

Department of Legislative Services
Maryland General Assembly
2012 Session

FISCAL AND POLICY NOTE

House Bill 1170

(Delegate Mizeur, *et al.*)

Environmental Matters

Fracking Records Transparency Act

This bill requires the holder of a permit to drill for natural gas to keep and maintain specified records relating to drilling for each individual well, including a list of any chemicals used, the amount of water used, and the amount of flow back or drilling waste generated, among other things. The records must be updated weekly and made publicly available on the permit holder's website.

Fiscal Summary

State Effect: State general/special fund revenues associated with general economic activity may decrease beginning in FY 2015 to the extent that the bill results in less development of natural gas resources than would occur in the absence of the bill, as discussed below. The Maryland Department of the Environment (MDE) can handle the bill's changes with existing budgeted resources.

Local Effect: Local severance tax revenues and other revenues associated with general economic activity may decrease for Allegany and Garrett counties beginning in FY 2015 to the extent that the bill's requirements result in less development of gas resources than would occur in the absence of the bill, as discussed below.

Small Business Effect: Potential meaningful impact on any small business engaged in natural gas well drilling and related services to the extent that the bill results in any change in the demand for their services.

Analysis

Bill Summary: The bill requires that the following records be maintained and updated:

- a list of any chemicals used, including the concentrations and amounts of the chemicals used;
- the amount of water used;
- the amount of flow back or drilling waste generated;
- actions taken to dispose of flow back and drilling waste;
- a daily drilling activity report;
- a daily incident report;
- a weekly natural gas production report;
- a list of site materials, including drilling supplies, trucks, and waste ponds; and
- a list of the names of all laborers and project managers for each well.

Current Law/Background:

The Marcellus Shale

The Marcellus Shale formation is a geologic feature in the Appalachian Range which has recently attracted significant attention from the energy industry for its rich natural gas deposits contained within 117 counties in seven states. Geologists have long known about the natural gas resources contained within the formation but had considered the gas to be not economically recoverable until the recent development of new drilling technologies including horizontal drilling and high-volume hydraulic fracturing, which have led to a boom in domestic energy production in the United States.

The Marcellus Shale primarily underlies New York, Ohio, Pennsylvania, Virginia, West Virginia, and Western Maryland, with a negligible share also found in Kentucky. Production wells have been drilled in New York, Ohio, Pennsylvania, and West Virginia, and several companies have expressed interest in drilling into the formation in Maryland. In Maryland, the formation is located in Allegany, Garrett, and Washington counties; however, the only anticipated areas of gas production are in Garrett and Western Allegany counties. Applications for permits to produce gas from the Marcellus Shale in Maryland using horizontal drilling and high-volume hydraulic fracturing were first filed in 2010. As of December 2011, MDE has received seven permit applications, of which only two are still active.

Concerns Regarding High-volume Hydraulic Fracturing

As the use of hydraulic fracturing has increased, so has concern about its potential impacts. MDE advises that, although accidents are relatively rare, exploration for and production of natural gas in nearby states have resulted in injuries, well blowouts, releases of fracturing fluids, releases of methane, spills, fires, forest fragmentation, road damage, and evidence of water contamination.

In 2010, the U.S. Environmental Protection Agency (EPA) raised several concerns regarding the impact of hydraulic fracturing on water supplies, water quality, and air quality, among other issues, and is currently examining the practice more closely. Other states, academic organizations, environmentalists, and the industry are also conducting research into the impacts of hydraulic fracturing on the public health, safety, and the environment.

General Regulation of Oil and Gas Development

In Maryland, MDE is authorized to issue permits for oil and gas exploration and production and is required to coordinate with the Department of Natural Resources (DNR) in its evaluation of the environmental assessment of any proposed oil or gas well. Specifically, a person must obtain a permit from MDE before drilling a well for the exploration, production, or underground storage of gas or oil in Maryland. A permit is also required for the disposal of any product of a gas or oil well. An applicant who wants to extract gas from the Marcellus Shale may also be required to apply for a number of other State permits, such as a water appropriation permit or a National Pollutant Discharge Elimination System permit.

