

Department of Legislative Services  
Maryland General Assembly  
2013 Session

FISCAL AND POLICY NOTE

Senate Bill 514 (Senator Montgomery, *et al.*)  
Education, Health, and Environmental Affairs  
and Finance

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Natural Gas - Hydraulic Fracturing - Prohibition

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This bill prohibits a person from engaging in the hydraulic fracturing of a well for the exploration or production of natural gas in Maryland. The bill defines “hydraulic fracturing” for purposes of the prohibition.

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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 prevents the development of natural gas resources that would occur in the absence of the bill, as discussed below. The Maryland Department of the Environment (MDE) can enforce the bill with existing resources.

**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’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.

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Analysis

**Current Law/Background:** MDE is authorized to issue permits for oil and gas exploration and production and is required to coordinate with the Department of Natural Resources 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:** A prohibition on the extraction of shale gas resources in the State through the use of hydraulic fracturing 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 whether or when any gas well drilling will be authorized even after that date.

**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 prevents such development that would otherwise occur in the absence of the bill. 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 is unclear.

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### **Additional Information**

**Prior Introductions:** None.

**Cross File:** HB 337 (Delegate S. Robinson, *et al.*) - Environmental Matters.

**Information Source(s):** Allegany County, Marcellus Shale Safe Drilling Initiative, U.S. Environmental Protection Agency, Maryland Department of the Environment, Department of Legislative Services

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

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## **Appendix – High-volume Hydraulic Fracturing in the Marcellus Shale**

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### *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.