

Department of Legislative Services
Maryland General Assembly
2013 Session

FISCAL AND POLICY NOTE

Senate Bill 601 (Senator Zirkin, *et al.*)
Education, Health, and Environmental Affairs

Maryland Hydraulic Fracturing Moratorium and Right to Know Act of 2013

This bill prohibits the Maryland Department of the Environment (MDE) from issuing a permit for the hydraulic fracturing of a well until specified conditions are satisfied. MDE and the Department of Natural Resources (DNR) are required to issue a risk assessment of public health and environmental hazards relating to hydraulic fracturing activities with specified information and classifications of risk. MDE is authorized to establish a fee on owners of specified gas interests, if the fee is requested by a representative of the natural gas drilling industry. Additionally, MDE is required to adopt regulations that are specific to hydraulic fracturing, including any restrictions deemed necessary to protect public health and the environment. Finally, the bill alters several definitions applicable to current oil and gas provisions and makes several statements as to the intent of the General Assembly related to hydraulic fracturing.

The bill takes effect June 1, 2013.

Fiscal Summary

State Effect: General/special fund revenues associated with general economic activity decrease, potentially beginning in FY 2015, to the extent that the bill delays or prevents the development of natural gas resources that would occur in the absence of the bill, as discussed below. MDE can implement the bill with existing resources. This analysis assumes that a fee on owners of specified gas interests is not established, as discussed below.

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

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: MDE may not issue a permit for the hydraulic fracturing of a well for the exploration or production of natural gas until (1) each requirement under the study required by Executive Order 01.01.2011.11 is satisfied; (2) 18 months has passed since the date the study required under the executive order is issued; and (3) MDE has adopted regulations that are specific to hydraulic fracturing.

The bill authorizes MDE, on written request from a representative of the natural gas drilling industry, to establish and collect a fee to provide funding necessary for the completion of the study required under the executive order. The fee must be collected from an owner of a gas interest in real property that is located in an area of the State underlain by the Marcellus Shale and that was acquired after January 1, 2007, for the purpose of exploration or production of natural gas. The fee must apply to each acre of property in which the owner has a gas interest.

MDE must adopt regulations that are specific to hydraulic fracturing, including any restrictions deemed necessary to protect public health and the environment. The regulations must be at least as protective of public health and the environment as recommended in the final findings and recommendations of the study required by the executive order and the risk assessment required under the bill.

The bill defines “natural gas liquids” as components of natural gas that are liquid at the surface in field facilities or gas-processing plants, and clarifies that natural gas liquids are included within the existing definition of both “oil” and “gas.” “Gas interest” means the right to explore for gas on, or produce gas from, real property; however, a fee simple interest in the surface rights of real property, regardless of whether the fee interest includes the mineral rights, is not a gas interest. Finally, the bill alters the definition of “person” to include any unit of government at the local, State, or federal level, and clarifies that any individual or entity is also included in the definition.

The bill states the intent of the General Assembly that the study under the executive order be fully funded in order for MDE and DNR to satisfy each study item under the executive order. MDE and DNR must jointly brief specified committees of the General Assembly 90 days after the study’s final report and the risk assessment are issued. Finally, the bill states that it is the intent of the General Assembly to (1) continue to monitor issues relating to hydraulic fracturing; (2) review the final findings and recommendations of the study required by the executive order; (3) review the risk assessment required by the bill;

and (4) determine if any modification to the bill is necessary, including extending or lifting the moratorium or imposing a ban on hydraulic fracturing in Maryland.

Current Law/Background: MDE is authorized to issue permits for oil and gas exploration and production and is required to coordinate with 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.

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.

More information on the practice of hydraulic fracturing, the Marcellus Shale, and the Marcellus Shale Safe Drilling Initiative may be found in the **Appendix – High-volume Hydraulic Fracturing in the Marcellus Shale**.

State/Local Fiscal Effect: General fund, special fund, and local government revenues associated with general economic activity, as well as local severance tax revenues decrease, potentially beginning in fiscal 2015, to the extent that the bill delays or prevents the development of natural gas resources that would otherwise occur in the absence of the bill. It is currently assumed that a permit could be issued in fiscal 2015, and potentially as early as August 1, 2014, on completion of the study required by executive order. However, the bill prohibits MDE from issuing a permit for hydraulic fracturing until 18 months after the date the study is completed and until MDE has adopted required regulations. It is unclear which of these events will occur first, but if the study is not completed until August 1, 2014, then, under the bill, a permit cannot be issued until February 1, 2016, at the earliest.

Additionally, the bill specifies that the hydraulic fracturing regulations required by the bill must be at least as protective of public health and the environment as the final findings and recommendations of the study and the risk assessment required by the bill. MDE advises that it is unclear how this provision of the bill is to be interpreted, as the bill only requires MDE to evaluate risks and assess probabilities of hazards occurring in

the risk assessment, not to make recommendations. Notwithstanding this confusion, there is significant uncertainty regarding the content of the study's ultimate recommendations at this time, or how protective/stringent each recommendation may be. MDE and DNR are required to make the recommendations and report in consultation with the Marcellus Shale Safe Drilling Initiative Advisory Commission. To the extent that the recommendations contained in the report are relatively protective, the subsequent hydraulic fracturing regulations may be sufficiently restrictive as to significantly delay or prevent any future development of natural gas resources in Maryland.

