

At recent meetings, Commissioners requested information about regulations and practices in other nearby states on issues such as bonding, insurance, royalties, severance taxes, and presumptions of causation. A post-graduate Law Fellow in MDE's Office of the Secretary researched the questions and prepared the attached summary. As you will see if you examine the tables, states have different approaches, and some states are in the process of amending the requirements.

### ***Bonding***

Maryland requires a bond not to exceed \$100,000 per well or \$500,000 as a blanket bond for all the applicant's wells. This is higher than other nearby states except New York. New York varies the amount of bond based on the depth of the well. For wells over 6,000 feet deep, New York requires the bond to cover the anticipated costs of plugging and abandoning the well, up to \$250,000 per well or up to \$2 million to cover all wells. The New York Department of Environmental conservation has proposed revisions to the regulations that would remove the cap on bond amounts for wells over 6,000 feet deep and remove the blanket bond option for these wells.

The draft report recommends that Maryland should amend the law that limits the amount of a performance bond to \$100,000 per well, or \$500,000 as a blanket bond for all wells of a permittee by deleting reference to a dollar amount and directing MDE to determine the proper amount of bond based on a consideration of the likely costs of complying with permit provisions, properly closing the well and performing site reclamation.

### ***Insurance***

Maryland's minimum requirements for liability insurance are set by statute and the actual requirements are set by regulation. Maryland's regulations are similar to Ohio's. Most other states we looked at do not have insurance requirements applicable to gas wells. There is no recommendation in the draft report regarding changing the insurance requirements.

### ***Royalties***

The federal government and those nearby states that have a minimum royalty set it at 1/8, which is 12.5%. There is no recommendation regarding royalties in the draft report.

### ***Severance Taxes***

The various severance taxes in nearby states are set out in the table. Information on other states has been provided previously in a briefing memorandum. The draft report recommends a State-level severance tax be levied and the receipts deposited in a Marcellus Shale Environmental Fund. The Fund can be used to address impacts on natural resources and the environment from gas development and production that cannot be attributed to a specific permittee or party.

### ***Presumption of Causation***

Some of the states have a presumption of causation for pollution of a water supply and others mandate that the well owner must compensate for, or replace, a water supply if the property owner proves that the pollution was caused by the gas operator. The draft report

recommends that a law be passed creating a presumption of causation for certain types of damage occurring within a certain distance from the well and a certain period of time after well completion.

**Bond Requirements for Gas Well Permits**

	<b>Bond Requirement</b>	<b>Bond Conditions</b>	<b>Proposed Changes, If Any</b>	<b>Source</b>
<b>Maryland</b>	\$100,000 per well, or not to exceed \$500,000 as a blanket bond for all of the applicant's wells	The bond secures compliance with laws, regulations, permit provisions and orders.		MD Environment Code §14-111(a)(5), (a)(6), (b); COMAR 29.19.01.06(C)(5)(a), (C)(4)
<b>Pennsylvania</b>	\$2,500 for single well, \$25,000 blanket bond	Liability continues until the well operator obtains a certificate of plugging and for one year thereafter. The bond is conditioned on plugging, site restoration, water supply replacement, and drilling requirements. It can also be forfeited whenever the operator fails to comply with laws, regulations, orders or permits.	In July 2011 the Governor's Marcellus Shale Advisory Commission recommended an increase in the bond amount to \$10,000 per individual well or \$250,000 for a blanket bond. The Governor adopted these increases in an Oct. 2011 proposal. In addition, an impact fee could be assessed up to \$160,000 per well (over 10 years) by counties. The proceeds would be distributed among localities and the State DOT. Presumed liability would be extended to 2500 feet from the well (currently 1000) for 12 months (currently 6) after completion. The proposal requires legislative approval.	58 P. S. § 601.215; 25 Pa Code § 78.303
<b>West Virginia</b>	\$5,000 per well, \$50,000 blanket bond	The Director holds the bond and will release it upon satisfaction of all laws and rules pertaining to drilling, redrilling, deepening, casing, stimulating, plugging, abandonment, reporting, and reclamation of wells.		WV Code §26-6-26
<b>New York</b>	<p>For wells 2500 ft deep or less Up to 25 wells: \$2,500 per well up to 25K</p> <p>26-50 wells: \$25,000 + \$2500 per well over 25 wells, up to \$40,000.</p> <p>51-100 wells: \$40,000 + \$2,500 per well over 50 wells, up to \$70,000.</p> <p>Over 100 wells: \$70,000+ \$2,500 per well over 100 wells, up to \$100,000</p> <hr/> <p>For wells 2500 ft - 6,000 ft Up to 25 wells: \$5000 per well up to \$40,000</p> <p>26-50 wells: 40,000 + \$5000 per well over 25 wells, up to \$60,000.</p> <p>51-100 wells: \$60,000 + \$5000 per well over 50 wells, up to \$100,000.</p> <p>Over 100 wells: \$100,000+ \$5000 per well over 100 wells, up to \$150,000</p> <hr/> <p>For wells over 6000 ft Anticipated costs of plugging and abandoning well, up to \$250,000 per well, or up to \$2M total</p>	The bond guarantees plugging and abandoning obligations and is maintained until performed to the satisfaction of the Department. The regulations contain specific requirements for plugging, restoration, reporting, and permanent abandonment.	<p>No specific proposal, though New York is in the process of completing a Supplemental Generic EIS for horizontal drilling and hydraulic fracturing in the Marcellus Shale. Any comments related to financial assurance requirements will be considered prior to finalizing the statement. The comment period for the revised draft ends 12/12/11.</p> <p>The Dept. issued proposed revisions to the regulations that would remove the cap on bond amounts for wells over 6,000 feet and remove the blanket bond option for these wells. Public comment continues until Dec 12.</p>	Laws of NY §23-0305; 6 NYCRR §551

