdraw of Alabama's Class II Underground Injection Control (UIC) Program. The court held that fracking for CBM production in Alabama constituted underground injection subject to regulation under the Safe Drinking Waste Act (SDWA). The court stated that fracking activities constitute "underground injection" under Part C of the SDWA. The Eleventh Circuit subsequently issued a writ of mandamus to enforce the court's mandate in *LEAF I*. EPA initiated proceedings to withdraw approval of Alabama's Class II UIC program.

Alabama's UIC Program was revised, and ultimately approved by EPA, under the alternative demonstration provision in § 1425 of the SDWA. LEAF filed yet another suit, arguing that EPA's approval of Alabama's revised UIC Program was improper because fracking did not fall within the scope of activities outlined within the alternative demonstration provision in § 1425 of SWDA. The court held that EPA's decision to classify fracking of coal beds to produce methane as a "Class II-like underground injection activity" is inconsistent with the plain language of 40 C.F.R. § 144.6. The court set aside EPA's classification and required EPA to determine whether Alabama's revised UIC Program complied with the requirements for Class II wells. This ruling required EPA to study the risk that fracking might pose to drinking water sources. In 2004, EPA found that unless diesel was used as an additive, fracking posed only a small risk to drinking water. As such, if diesel was not used as an additive, that regulation of fracking was unnecessary.

In 2005, Congress enacted the Energy Policy Act (EPAAct). Section 322 of EPAAct amended the definition of "underground injection" clarifying that the UIC requirements found in SDWA do not apply to fracking. This exclusion did not extend to fracking activities that used diesel fuel as an additive. As a result, EPA lacks authority to regulate fracking activities that do not use diesel fuel as an additive. In May 2012, EPA issued its draft Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels Underground Injection. In August 2012, EPA extended the comment period by forty-five

days in response to requests from several stakeholders.

As the use of fracking has grown, however, some in Congress would like to revisit this statutory exclusion. In fact, EPA's FY2010 Appropriations Act urged EPA to study the relationship between fracking and drinking water quality. In February 2011, EPA released its Draft Hydraulic Fracturing Study Plan. More than 9,500 people provided written comments, participated in webinars, or spoke at EPA-held public meetings in Texas, Colorado, Pennsylvania, New York, and Washington, DC. According to the EPA, the final study plan is expected sometime in 2012 (but had not been released by mid-November).

Moreover, several bills related to fracking are pending before Congress. H.R. 1084 and S. 587 would repeal the exemption for fracking established in the EPA Act. The bills would also amend the term "underground injection" to include explicitly the injection of fluids used in fracking, thus authorizing EPA to regulate this process under the SDWA. The respective bills also would require disclosure of the chemicals used in the fracturing process. On the other hand, S. 2248 and H.R. 4322 would specify that a state has sole authority to regulate fracking on federal lands within state boundaries.

In April 2012, EPA issued new source performance standards and National Emission Standards for Hazardous Air Pollutant for the Oil and Gas Sector that included standards related to air pollutants emanating from fracking. This is the first federal air standard for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that previously were not regulated at the federal level. Additionally, on April 13, 2012, EPA, the Department of the Interior, and the Department of Energy entered into a Memorandum of Agreement (MOA) regarding collaboration with respect to unconventional oil and gas production. Pursuant to this MOA, these agencies will develop program directed toward addressing the largest challenges associated with developing unconventional shale gas and tight oil resources, including those arising from fracking.

Finally, in May 2012, EPA issued its *Draft Guidance: Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels*. Through this guidance, EPA has developed draft UIC Class II permitting guidance for oil and gas fracking activities using diesel fuel additives. EPA's stated goal is to improve compliance with the SDWA requirements and strengthen environmental protections.

### ***State Regulation of Fracking***

Because of the absence of any comprehensive federal regulation of fracking coupled with public concern regarding fracking activities, state legislatures and even some local governments have taken the lead in regulating this process. However, state regulation brings with it significant competing interests. On one hand, policymakers are responsible for ensuring the health and safety of the environment and its citizens. On the other hand, increased oil and gas production has a direct, and often significant impact to tax-based revenue. Not surprisingly, states have adopted differing approaches to address these competing interests.

