Department of Legislative Services

Maryland General Assembly 2012 Session

FISCAL AND POLICY NOTE

House Bill 1034 (Delegate Mizeur, et al.)

Environmental Matters

Environment - Oil and Gas Leases - Risk Disclosures

This bill prohibits a person from entering into a lease for the drilling of any well for the exploration, production, or underground storage of gas or oil in the State unless specified language as to the risks of drilling is provided to the lessor and stated conspicuously in the lease. Failure to provide the risk information in the language of the lease may be grounds for denial of a well drilling permit.

Fiscal Summary

State Effect: Special and/or general fund expenditures increase by about \$59,300 in FY 2014 for the Maryland Department of the Environment (MDE) to hire a paralegal to review leases submitted with gas or oil permit applications. Special fund revenues increase beginning in FY 2014, assuming MDE assesses permit fees to cover some or all of its costs, as authorized under current law. Future years reflect inflation.

(in dollars)	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
SF Revenue	\$0	-	-	-	1
GF/SF Exp.	\$0	\$59,300	\$58,500	\$61,300	\$64,200
Net Effect	\$0	(\$59,300)	(\$58,500)	(\$61,300)	(\$64,200)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: Assuming the risk disclosure requirements of the bill do not cause a reduction in future gas development, the bill is not anticipated to materially impact local government finances, as discussed below.

Small Business Effect: Potential meaningful impact on any small business engaged in gas well drilling and other contractual services associated with the regulated production of shale gas to the extent that the bill results in any change in the demand for their services. Small business mineral rights owners could be positively impacted to the extent

the additional information provided in the lease results in a more favorable deal for the lessor.

Analysis

Bill Summary: A person is prohibited from entering into a lease for the drilling of exploration, production, or underground storage gas or oil wells unless a copy of the risks reported on the U.S. Securities and Exchange Commission's (SEC) Form 10-K are provided to the lessor. In addition, the following risks must be stated conspicuously in the lease:

- operations subject to inherent hazards, such as fires, well site blowouts, explosions, or uncontrollable flows of gas;
- environmental hazards, including gas leaks, oil spills, and use of carcinogenic chemicals; and
- events that could cause (1) loss of hydrocarbons; (2) pollution, including contamination of water and air emissions; (3) cleanup responsibilities; (4) regulatory investigations and penalties; (5) suspension of operations; (6) personal injury claims; (7) loss of life; (8) property damage; and (9) reduction of property values.

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. HB 1034/ Page 2

As of December 2011, MDE had 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.

Chapter 383 of 2010 established an Oil and Gas Fund to support MDE's administration of a regulatory program that oversees the drilling, development, production, and storage of oil and gas wells in the State. 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. The final report is due by August 1, 2014.

Corporate Risk Disclosure of Hydraulic Fracturing Activities

Publicly traded companies are required by the SEC to file an annual report known as a Form 10-K. Within the Form 10-K are numerous required elements, including a discussion by the management of risk factors applicable to the business. In 2011, the SEC sent comment letters to various energy companies engaged in hydraulic fracturing after reviewing the companies' financial filings for compliance with risk disclosure rules. It is unclear exactly what risks must be disclosed for compliance purposes, but a review of several risk disclosure statements from major energy companies shows common language in discussion of the physical risks of hydraulic fracturing activities including well site blowouts, cratering, explosions, and uncontrolled flows of natural gas.

State Fiscal Effect: MDE advises that the bill's risk disclosure requirements are sufficiently unique relative to current permit review tasks that it will likely need to hire an additional paralegal to determine whether oil or gas drilling permits comply with the

bill. Thus, special fund expenditures increase by \$59,251 in FY 2014, which assumes that MDE does not receive enough applications to justify an additional employee until fiscal 2014.

Position	1
Salary and Fringe Benefits	\$54,165
Operating Expenses	5,086
Total FY 2014 State Expenditures	\$59,251

Future year expenditures reflect the salary with annual increases and employee turnover as well as annual increases in ongoing operating expenses.

Under Chapter 383 of 2010, MDE is required to set and collect permit and production fees related to oil and gas well drilling. Fees must be set at a rate necessary to (1) review, inspect, and evaluate monitoring data, applications, licenses, permits, and other reports; (2) perform and oversee assessments, investigations, and research; (3) conduct permitting, inspection, and compliance activities; and (4) develop and implement regulations to address the risks to public safety, human health, and the environment from oil and gas well drilling and development. MDE advises that the regulations to establish such fees have been drafted but are being held pending the work of the Marcellus Shale Safe Drilling Initiative and related studies.

Because MDE has the authority under current law to assess fees to cover its costs related to permitting activities, this analysis assumes that MDE will attempt to recover the costs incurred as a result of this bill from permit applicants. Thus, special fund revenues from permit fees may increase to the same extent as special fund expenditures in each year. However, to the extent MDE is unable to recover all of its costs through the assessment of fees, other special funds or general funds may be needed.

Legislative Services advises that it is unclear whether or how the bill might impact future development of the State's shale gas deposits, and consequently, revenues derived from such development. Generally, additional regulatory restrictions could create a disincentive for the energy industry to engage in gas resource development in Maryland. However, it is not likely that informing lessors of additional risks involved in oil or gas well drilling will result in a significant reduction in the availability of gas or oil resources for development. Any impact on the future extraction of shale gas resources in the State may indirectly affect future tax revenues from general economic activity. The State does not currently impose a severance tax on gas development.

Local Revenues: 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 local revenue from general economic activity may also be indirectly impacted.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Garrett and Washington counties, Board of Public Works, Maryland Department of the Environment, Judiciary (Administrative Office of the Courts), Department of Legislative Services

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ncs/lgc

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