<b>Texas</b>	\$2.00 per foot of well depth for each well, unless the well is covered by a well-specific insurance policy. Or, a blanket bond calculated as follows. Excluding permits for wells covered by well-specific insurance policies, if 10 or fewer wells, \$25,000. If 10 - 100 wells, \$50,000. If over 100 wells, \$250,000.	Bond conditions state that the operator will plug and abandon the wells and will "control, abate, and clean up pollution associated with the oil and gas operations and activities" according to the statute, permits, rules, and orders.		16 Tx. Admin. Code §01.03.78(g)(1)(A),(B)
<b>Ohio</b>	\$5,000 for a single well; \$15,000 blanket bond.  Exempt domestic well owners are those who own the surface estate and use the well to provide gas for their own use. Exempt domestic well owners with only one well and well owners from whom financial statements were accepted as of 1993 can file a financial statement in lieu of the bond. The statement must show net worth in Ohio of twice the amount of the bond.	The bond is conditioned on compliance with the restoration requirements, plugging requirements, permit provisions, and all rules and orders of the chief.	Minor changes were made to the bond requirements in 2010. Noncompliance with an order of the chief was made an additional ground for forfeiture of the bond. The Chief may require an owner whose bond was forfeited to post a new bond at the increased amounts of \$15,000 for a single well and \$50,000 as a blanket bond.	Ohio Admin. Code 1501:9-1-03 (A); Ohio Revised Code §1509.07
<b>Kentucky</b>	Individual bonds: 0-500 feet: \$500 501-1000 feet: \$1,000 1001-1500 feet: \$1,500 1501-2000 feet: \$2,000 2001-2500 feet: \$2,500 2501-3000 feet: \$3,000 3001-3500 feet: \$3,500 3501-4000 feet: \$4,000 >4,000 feet: \$5,000 or a higher amount determined by the Commission to be warranted in the circumstances  Blanket bond: A "qualified" operator can post a blanket bond of \$10,000 - 100,000, depending on number of wells. Qualified operators must have had a blanket bond in place by 2006 and have no outstanding violations. Additional proof of financial ability requirements apply. Nonqualified operators can post a blanket bond of \$50,000 - 100,000.	The bond can be forfeited after 45 days notice if the proper plugging and records requirements have not been complied with within time limits set by the Department.		805 Kentucky Administrative Regulations §1:050; Kentucky Revised Statutes §353.590
<b>Tennessee</b>	Plugging bond: \$2,000 per well or blanket bond of \$10,000 for up to 10 wells Reclamation bond: \$1,500 per well site	1/3 of the reclamation bond is released upon satisfactory regrading and revegetation of all disturbed areas except active work areas and access roads. The rest of the bond is released after satisfactory plugging and reclamation, which must include two seasons of survival of plantings.  The plugging bond is released after proper plugging of the well and submission of reports, logs, surveys, and other data as required.		Rules of Tennessee State Oil and Gas Board §1040-2-1

## Insurance Requirements for Gas Well Permits

	Insurance Requirement	Insurance Required by Another Law?	Proposed Changes, If Any	Source
<b>Maryland</b>	Personal injury and property damage; at least \$1M for each person, \$5M for each occurrence or accident (or proof of self-insurance meeting further criteria)			MD Environment Code §14-111(a)(5), (a)(6), (b); COMAR 29.19.01.06(C)(5)(a), (C)(4)
<b>Pennsylvania</b>	None	No	None. Governor's Oct 2011 proposal changes bond amounts and liability but does not require insurance.	58 P. S. § 601.215; 25 Pa Code § 78.303
<b>West Virginia</b>	None			WV Code §26-6-26
<b>New York</b>	None	No	No specific proposal, though New York is in the process of completing a Supplemental Generic EIS for horizontal drilling and hydraulic fracturing in the Marcellus Shale. Any comments related to financial assurance requirements will be considered prior to finalizing the statement. The comment period for the revised draft ends 12/12/11.	Laws of NY §23-0305; 6 NYCRR §551
<b>Texas</b>	None	No		16 Tx. Admin. Code §01.03.78(g)(1)(A),(B)
<b>Ohio</b>	Liability and bodily injury coverage of \$1M must be held until all wells are plugged or transferred to another owner. If wells are in urban area, coverage must be at least \$3M		Recently changed (2010). Coverage requirement was increased to present amount from \$300,000 property damage and \$300,000 bodily injury.	Ohio Revised Code §1509.07
<b>Kentucky</b>	None			
<b>Tennessee</b>	None			Tennessee Codes Annotated § 60-1-101 to -705