This article provides a summary of state-based regulatory activities through November 1, 2012. Undoubtedly, there will be significant changes, perhaps even some that occur prior to

publication of this article. Overall, state regulation of fracking is focused primarily on the following areas: (i) disclosure of the chemical composition and additives used in fracking; (ii) water quality protection and monitoring; (iii) spill and leak prevention; (iv) regulation of the storage, transport, treatment, and disposal of waste and wastewater; (v) restrictions on well location; (vi) economic impacts associated with fracking, including severance taxes and impact fees; and, in certain instances (vii) drilling moratoriums.

States with significant oil and gas reserves depend heavily upon production to fund various state programs. Oil and gas production in these states generates significant revenues for individuals working within the state, as well as for the state itself. These states include Alaska and Florida, which, not surprisingly, have no existing laws or proposed legislation governing fracking. However, as discussed below, other states with significant oil and gas reserves do regulate fracking.

Certain other states have a robust legislative framework governing fracking, despite the fact that fracking has rarely or never been used or the geologic formations underlying these states do not contain shale or oil and gas producing tight sands that would result in any significant oil or gas production. For example, Indiana has enacted temporary rules requiring all producers who utilize fracking to provide detailed information on the types and volumes of fluids and additives used in the well treatment. See Title 312 IAC Natural Resources, LSA Doc. # 12-292(E) Emergency Rule. In May 2012, the Vermont legislature passed H.464, banning all fracking activities within the state. On May 17, 2012, the complete fracking ban was signed into law. Neither of these two states have commercially developable oil and gas reserves.

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A third group of states are involved in contentious disputes over the use of fracking. Numerous lawsuits have been filed in these states, and there have been proposed moratoriums on fracking and efforts to prohibit fracking all together. One such state is Maryland. Section 14-110 of Maryland's Code offers general regulatory authority of fracking through the issuance of drilling permits that protect public health and the environment. However, Maryland's Governor, Martin O'Malley, signed an Executive Order mandating a detailed study of potential drilling

impacts on the state. This study is to be finished by 2014. Governor O'Malley has said he will not allow the use of fracking in Maryland until that time.

In addition, issues surrounding fracking have created substantial legislative conflict in New York, New Jersey, and North Carolina. New York is one of the states struggling most with devising a regulatory scheme for fracking. The general rules governing oil and gas production in New York are contained in Parts 550–559 of the Rules and Regulations for Oil, Gas and Solutions Mining. In 2011, the New York State Department of Environmental Conservation (DEC) released a revised draft Supplemental Generic Environmental Impact Statement (SGEIS) to address permit conditions required for gas drilling in the Marcellus Shale and other areas of the state. The study recommended restricting fracking within New York City's watershed while opening up large parts of the rest of the state to drilling and fracking. Fracking could commence when DEC finalizes the SGEIS, likely in 2012, if approved by Governor Cuomo.

Moreover, on August 3, 2010, the New York State Senate passed S8129B, by a vote of 48–9, which prohibited drilling permits from being issued by DEC before an ongoing state environmental review of fracking had been finalized. The bill passed the Assembly on November 30, 2010. A few days later, former Governor Paterson vetoed S8129B while issuing an Executive Order prohibiting fracking of horizontally drilled wells until July 1, 2011. In 2012, New York had thirty-five bills pending in the legislature regarding fracking, including disclosure of the chemical composition of the fluid, water quality protection issues, and moratoria of varying lengths of time or requiring preparation of impact studies. Those bills were not passed by the end of the legislative term and will not be enacted unless they are reintroduced and reconsidered in the 2013 term.

The New Jersey Legislature passed a ban on fracking. See S.B. 2576, A.B. 3313 and A.B. 3653. Governor Christie conditionally vetoed the bill and instead changed the permanent ban to a one-year moratorium. However, in February 2012, the Senate Environment and Energy Committee approved a bill to ban fracking by a vote of 5–0. See S246. In June 2012, New Jersey passed a ban on the treatment or storage of fracking waste in the state. Interestingly, according to the New Jersey Department of Environmental Protection, there are no shale formations capable of producing natural gas in New Jersey.

