Department of Legislative Services

Maryland General Assembly
2015 Session

FISCAL AND POLICY NOTE
Revised

Senate Bill 458 (Senator Zirkin, *et al.*)
Judicial Proceedings Environment and Transportation

Civil Actions - Hydraulic Fracturing Liability Act

This bill defines "hydraulic fracturing" as an ultrahazardous and abnormally dangerous activity. The bill makes information about chemicals used in hydraulic fracturing discoverable as evidence, regardless of a trade secret claim. The bill also increases the amount of comprehensive general and environmental pollution liability insurance coverage that a permit holder must maintain and increases the duration of coverage for environmental pollution liability insurance. Finally, the bill voids specified contractual waiver provisions pertaining to hydraulic fracturing activities.

Fiscal Summary

State Effect: General/special fund revenues associated with general economic activity may decrease 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 implement the bill with existing resources.

Local Effect: Local severance tax revenues and other revenues associated with general economic activity may decrease for Allegany and Garrett counties 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.

Analysis

Bill Summary:

Legal Actions

The bill voids any contractual waiver of a right to sue a permittee or liability for damages caused by the hydraulic fracturing activities of a permittee. Any information about the chemicals used in hydraulic fracturing activities are discoverable in a legal action against a permittee and admissible as evidence, regardless of any trade secret claims. Further, a plaintiff may recover any economic or noneconomic damages that were proximately caused by the hydraulic fracturing activities of a permittee.

Increase in Required Insurance Coverage

The bill increases, from $300,000 to $1.0 million per person and from $500,000 to $5.0 million per occurrence, the required comprehensive general liability coverage for damages caused by the sudden accidental occurrences of a permittee. The bill also increases, from $1.0 million to $10.0 million, the environmental pollution liability insurance coverage for bodily injury and property damage to persons and natural resource damages, including the costs of cleanup and remediation, caused by a release of pollutants. The bill increases, from 5 years to 6 years, the duration for which environmental pollution liability insurance must be maintained from the time that MDE determines that the gas or oil well has been properly sealed and plugged and the site reclaimed.

Definitions

In addition to being defined as an ultrahazardous and abnormally dangerous activity, the bill broadly defines a "hydraulic fracturing activity" to include (1) well drilling; (2) exploration or production; and (3) storage, treatment, or transport by a permittee of any natural gas produced by hydraulic fracturing, chemical component used in hydraulic fracturing, or waste from hydraulic fracturing, including produced waters. The bill also broadly defines "natural gas" as any hydrocarbon or nonhydrocarbon gas that is produced from a natural reservoir, including carbon dioxide, casinghead gas, helium, hydrogen, hydrogen sulfide, and nitrogen.

Current Law/Background:

Current Oil and Gas Regulations

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. An applicant that wants to extract gas from the Marcellus Shale may also be required to apply for a number of other State environmental permits.

Environmental laws such as the federal Clean Air Act and the federal Clean Water Act include provisions that are generally referred to as "permit shields," which generally provide the permit holder with certain protections from enforcement and liability as long as the permit holder remains in compliance with State and federal laws and all provisions and conditions within the permit. A strict liability standard that specifically excludes permit compliance from liability protection may negate the effect of this permit shield.

MDE regulates gas exploration and production and 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. However, current MDE oil and gas regulations were written prior to the use of high-volume hydraulic fracturing and, as of February 2015, have not been revised since 1993. These regulations apply to all gas wells in Maryland, are not specific to the practice of hydraulic fracturing and, in some cases, are incompatible with modern industry practices.

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. Under Chapter 383, MDE is required to set and collect permit and production fees at a rate necessary to, among other things, develop and implement regulations to address the risks to public safety, human health, and the environment from oil and gas well drilling and development. Regulations that set various fees and otherwise establish a regulatory regime for the development of the Marcellus Shale were published in the January 9, 2015 issue of the *Maryland Register*.

Proposed Oil and Gas Regulations

Under the proposed regulations, a permit applicant must prepare a comprehensive gas development plan (CDP) before applying for a permit to drill a well. A CDP, among other things, must identify the locations of various items associated with future plans, including well pads, roads, and pipelines, and assure that the locations avoid, minimize, and mitigate adverse impacts. The regulations also establish an approval process for the CDP, including a stakeholder group process and a process for public comment and participation.