	Minimum Royalties		Source	Notes
New York	1/8 when involuntary integration; no minimum for leases on state land.	If an operator seeks to drill in a "spacing unit" in which that operator has control over some but not all of the land within that unit, the Department can order an integration of all the interests in that unit. It must be found that integration is necessary to carry out policies in 23-0301. The owner of the interest that is being involuntarily integrated can choose to share in the risk of drilling or just receive royalties. If he chooses to receive royalties, they must be at least what is paid to the other owners in the unit but no less than 1/8.	NY Environmental Conservation Law § 23-0901	A bill was introduced in 2011 that would raise the minimum royalty for involuntary integration in the Marcellus Shale to 18.75%. S 3659.
West Virginia	None		West Virginia Code §5A-11-6	For leases on state land, fair market value as determined by an appraisal.
Ohio	None for private leases; 1/8 for leases on state land.		Ohio Revised Code §1509.73	The 1/8 minimum royalty for leases on state lands became effective in Sept. 2011.  If there is a mandatory pooling order, the nonparticipating owner receives a proportionate share of the royalties, but there is no minimum specified.  The Ohio DNR website states that the royalty is "usually 1/8"
Kentucky	None			
Virginia	None			
Pennsylvania	1/8	"A lease or other such agreement conveying the right to remove or recover oil, natural gas or gas of any other designation from lessor to lessee shall not be valid if such lease does not guarantee the lessor at least one-eighth royalty of all oil, natural gas or gas of other designations removed or recovered from the subject real property."	58 P.S. § 33	The Pa Supreme Ct. decided in 2010 that the 1/8 minimum payment may be calculated at the well. Lessees may deduct post-production costs from the value of the gas before calculating the royalty, if provided in the lease. Kilmer v. Elexico Land Services, Inc., 990 A. 2d 1147 (2010).
Tennessee	None			State land may be leased at a "reasonable royalty" Tenn. Code Ann. § 12-2-101
Federal Lands	1/8		30 U.S.C. §226	

	Severance tax imposed by state	Source
New York	None	
West Virginia	5% + additional \$.047 per mcf of natural gas.  10% of the tax revenue from the 5% tax is dedicated to the use of counties and municipalities. The \$.047 tax goes to fund workers' compensation.	West Virginia Code §§ 11-13A; 13V
Ohio	Severance tax: 2.5 cents per thousand cubic feet of gas "for severance of natural resources from soil or water of this state"  Cost recovery assessment (new as of 2010): If .5 cents per thousand cubic feet of gas + severance tax is greater than \$15 for each well owned, assessment is .5 cents per thousand cubic feet. Otherwise, assessment is \$15 per well minus the severance tax.	Ohio Revised Code § 5749.02
Kentucky	4.5%  50% of the revenue from gas severance tax goes to an economic assistance fund, which is distributed among mineral producing counties.	Kentucky Revised Statutes §143A.020
Virginia	None	
Pennsylvania	None; various proposals are in progress, some of which would be flat "fees" on the well rather than per quantity of natural gas.	
Tennessee	3% of the sale price of all gas and oil removed from the ground in TN  1/3 goes to the county which was the site of the wellhead. The other 2/3 goes to the State's general fund.  The counties may not impose any additional severance tax.	Tenn. Code Ann. § 60-1-301

	Presumption of causation	Source
New York	None	
West Virginia	Presumption of causation for contamination or deprivation of a water source within 1,000 feet of site of drilling	West Virginia Code §22-6-35
Ohio	<p>None; well owner must compensate or replace water supply used by real property owner if contaminated or disrupted, but real property owner must prove damage was proximately caused by gas operation.</p> <p>If the state brings an action for a violation relating to contamination or personal property damage from storage or disposal of brine, crude oil, natural gas, or other fluids associated with the exploration or development of oil and gas, there is a rebuttable presumption that these damages within 1/4 mile of the site of annular disposal caused the violation</p>	Ohio Revised Code 1509.22
Kentucky	None; well owner must compensate or replace water supply used by real property owner if contaminated or disrupted, but real property owner must prove damage was proximately caused by gas operation.	Kentucky Revised Statutes §353.597
Virginia	None	
Pennsylvania	Currently there is a presumption of causation for pollution of a water supply within 1,000 feet of a well and within 6 months of completion of drilling. Proposals are underway to extend the presumption to 2,500 feet and 1 year, as recommended by Pennsylvania's Marcellus Shale Advisory Commission	58 P.S. § 601.208
Tennessee	None	