Taking a different approach, the North Carolina legislature passed S.B. 820 in June 2012, legalizing fracking effective 2014. On July 1, 2012, Governor Perdue vetoed the legislation on the basis that it failed to ensure adequate environmental protections. This veto was overridden, however.

The majority of the states in which fracking is a viable process to enhance oil and gas production have statutes and regulations that, to varying degrees, protect human health and the environment by requiring public disclosure of the chemical composition and additives used in fracking, protect water quality, or generally govern other aspects of the fracking process. Many of these states have modified their statutes or regulations recently to more thoroughly regulate fracking. Due to space constraints, as well as the abnormally high amount of conflict and legislative activity surrounding fracking, we have included only brief summaries of these changes and updates. We call attention to new requirements and pending legislation, but given the dynamic and rapid changes occurring in this area of law, we also encourage readers to conduct more in-depth research and analysis.

## ***Fracking Regulation and Marcellus Shale Production***

Following the passage of sweeping legislation in early 2012, Pennsylvania became one of the states that has seen a huge surge in drilling activity. Pennsylvania's shale gas resources are part of the Marcellus Shale, an extensive formation of shale that also underlies other states including New York, Ohio, and West Virginia. Oil and gas production is regulated using Pennsylvania's Oil and Gas Act, Coal and Gas Coordination Act, and Oil and Gas Conservation Law. Environmental laws impacting drilling in the Marcellus Shale formation include the Clean Streams Law, the Dam Safety and Encroachments Act, the Solid Waste Management Act, and the Water Resources Planning Act. The Office of Oil and Gas Management in Pennsylvania's Department of Environmental Protection (DEP) regulates the safe exploration, development, and recovery of Marcellus Shale natural gas reservoirs in a manner that will protect the commonwealth's natural resources and the environment. To drill a new Marcellus Shale natural gas well in Pennsylvania, the operator must obtain a well permit from DEP and post a bond. The permit application details the well location, proximity to coal seams, and distances from surface waters and water supplies. DEP evaluates it for environmental impacts, any potential conflicts with coal mining operations, or nonconformity with any well spacing requirements. DEP's regulations include drilling, casing, and operational standards. Operators of wells permitted to produce from the Marcellus Shale formation are also required to submit a production, waste, and well status report to DEP semi-annually—on or before February 15 and August 15 of each year. Some of the Pennsylvania laws have been heavily criticized by local citizens and environmental groups claiming, among others, that the regulations interfere with local zoning and land use controls laws, as well as interfering with a physician's ability to disclose information regarding the chemicals used in fracking.

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In the most recent legislative term, six bills were introduced in Pennsylvania mandating various forms of disclosure of fracking activities and the constituents used. See S.B. 127, S.B. 425 and H.B. 971, H.B. 1680, S.B. 1226, H.B. 24 and H.B. 1950. In addition, there were seventeen bills dealing with water quality protection, casing and drilling requirements, water withdrawals, flowback, and waste management. Finally, there was one bill proposing a cumulative impacts study and a resolution urging Congress to act regarding fracking. While none of these bills have passed to date, the legislature reconvened on November 14, 2012.

Ohio requires producers to keep electric logs and well completion records, as well as imposing certain disclosure requirements. See Chapter 1501:9-5 *Enhanced Recovery Projects*. Pending legislation would require oil and gas producers to disclose the composition of the fracking compounds to the State Board of Health. There is also a proposed moratorium on horizontal stimulation of oil and gas wells until the EPA publishes a report containing the results of a study of the relationship of fracking to drinking water resources, and the Chief of the Division of Oil and Gas Resources Management issues a report analyzing how Ohio's rules address issues raised in any such report. See Ohio S.B. 213 and H.B. 345.

In West Virginia, where fracking is used in a significant number of oil and gas wells, the new Horizontal Well Act imposes \$5,000 to \$10,000 fees on new wells and subjects applications for new wells to strict public notice requirements, bureaucratic approval processes—including the development of a water management plan, declarations of the components of the hydraulic fracturing fluids, and reclamation requirements—and newly imposed setback requirements. Legislation pending as of November 1, 2012, would further regulate horizontal drilling and use of water, provide for recordkeeping for all water used and flowback, and regulate groundwater contamination and releases. See H.B. 3042, H.B. 4066, H.B. 4265, and H.B. 4386.