Among other things, current oil and gas regulations outline application requirements and procedures, criteria for permit approval, drilling and operating requirements and permit conditions, and requirements for the plugging of an oil or gas well upon abandonment or ending of operation. Current regulations apply to all gas wells in Maryland and are not specific to the practice of hydraulic fracturing. However, under current law, MDE has broad authority to impose conditions on permits to protect the State's natural resources and to provide for public safety. Further, MDE may deny a permit based on a substantial threat to public safety or a risk of significant adverse environmental impact.

Although MDE regulates gas exploration and production, the regulations were written prior to the use of hydraulic fracturing and have not been revised since 1993. Further, MDE advises that a complete understanding of the risks of hydraulic fracturing and consensus about how to protect against those risks is lacking. Due to these concerns, a number of bills were introduced during the 2011 session that would have required further study and the development of regulations prior to the issuance of a permit for gas

exploration and production from the Marcellus Shale. None of the bills was enacted, however.

MDE's Oil and Gas Division currently oversees about 95 permits. According to MDE, many of the oil and gas sites covered by these permits are not in active production, and no new wells were drilled in fiscal 2011.

Marcellus Shale Safe Drilling Initiative

In response to the failure of legislation in the 2011 session, Governor Martin O'Malley established the Marcellus Shale Safe Drilling Initiative by executive order in June 2011 to ensure that, if drilling for natural gas from the Marcellus Shale proceeds in Maryland, it is done in a way that protects public health, safety, natural resources, and the environment. The executive order directs MDE and DNR to assemble and consult with an advisory commission in the study of specific topics related to horizontal drilling and hydraulic fracturing in the Marcellus Shale. Specifically, the executive order tasks MDE and DNR, in consultation with the advisory commission, with conducting a three-part study and reporting findings and recommendations. Part I of the study, a report on findings and recommendations regarding sources of revenue and standards of liability, was released in December 2011.

Disclosure of Chemicals and Other Information

According to the National Conference of State Legislatures, in September 2010, Wyoming became the first state to require full disclosure of chemicals used in hydraulic fracturing, which was set forth in a rule approved by the Oil and Gas Conservation Commission. Since then, Texas has enacted a law that requires public disclosure of hydraulic fracturing fluid chemicals, and a number of other states have adopted new regulations pertaining to the disclosure of chemicals, including Michigan, West Virginia, Montana, and Colorado. Most recently, Pennsylvania enacted comprehensive Marcellus Shale legislation that establishes well reporting requirements, including information on the chemical additives used.

State/Local Revenues: Generally, additional legal or regulatory restrictions could create a disincentive for the energy industry to explore development of the State's shale gas resources. To the extent that the bill's recordkeeping and disclosure requirements are more stringent than imposed by other states with natural gas resources, the additional burden could result in a significant reduction in drilling in the State. For example, recent legislation enacted by Pennsylvania provides specific protections for trade secrets and proprietary information regarding hydraulic fracturing fluids, which this bill does not provide. In addition, the requirement to update all records required under the bill on a

weekly basis, including the names of all laborers and project managers, may be considered a particularly onerous burden for at least some energy companies.

Any impact on the future extraction of shale gas resources in the State would directly affect future severance tax revenues in Allegany County, and to a greater extent, Garrett County; other sources of State and local revenue from general economic activity may also be indirectly impacted. The State does not currently impose a severance tax on gas production. Although not prohibited under current law, it is assumed that MDE will likely not issue any permits for gas well drilling in the Marcellus Shale until after the Marcellus Shale Safe Drilling Initiative releases its final report, which is due August 1, 2014. However, it is unclear that any gas well drilling will be authorized even after that date.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Department of the Environment, Marcellus Shale Safe Drilling Initiative, National Conference of State Legislatures, General Assembly of Pennsylvania, Ground Water Protection Council, Interstate Oil and Gas Compact Commission, American Petroleum Institute, FracFocus, U.S. Environmental Protection Agency, Department of Legislative Services

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