Following the submission of a CDP, an application for a drilling and operating permit must include, among other things, an environmental assessment (including an assessment of public health impacts) and two years of baseline monitoring of surface water, groundwater, and the air in the vicinity of the well pad, as well as detailed plans for activities associated with drilling, such as a site restoration plan, and a spill prevention, control, and countermeasure plan. After an application is deemed complete by MDE, public notification of the application and opportunity for a public hearing is provided. The regulations also establish numerous technical and engineering standards and criteria for well drillers and others involved in the process of hydraulic fracturing.

The proposed regulations also describe the requirements for chemical disclosure in depth, including the process of protecting trade secret data and confidentiality when distributing such data to specified individuals, such as health care and public health professionals. A company making the claim of trade secrecy must provide MDE with contact information and be available 24 hours per day, 7 days per week to provide the trade secret information to authorized individuals.

The proposed regulations generally require several types of financial assurance, including liability insurance for personal injury and property damage of at least $1.0 million for each person and $5.0 million for each occurrence (which is greater than required by the bill); environmental pollution liability insurance for natural resource damage of at least $10.0 million per loss (also greater than under the bill); and performance bonds of at least $50,000 per well. However, an applicant may satisfy the financial assurance requirements independently upon demonstration of the ability to pass several financial tests and other qualifications. The proposed regulations' insurance requirements are significantly greater than the minimum requirements in statute.

Presumptive Impact Areas

Chapter 703 of 2012 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.

Abnormally Dangerous Activities

An abnormally dangerous activity is defined in *Black's Law Dictionary* as "an undertaking that necessarily carries with it a significant risk of serious harm even if reasonable care is used, and for which the actor may face strict liability for any harm caused…" The Restatement (Second) of Torts (1977), which has been adopted by the Maryland Court of Appeals, states that "determining whether an activity is abnormally dangerous includes analyzing whether there is a high degree of risk of harm, whether any harm caused will be

substantial, whether the exercise of reasonable care will eliminate the risk, whether the activity is a matter of common usage, whether the activity is appropriate to the place in which it occurs, and whether the activity's value to society outweighs its dangerousness." Thus, under current law, this is the process by which to consider whether a particular activity is abnormally dangerous.

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

State/Local Fiscal Effect: To the extent that the bill's liability standard establishes a substantial disincentive to engage in the extraction of natural gas resources in the State, the bill directly affects 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.

As noted above, current oil and gas exploration and development regulations are generally inconsistent, and in some cases, incompatible with modern industry practices. Thus, it is unlikely that high-volume hydraulic fracturing occurs in Maryland until the regulations are updated. Even if current regulations are revised, it is unclear whether and when future development may occur, which is dependent on the relative stringency of the regulatory provisions (including any baseline monitoring periods or similar provisions that prohibit extraction for a certain period of time), as well as future price levels.

In the event that future hydraulic fracturing activities occur, State and local expenditures associated with the remediation of any damages caused by oil and gas exploration and development may decrease due to the bill's liability standards and greater levels of insurance coverage, as the permit holders and their insurers likely incur any such costs.

MDE advises that it can implement the bill with existing resources. The Mining Program within MDE is responsible for ensuring that oil and gas permits and regulatory standards are up to date. Additionally, under the bill the program is responsible for ensuring that proper liability insurance coverage is maintained for wells for a longer duration.

Small Business Effect: The bill may have a meaningful adverse impact on small businesses engaged in providing services related to hydraulic fracturing to the extent the bill prevents, or reduces the level of, future natural gas exploration or production through hydraulic fracturing. 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. The bill may also have a meaningful beneficial impact on any small business with

property that is located adjacent to any future hydraulic fracturing activities that may occur to the extent that the bill provides greater legal and financial protections than would otherwise be available.