### ***Regulation of Fracking in Southern and Southwestern States***

According to the Texas Railroad Commission (TRC), more than 15,300 wells have been drilled in the Barnett Shale underlying Texas. The TRC is the regulatory body governing oil and gas production, including well construction and water protection. The TRC's regulations, while not specifically directed at fracking, do work to protect surface and groundwater. The TRC issues permits for oil and gas wells, imposes well and casing construction requirements, and monitors well drilling, completion, production, and plugging operations. After the well stimulation treatment is complete, the operator is required to provide actual fracturing data in detail, as well as provide resulting production results. Forms required to be submitted to TRC include a section on the back for an operator to list "acid, shot, fracture, cement squeeze, etc.," and most operators indicate in this section of the form what and how much slick water fluid and sand were injected. Material safety data sheets for all materials used in oil and gas operations are required to be maintained on location by Hazard Communication Standards of OSHA.

On February 1, 2012, the TRC Rules were amended to require disclosure of the names of fracking products and chemicals, as well as their Chemical Abstract Registry numbers.

Only hazardous chemicals are matched with the products they go into. Producers are not required to disclose trade secret information unless the attorney general or court determines the information is not entitled to trade secret protection. A landowner or state agency can challenge trade secret classification. The information cannot be withheld from health care professionals in an emergency. This information must be posted on the fracfocus.org website within thirty days after well completion.

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The Oklahoma Corporation Commission regulates fracking of oil and gas wells, as well as completion operations. Oklahoma's Administrative Code addresses well permitting and construction, completion reporting, fluids management, and waste disposal. See Title 165 Corporation Commission, Chapter 10: Oil and Gas Conservation. Additionally, Rule 165:10-3-10 expressly prohibits the pollution of fresh water during fracking operations. As of July 1, 2012, Oklahoma oil and natural gas producers were required to disclose the chemicals used in their fracking operations on fracfocus.org.

Regulation of fracking in Alabama is set forth in Chapters 400-1-4.07 through 400-1-4.11 of the Alabama Administrative Code and governs the fracturing disposal and closure process. These code sections govern chemically treating or fracturing a well, reporting or disclosing of well treatment, casing, cementing, and test pressure requirements, and recycling or disposal of pit fluids and pit closure.

Several southern states have increased their regulation of fracking. In 2011, Arkansas Oil and Gas Commission Rule B-19—Requirements for Well Completion Utilizing Fracture Stimulation—were amended. These amendments strengthened requirements related to well casing and cementing, material and fluid handling, as well as disclosure and flowback. Louisiana regulates fracturing stimulation operations broadly under Department of Natural Resources (DNR), Office of Conservation through Title 43, Part XIX, Subpart 1, State-wide Order No. 29-B, Chapter 1. General Provisions § 118 of DNR's Rules regulate hydraulic fracture stimulation operations, effective Oct. 20, 2011. Additionally, in June 2012, Louisiana's Governor signed H.B. 957, which provides the Commissioner of Conservation the power to promulgate rules, regulations, and orders to further regulate fracking.

In Mississippi, the State Oil and Gas Board governs oil and

natural gas production. Rules 47 and 64 of the Oil and Gas Board govern fluid and underground injection. The Mississippi Underground Injection Control Program for Class I, III, IV, and V wells is administered by the Mississippi Department of Natural Resources. In October 2012, the Oil and Gas Board updated its Rule 26 to provide for operators to post information with respect to chemicals used in fracking on [fracfocus.org](http://fracfocus.org).

The Virginia Department of Mines, Minerals and Energy, Division of Gas & Oil regulates natural gas drilling operations in that state. Virginia law requires an operating permit for any sort of oil or gas production activities and places special emphasis on water quality protection, erosion, and sediment control as well as protection of the public from safety hazards. The requirements are designed to prevent offsite disturbances from gas and oil operations. The operating permit requires a drilling and stimulating plan, including information on the water and constituents of the drilling fluids, management and disposal of pit fluids, produced waters, drill cuttings, and solids.

