

Department of Legislative Services
Maryland General Assembly
2012 Session

FISCAL AND POLICY NOTE
Revised

Senate Bill 636

(Senator Frosh)

Education, Health, and Environmental Affairs

Environmental Matters

**Environment - Presumptive Impact Areas - Contamination Caused by Gas Wells
in Deep Shale Deposits**

This bill establishes a presumptive impact area that applies to areas around a deep shale deposit gas well for which the Maryland Department of the Environment (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 presumptive impact area is in effect within a radius of 2,500 feet from the vertical wellbore, and for 365 days after the last event of well drilling, completion, or hydraulic fracturing. The bill establishes the conditions under which a permittee must replace a water supply or compensate a property owner, specifies when a permittee’s actions are deemed adequate to resolve contamination presumed to be caused by the permittee, and provides specified exceptions to the presumption of causation and the requirement that a permittee compensate a property owner or replace a water supply.

The bill takes effect July 1, 2012.

Fiscal Summary

State Effect: Potential decrease in State expenditures (all funds) to the extent that the establishment of presumptive impact areas reduces the State’s liability for remediating any water contamination caused by drilling in affected areas. The bill can be implemented by MDE with existing resources and is not anticipated to materially impact caseloads for the District Court. Assuming the new liability standard for gas permit holders does not cause a significant 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 establishment of presumptive impact areas reduces local government liability for remediating any water contamination caused by drilling in affected areas. The bill is not

anticipated to materially impact caseloads for the circuit courts. Assuming the new liability standard for gas permit holders does not cause a significant reduction in future gas development, the bill is not anticipated to significantly impact local tax revenues.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: For each permit MDE issues to drill a well for the exploration or production of gas in deep shale deposits, there is a presumptive impact area around the gas well in which it is presumed that contamination of a water supply was caused by the activities of gas exploration or production. However, the presumption of causation established by the bill does not apply to contamination of a water supply well if a property owner refuses to allow a permittee to test the owner's water supply well before commencement of activities and to provide the property owner with a complete copy of the test results. The bill defines "water supply" as a source of water used for drinking or other domestic purpose or for agriculture, including livestock.

The presumptive impact area is in effect (1) within a radius of 2,500 feet from the vertical wellbore; and (2) for 365 days after the last event of well drilling, completion, or hydraulic fracturing. Within a presumptive impact area, the permit holder must replace, at no expense to the property owner in the presumptive impact area, a water supply that is contaminated as a result of the permittee's drilling or operation of the gas well. A water supply within a presumptive impact area that no longer yields potable water as a result of the drilling or operation of a gas well is considered to be adequately replaced by a permittee if the permittee provides a new or retrofitted well or other alternative water supply that is capable of yielding potable water in a volume equal to what was used or needed before the contamination of the water supply.

The permittee and property owner may privately agree on monetary compensation or other mitigation instead of restoration.

MDE may not require a permittee to replace a water supply or compensate a property owner if the permittee demonstrates to MDE by a preponderance of the evidence that (1) the contamination is not the result of activities relating to the gas well; or (2) the contamination existed before the commencement of activities allowed by the permit and was not worsened by those activities.

The presumption of causation established by the bill applies in a proceeding for judicial review or an action for an injunction authorized under specified provisions of the Gas and Oil Title, or in a civil action for damages or equitable relief brought by a property owner against a permittee. The presumption may be rebutted by a preponderance of the evidence.

MDE may adopt regulations to implement the bill. Additionally, the bill may not be construed to affect any common law remedies available to a property owner.

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. According to MDE, there is currently only one pending permit application.

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.

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 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 an 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. In consultation with the advisory commission, MDE and DNR examined the current liability structure in Maryland and problems and gaps in this structure. The study offered several potential recommendations, including that Maryland create a statutory presumption that certain types of damage are caused by a drilling activity or operation if resulting damage occurred close in time and place to the gas operations. The study noted that establishing a presumption of causation for damage related to drilling within the Marcellus Shale would provide an incentive for those drilling gas wells to test drinking water wells prior to undertaking drilling.

The study noted that West Virginia recognizes a presumption of causation for contamination or deprivation of a water source within 1,000 feet of the site of drilling. In Pennsylvania, there is a presumption of causation for pollution of water supply within 2,500 feet of a well and within 12 months of completion of drilling in an unconventional shale formation.

The study also examined current laws in Maryland that might serve as a guide in determining standards of liability for drilling in the Marcellus Shale. For example, under the Natural Resources Article, a person who drills for oil or gas to the lands or in the waters of the State is strictly liable for any damages that occur in exploration, drilling, or producing operations or in the plugging of the person's oil or gas wells, including liability to the State for any environmental damage. In addition, a similar law exists in the Environment Article that applies to surface mines established within certain geological areas (known as Karst terrain).

State/Local Fiscal Effect: MDE advises that it can implement any regulatory development work and handle any additional involvement required following claims by property owners within presumptive impact areas with existing budgeted resources. The Judiciary advises that it does not anticipate that the bill will have a fiscal or operational impact. It is unclear whether the extra-judicial claim procedures established by the bill for alleged water contamination arising from within presumptive impact areas will result in greater or lesser caseloads for the District Court and circuit courts in Allegany, Garrett, or Washington counties, but it is assumed that caseloads are not materially affected.

However, State and local government expenditures may decrease to the extent that the establishment of presumptive impact areas reduces governmental liability for remediating any water contamination caused by drilling in affected areas. 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.

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, 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 mirrors similar practices in other states, or provides additional regulatory/judicial certainty for the industry, the liability standard established by the bill may not impact future rates of development significantly. Further, the bill may result in a statewide industry standard that involves pre-drilling testing of all water supplies proximate to the drilling site, which may result in more efficient dispositions of claims made by landowners.

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

Small Business Effect: The bill has a 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 property owners in affected areas could benefit to the extent the bill shifts remediation costs from property owners to permittees.

Additional Information

Prior Introductions: None.

Cross File: HB 1123 (Delegate Mizeur) - Environmental Matters.

Information Source(s): Garrett County, Maryland Department of the Environment, Judiciary (Administrative Office of the Courts), Department of Legislative Services

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