It should be noted that the bill's provisions apply to current oil and gas permit holders in Maryland, and not just future permit holders. Therefore, current permit holders are subject to the bill's liability provisions and increase in required insurance coverage. Current permit holders include any company that owns or operates gas storage wells in the Accident storage field of Garrett County. Hydraulic fracturing of these storage wells is rare, however, and the only impact of the bill is likely to be the purchase of greater insurance coverage. Moreover, the current owner of these wells is not a small business.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Office of the Attorney General (Consumer Protection Division), Maryland Department of the Environment, Judiciary (Administrative Office of the Courts), Department of Natural Resources, Maryland Association of Counties, Garrett County, Marcellus Shale Safe Drilling Initiative, U.S. Environmental Protection Agency, Federal Energy Regulatory Commission, *Black's Law Dictionary*, Department of Legislative Services

Fiscal Note History: First Reader - February 23, 2015
md/lgc Revised - Senate Third Reader - March 30, 2015

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Appendix – High-volume Hydraulic Fracturing in the Marcellus Shale

The Marcellus Shale formation is a geologic feature that has attracted significant attention from the energy industry for its rich natural gas and liquids resources contained within seven states. In Maryland, the only anticipated areas of potential gas production are in Garrett and western Allegany counties. Applications for permits to produce natural gas in Maryland using horizontal drilling and high-volume hydraulic fracturing were first filed with the Maryland Department of the Environment (MDE) in 2010, but were subsequently 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; a full draft report is expected to be released for public comment and peer review in 2015, although a series of peer-reviewed studies of various aspects of hydraulic fracturing have been published and are publicly available on the agency's website. Other states, academic and environmental organizations, and the oil and gas industry are also conducting research into the impacts of hydraulic fracturing on public health, safety, and the environment. On December 17, 2014, Governor Andrew M. Cuomo of New York prohibited the practice of high-volume hydraulic fracturing in New York State following the release of a multi-year study conducted by the State's Department of Health that recommended a ban until sufficient information on the risks of the practice became available.

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 directed MDE and the Department of Natural Resources (DNR) to assemble and consult with an advisory commission.

Specifically, the executive order tasked MDE and DNR, in consultation with the advisory commission, with conducting a three-part study and reporting 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 (House Bill 1123) established a presumptive impact area applicable to areas around a well for which MDE has issued a gas exploration or production permit. In a presumptive impact area, it is presumed that the contamination of a "water supply" was caused by the activities of gas exploration or production; this presumption may be rebutted.

Part II of the study – a report on best practices – was completed in August 2013 and reflected changes made after consideration of more than 4,000 public comments. This report was based upon work conducted by two experts at the University of Maryland Center for Environmental Science, Appalachian Laboratory. The experts provided MDE and DNR with a suite of recommendations that have been used or studied in other states. The departments considered each recommended best practice and decided, in consultation with the advisory commission, which practices to accept. While the report contained many recommendations, the centerpiece was the use of a Comprehensive Gas Development Plan (CDP), which a drilling applicant would be required to submit as a prerequisite to an individual well permit. A CDP would address, before any well is drilled, the broad and cumulative issues associated with the completion of numerous wells and the effects that the well construction and resource extraction and transportation would have on a large scale.

The third and final report required by the executive order was scheduled to be released by August 1, 2014. However, the departments released a draft report on July 11, 2014, and announced that public comments would be accepted through November 17, 2014. A draft of the final report of the Marcellus Shale Safe Drilling Initiative Study was released on November 25, 2014, and contained information from a risk assessment, a public health study, and an economic impact study commissioned by the departments. The final report contained all final findings and recommendations and addressed all remaining issues identified by the executive order.

The report incorporated findings from the risk assessment, including several impacts that were characterized as high, moderate, or low risks. Impacts identified as high-risk include (1) road repair costs; (2) disruptive noise and vibrations from truck traffic; (3) temporary and localized air emissions during the drilling process (under a "high-extraction" development scenario only); and (4) ecosystem fragmentation from pipeline development (high-extraction scenario only). The report also identified several moderate risks,

including (1) air emissions from combustion equipment, well pads, pipelines, and trucks; (2) ecological and agricultural impacts from land clearing; (3) community health and safety impacts from a significant increase in truck traffic; (4) the effect on aquatic ecosystems from large water withdrawals; (5) land fragmentation from the construction of natural gas gathering lines; and (6) exposure of dissolved methane to drinking water wells and groundwater. The characterization of a risk as "low," "moderate," or "high" results from a weighing of both the probability of an event's occurrence and its severity. Ultimately, the departments concluded that the risks to public health and the environment can be adequately managed under a stringent regulatory regime that relies on the best practices identified in their report. MDE subsequently developed such regulations, which were published in the *Maryland Register* on January 9, 2015.