The State Oil and Gas Board oversee drilling in Tennessee. This Board governs the operation and closure of oil and gas wells, and fracking operations are included within its jurisdiction. H.B. 3205 and S.B. 3125 establish regulations governing groundwater protection standards that are no less stringent than those adopted by the American Petroleum Institute.

### ***New and Pending Regulation of Fracking in the Midwest***

In the Williston Basin underlying North Dakota and Montana, improved horizontal drilling and fracking technology caused a boom in production of oil from the Bakken formation. In January 2012, North Dakota regulators approved new rules that amended the North Dakota Century and Administrative Code to reduce the number of open pits used to store oil drilling wastes and to require that producers disclose the makeup of fluid that is used in hydraulic fracturing, requiring that the chemicals used in “frack” fluids be posted on [fracfocus.org](http://fracfocus.org) two months after a well is completed. The new rules took effect April 1, 2012.

In Kansas, H.B. 2526 was signed into law on April 12, 2012. This law amends the powers and duties of the Kansas Corporation Commission, amending K.S.A. 55-152 and 66-131 and K.S.A. 2011 Supp. 66-1257 and 66-1260 and repealing the existing sections. The amendments allow the Commission to promulgate rules addressing the state supervision of any well on which a fracking treatment is performed. It also allows the Commission to promulgate fracking disclosure rules, presumably including well location and chemical usage disclosure requirements.

Chapter 4 of Title 267 of Nebraska’s Oil and Gas Conservation Commission covers underground injection of constituents used to enhance oil and gas production. That Chapter also sets forth the permitting requirements for operators. Pending legislation would impose certain disclosure requirements, as well. See R 877.

In 2011, the Michigan Department of Environmental Quality issued new rules for energy companies working to extract natural gas from shale deposits within the state, including requiring documentation of fresh water usage, and imposing certain disclosure and process requirements. Michigan has pending legislation regarding presumption of liability for

contamination of groundwater caused by fracking fluids, as well as study requirements related to fracking. See H.B. 4736; see also H.B. 5150; see also H.B. 5151. The Michigan legislature is in recess until November 27, 2012.

South Dakota regulates oil and gas production in Chapter 45-9, *Oil and Gas Conservation*, of the South Dakota Codified Laws. The regulations regarding fracking are set forth in Chapter 74:12:07, *Enhanced Recovery and Underground Injection*, of the South Dakota Administrative Code. South Dakota requires a permit for fracking operations and, except where an aquifer exemption is approved, the applicant must demonstrate that the project will not cause any degradation of freshwater resources or other mineral resources. The regulations also govern casing and cementing requirements, notice requirements, recordkeeping, and retention requirements, and inspection and monitoring requirements.

### ***Regulation of Fracking in the Western States***

Western states including Wyoming, Colorado, Utah, and New Mexico also have significant natural gas reserves and fracking activity. The Wyoming Oil and Gas Conservation Commission (WOGCC) regulates drilling in Wyoming, and Chapter 3, § 45 and Chapter 4 of the Rules of the WOGCC are specific to fracking. Producers must submit a drilling plan and receive permission to conduct fracking activities. Additionally, casing integrity testing may be required before proceeding. The producer must provide the WOGCC with a detailed description of the well stimulation design and the geologic formation where fluids are to be injected. The WOGCC also requires disclosure of the types and amounts of chemicals used in fracking operations, but the rules allow for any proprietary information to remain confidential. On July 19, 2012, the Interim Supervisor of the WOGCC issued a policy letter regarding the status of “confidential wells” in Wyoming. These changes will require review and approval of confidentiality requests for wells by WOGCC and a reevaluation of many previously classified wells. The rules also restrict the use of diesel and volatile organic compounds in fracking and require the producer to disclose whether fracking fluids are disposed of or reused.

In March 2012 environmental groups sued the WOGCC, stating that the agency has not done enough to justify honoring requests by companies to keep the public from reviewing ingredients in fracking fluids. The groups included Powder River Basin Resource Council, Wyoming Outdoor Council, Earthworks, and OMB Watch. The groups alleged the WOGCC denied their open records request to review fracking fluid ingredients. Laura Veaton of Earthjustice, who represents the groups, said that nearly all of the company requests to withhold trade secrets had been granted. Ms. Veaton said some were granted even though some companies did not comply with state requirements.