Finally, it is assumed that MDE does not establish and collect a fee from an owner of a gas interest on request of an industry representative under the bill's authorization. The Governor has submitted a deficiency appropriation for the fiscal 2013 operating budget that increases MDE's appropriation by \$1.0 million in general funds, and increases DNR's appropriation by \$500,000 in general funds, to fund the study requirements. It is assumed that, if approved, these deficiency appropriations are sufficient to fund the study required by the executive order. In addition, it is unclear whether an industry representative would request that a fee be established. However, to the extent that a fee is requested and established, MDE special fund revenues and expenditures increase accordingly.

Small Business Effect: The bill may have a meaningful adverse impact on small businesses engaged in providing services related to hydraulic fracturing and the development of natural gas resources to the extent the bill delays such development. The bill may have a meaningful beneficial impact on small businesses in Western Maryland reliant upon tourism to the extent that the development of natural gas resources would impact the levels of tourism in the area; however, any such impact development is unclear.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Garrett and Washington counties, State Department of Assessments and Taxation, Department of Natural Resources, Maryland Department of the Environment, Marcellus Shale Safe Drilling Initiative, U.S. Environmental Protection Agency, Department of Legislative Services

Fiscal Note History: First Reader - February 22, 2013
ncs/lgc

Analysis by: Evan M. Isaacson

Direct Inquiries to:
(410) 946-5510
(301) 970-5510

Appendix – High-volume Hydraulic Fracturing in the Marcellus Shale

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. 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 natural gas from the Marcellus Shale in Maryland using horizontal drilling and high-volume hydraulic fracturing were first filed with the Maryland Department of the Environment (MDE) in 2010. According to MDE, however, all of the permit applications that had been filed have since been withdrawn.

Concerns Regarding High-volume Hydraulic Fracturing

As the use of hydraulic fracturing has increased, so has concern about its potential impacts. MDE has advised 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. In April 2012, EPA adopted a final rule to address air emissions from hydraulic fracturing, and in December 2012, EPA released a progress report on its comprehensive study of hydraulic fracturing impacts on water resources. 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.

Marcellus Shale Safe Drilling Initiative

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 the Department of Natural Resources (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 for damages caused by gas exploration and production, was released in December 2011. The findings and recommendations of the report led to the introduction of several bills during the 2012 legislative session; the General Assembly passed only one of the bills, however. Chapter 703 of 2012 (HB 1123) established a presumptive impact area applicable to areas around a deep shale gas deposit well for which MDE has issued a gas exploration or production permit. In a presumptive impact area, it is presumed that contamination of a “water supply” was caused by the activities of gas exploration or production. The bills that failed would have, among other things:

- established a State-level severance tax on gas production;
- created a revenue source for the ongoing study of the Marcellus Shale Safe Drilling Initiative;
- established gas or oil lease recordation requirements to facilitate public access among the land records;
- required a landman (a person who’s responsibilities include meeting with landowners and negotiating leases on behalf of companies seeking to mine or drill on a plot of land) to register with the Department of Labor, Licensing, and Regulation; and
- increased the amount of performance bond coverage that a holder of a permit to drill for gas or oil must maintain.

The other two parts of the required study are (1) a report with recommendations for best practices for all aspects of natural gas exploration and production in the Marcellus Shale in Maryland and (2) a final report with findings and recommendations relating to the impact of Marcellus Shale drilling, including possible contamination of groundwater, handling and disposal of wastewater, environmental and natural resources impacts, impacts to forests and important habitats, greenhouse gas emissions, and economic impacts. A draft of the best practices report has been delayed twice and is currently expected to be released in spring 2013. The final best practices report is still expected to be completed by August 1, 2013, and the final report for the third part of the study is expected by August 1, 2014.

The Marcellus Shale Safe Drilling Initiative study has been hampered to some extent by a lack of funding. Legislation failed in the 2011 and 2012 sessions that would have provided the estimated funding needed to fully research all initially planned aspects of the study. To date, the failure to establish a funding source for the study has resulted in the need by MDE, DNR, and the advisory commission to identify other sources of funding and to reduce the scale of the study. However, the Governor's proposed fiscal 2014 budget includes a \$1.5 million fiscal 2013 deficiency appropriation in MDE and DNR to support research required by the executive order. The proposed general funds would be used to support stream sampling, economic analysis, a review of the potential impacts of gas extraction on public health, and the establishment of baseline data for groundwater, surface water, and air in Western Maryland.

Marcellus Shale Safe Drilling Advisory Commission Legislative Committee

In September 2012, the Marcellus Shale Safe Drilling Advisory Commission established a legislative committee to recommend legislative proposals to the advisory commission for consideration prior to the 2013 session. The commission considered 10 topics for potential legislative proposals and the legislative committee ultimately recommended four proposals: (1) a surface owner protection act; (2) financial assurance requirements, such as performance bonds or environmental impairment liability insurance; (3) the registration of landmen; and (4) the establishment of a severance tax on gas production.