# **Department of Legislative Services**

Maryland General Assembly 2013 Session

# FISCAL AND POLICY NOTE Revised

Senate Bill 854 (Senator Edwards)

Education, Health, and Environmental Affairs

**Environmental Matters** 

## **Environment - Gas and Oil Drilling - Financial Assurance**

This bill repeals current performance bond requirements for the holder of a permit to drill an oil or gas well, and instead requires compliance with specified financial assurance requirements. The bill does not apply to the holder of a permit to drill for gas or oil that has a well in existence on or before October 1, 2013, unless the well is modified after that date by recompletion, stimulation, deepening, or adding lateral extensions.

# **Fiscal Summary**

**State Effect:** Potential decrease in State expenditures (all funds) to the extent that the bill's financial assurance requirements reduce the State's liability for remediating any pollution caused by oil or gas drilling. The bill can be implemented by the Maryland Department of the Environment (MDE) with existing resources. Assuming the financial assurance requirements do not cause a reduction in future gas development, the bill is not anticipated to significantly impact State tax revenues.

**Local Effect:** Potential decrease in local government expenditures to the extent that the bill's financial assurance requirements reduce local government liability for remediating pollution caused by drilling. Assuming the financial assurance requirements for oil and gas permit holders do not cause a significant reduction in future development, the bill is not anticipated to significantly impact local tax revenues.

**Small Business Effect:** Potential meaningful beneficial impact on any small business located near future oil or gas wells to the extent the bill shifts remediation costs from property owners to permittees.

### **Analysis**

**Bill Summary/Current Law:** Under current law, the holder of a permit to drill for gas or oil currently must comply with specified requirements of the Oil and Gas Title; the bill specifies that this must include the proper sealing and plugging of a gas or oil well and reclamation of the site. The bill also specifies that a closure cost estimate for the proper sealing and plugging of a gas or oil well and for site reclamation must be included with each application for a permit to drill a well and each permit renewal application.

The bill repeals the requirement for a permit holder to post a performance bond of up to \$100,000 per well, and up to \$500,000 as a blanket bond for all wells. Instead, a permit holder must provide financial assurance of at least \$50,000 for each well, including each well on a multi-well pad, and not less than the most recent closure cost estimate. The bill maintains the requirement that a permit holder have liability insurance coverage of up to \$300,000 for each person and \$500,000 for each occurrence or accident, but requires that it be *comprehensive general* liability insurance coverage. The bill specifies that this insurance is for damages or injury to persons, and for damage to property caused by *sudden accidental occurrences* arising from permitted activities (instead of from the drilling, production operations, or plugging of all of the permit holder's gas or oil wells in current law).

The bill further requires a permit holder to maintain environmental pollution liability insurance of up to \$1 million per loss for bodily injury and property damage to persons and natural resource damage, including the costs of cleanup and remediation, caused by the release of pollutants arising from permitted activities, including the costs and expenses incurred in the investigation, defense, or settlement of claims. This insurance must be maintained for five years after MDE determines that the gas or oil well has been properly sealed and plugged and the site has been reclaimed.

A permit holder's financial assurance must extend to the owner or owners of the surface and subsurface property and cover the acts and omissions of the permit holder's contractors and subcontractors during their activities in connection with the drilling, operation, and closure of a well. In the event of an assignment or transfer of a permit, the permit holder must maintain the existing financial assurance until replacement financial assurance is approved by MDE.

The bill authorizes MDE to adopt regulations that enable permit applicants to offer, and MDE to authorize, alternative means for demonstrating financial assurance, including (1) a performance bond; (2) a blanket bond; (3) cash; (4) a certificate of deposit; (5) a letter of credit; (6) self-insurance; (7) a corporate guarantee; or (8) any other surety MDE determines to be sufficient. MDE may also adopt regulations to increase the minimum financial assurance requirements. Finally, the bill authorizes MDE to adopt regulations

that establish alternative financial assurance requirements appropriate for a new gas storage well and a gas storage well that is modified by recompletion, stimulation, deepening, or adding lateral extensions.

The bill prohibits a permit, or the transfer of a permit, from becoming effective until all financial assurance requirements have been satisfied.

**Background:** The bill generally conforms to the financial assurance concepts presented as a discussion draft to the Legislative Committee of the Marcellus Shale Safe Drilling Initiative Advisory Commission on January 2, 2013. The Marcellus Shale Safe Drilling Initiative Advisory Commission was also presented in February 2013 with recommended best management practices for Marcellus Shale development in Maryland by Dr. Keith N. Eshleman of the University of Maryland Center for Environmental Science – Appalachian Laboratory.

The best management practices report noted that, compared to other states, Maryland's performance bond requirements are relatively high. However, the report also noted that performance bonding has been deemed inadequate for providing financial assurance relative to the decommissioning, site reclamation, and legacy responsibilities of permit holders.

The report also discussed that the divestment of older, marginally productive wells to small independent operators or to surface owners is a common industry practice, particularly for shale gas wells with steep production declines. Problems occur when a smaller owner of a gas well with reduced production potential is transferred a disproportionately significant future liability and closure costs.

Overall, the report noted that performance bonds are not well suited to cover unforeseen liabilities. Thus, one recommended best management practice in the report is for Maryland to consider alternate mechanisms of covering decommissioning and reclamation costs.

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:** State and local government expenditures may decrease to the extent that the updated financial assurance requirements reduce governmental liability for remediating any future pollution from oil or gas wells. Because any future contamination cannot be predicted, and because the extent to which the State or local governments would be required to remediate any such contamination in the absence of the bill is unknown, the potential decrease in expenditures cannot be reliably estimated.

The Department of Legislative Services advises that it is also unclear whether or how the bill might impact future development of the State's shale gas deposits and, consequently, any State or local tax revenues derived from such development. Generally, additional regulatory restrictions represent a disincentive for the energy industry to engage in gas resource development in Maryland. However, to the extent that the bill provides additional regulatory certainty for the industry, the bill may not impact future rates of development significantly. Further, it is unclear whether the financial assurance requirements represent a meaningful or onerous disparity from current requirements on the industry.

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 would also be indirectly impacted. The State does not currently impose a severance tax Assuming the bill does not cause a reduction in future gas on gas production. development, however, State and local tax revenues are not materially affected.

MDE advises that it can implement the bill with existing budgeted resources.

#### **Additional Information**

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Maryland Department of the Environment, Maryland Insurance Administration, Marcellus Shale Safe Drilling Initiative Advisory Commission, University of Maryland Center for Environmental Science - Appalachian Laboratory, Department of Legislative Services

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# **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.