Colorado’s Oil and Gas Conservation Commission Series 200, 300, and 805 Rules require chemical inventory and disclosure requirements, water protection measures, and fracking process requirements. Colorado is among a number of states that provides for regulatory reporting of chemicals used in fracking to be done through posting on the [fracfocus.org](http://fracfocus.org) site. In 2012, bills were introduced in Colorado to regulate disposal of fluids and flowback water from fracking, but the legislation

did not pass. See SB 107 and HB 1173. These bills died with the end of the legislative session. On the local level, Longmont, Colorado voters overwhelmingly passed Ballot Question 300 on November 6, 2012, amending Longmont's city charter to ban fracking within the city limits. It is expected that this charter amendment will be challenged in court.

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In 2011, Governor Gary Herbert unveiled Utah's ten-year Strategic Energy Plan, which calls for tapping the state's oil sands and oil shale reserves while continuing to develop fossil fuels such as coal, oil, and natural gas. Utah's regulations, as in effect on July 1, 2012, set forth the notice and permitting requirements, disclosure requirements, and testing and monitoring obligations for enhanced recovery wells in Utah. Recently, the Utah Board of Oil, Gas and Mining gave final approval to a Utah specific Hydraulic Fracturing Rule. Operators conducting fracking in Utah, effective November 1, 2012, are now required to report the amount and type of chemicals used to fracfocus.org within sixty days of completion of fracking operations. The rule also incorporated preexisting Utah requirements regarding wellbore integrity, management procedures of flowback water, and surface protection measures such as storage requirements, reserve pit, and onsite pit management processes, and waste management.

New Mexico regulates fracking processes and requires notification to the New Mexico Oil Conservation Division if fracking has damaged the well casing, casing seat, producing formation, or injection interval. See Section 19 N.M.A.C. 15.15.16 and 15.17. In such event, an operator must repair the damage or plug and abandon the well.

Other western states also have adopted new rules relating to fracking. Although no oil or gas wells are currently listed as

using fracking in Idaho and utilizing the fracfocus.org reporting site, Idaho's Oil and Gas Conservation Commission has approved temporary rules for fracking. That Commission decided not to put a permanent ban on horizontal fracking, however. The Montana Board of Oil and Gas Conservation (MBOGC) adopted new rules governing fracking that became effective on August 26, 2011. MBOGC requires approval before fracking, reporting requirements to the State of the actual fracking operations performed, including disclosure of chemical composition of drilling fluids. It also imposes certain well construction, integrity, and injection pressure testing requirements. See MBOGC Rules 36.22.1010 and 36.22.1015. Arizona's hydrologic fracturing regulations can be found at Title 12, Chapter 7, Oil and Gas Conservation Commission, Supp. 07-4, R12-7-175, R12-7-176, R12-7-178 and R12-7-129. These include technological and engineering requirements, and insertion of notice and disclosure requirements within the permit, as well as monitoring requirements for fracking. In Nevada, the Division of Environmental Protection regulates fracking through the Class V Well Rules and the Underground Injection Program Rules.

Finally, in a number of other states that don't currently regulate fracking, legislation has been proposed to do so. One such state is California, where there is pending legislation that proposes to place a moratorium on new permits, as well as require oil companies to disclose where fracking occurs or what chemicals they inject into the ground. See AB 972 and 591. These bills did not pass before the legislative session ended on November 30, 2012. While Illinois has no rules regarding fracking and no chemical disclosure requirements, pending legislation would impose certain drilling process and chemical inventory and use disclosure requirements upon drillers, and would implement broad groundwater protection measures. See SB 3280, SB 3534, and HB 3897. These bills were referred to various committees, and they did not pass before the legislative session ended on January 8, 2013. Massachusetts H.B. 3055 would have required the identification of the constituents and volumes of these constituents used in fracking, but the bill did not pass in the 187 legislative session.

Fracking is very controversial. This has resulted in significant recent activity by state legislatures and regulatory agencies that govern injection wells and fracking activities. As has been demonstrated, few states that contain geologic formations that allow for enhanced mineral recovery have not modified or updated statutes or regulations governing fracking. At this point, the only certainty associated with fracking is change. 🌳