Unconventional natural gas development—using horizontal drilling with a method known as hydraulic fracturing—is burgeoning in the Northeast and Midwest region. While the prospect of a new, ample source of relatively clean energy for the region is attractive, the mounting commercial pressure to extract natural gas reserves using the “fracking” process also raises a variety of important questions for the region’s policy makers and planners. Among these questions is how to best protect the rights of landowners—both surface and mineral—in the milieu of intense development pressure. In this Note to the Coalitions, we provide basic information on property rights in the context of growing natural gas development, describe policy responses to the property debate in our region, and highlight relevant property rights concerns from regional news items.

How do property rights work in natural gas development?

In general, rights for surface and subsurface properties fall into two main categories: fee simple and split estate. Fee simple property rights are relatively straightforward—the landowner controls the subsurface and surface of a property, as well as the air above it. A split estate, however, divides ownership of the surface and the subsurface (commonly called mineral rights) among multiple legal entities. In many cases, particularly in the western United States, mineral rights are the dominant right for a parcel—that is, mineral rights trump other property rights in a land use disagreement.

It is important to note that few leases and legal agreements between mineral rights owners, surface owners and producers are exactly alike. Some fundamental commonalities exist, however. In virtually all cases, owners of mineral rights may enter into a lease agreement with producers to explore their oil, gas or mineral resources. Additionally, a producer’s lease with mineral rights owners is likely to stipulate an up-front exploratory payment for initial exploration for oil, gas or mineral resources within a specific timeframe. Such leases may include a provision for automatic extension if exploitable resources are discovered—or automatic expiration if the lessee chooses not to explore or explores and finds inadequate exploitable resources. In the latter instance, the lessee has no further rights. The lease may also require regular royalty payments to the mineral rights owner from the producer to maintain the lease if the lessee locates developable resources and begins production.
The rights of surface property owners vary by state, but almost always receive secondary consideration in the leasing process to the rights of mineral owners. For example, most states stipulate a minimum royalty payment to the mineral rights owner, but generally do not get involved in other aspects of leases.

Any conditions and protections for surface property owners (e.g. location and design of well pads, road placement and buffers, natural gas supplies for residents) are clarified up front in the lease process, making lease term negotiations a critical opportunity to influence the degree of surface disturbance and address any local environmental protection concerns around unconventional natural gas development.

**Spotlight States – Pennsylvania and Ohio**

**Pennsylvania:**

For the last few years, the Commonwealth of Pennsylvania has been the epicenter of the Northeast-Midwest region’s natural gas development activity; nearly 1,800 wells were drilled in the Marcellus shale formation in 2011. In Pennsylvania:

- The mineral estate may be separate from the surface estate.
- Ownership of rights to different resources, e.g. oil, gas, coal, and hard rock minerals, may be separate in the same property.
- Public lands are subject to the split estate system, wherein the state or federal government may own the surface rights, but the mineral rights may belong to individuals or other entities.
- A surface owner may not prevent “reasonable access” to the mineral resources, although Pennsylvania recognizes the surface owner’s “right to protection from unreasonable encroachment or damage”.
- Resources belonging to mineral owners who are unwilling to lease their rights—but are located adjacent to those who have leased—could be included in production without the mineral owner’s express consent through the practice of **pooling**, whereby mineral resources are extracted without a lease and a prorated minimum royalty is paid to the owner (see box at right).
- Surface owners are encouraged to engage an oil and gas attorney to negotiate with the drilling company for compensation for surface disturbance and for any baseline studies (e.g., to determine drinking/source water quality prior to drilling).

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2. [http://www.dep.state.pa.us/dep/deputate/minres/oilgas/2011PermitDrilledmaps.htm](http://www.dep.state.pa.us/dep/deputate/minres/oilgas/2011PermitDrilledmaps.htm)
Beyond ensuring payment of a minimum royalty, the Commonwealth is not directly involved in lease negotiations between mineral owners and producers.  

OHIO:

In terms of drilling pressure, Ohio is currently well behind Pennsylvania with only 7 Marcellus Shale wells drilled and 31 wells drilled to the deeper Utica Shale formation. However, Chesapeake Energy recently released estimates claiming its 1.25 million acre Utica holdings to be worth billions of dollars. Natural gas production on private lands in Ohio is expected to increase in the next few years, and last fall, Ohio opened public lands to drilling. To date, Ohio’s primary involvement in natural gas development has been to accept waste from neighboring states for disposal in underground injection wells. Ohio has primacy of its underground injection control program from the US Environmental Protection Agency, and has seen a large revenue increase due to the acceptance of out-of-district oil and gas brine wastewater. However, recent earthquakes associated with deep injection wells have caused the state to suspend the disposal program. Regarding property rights, Ohio:

- Also has a split estate system – the mineral rights may be owned by a different party than the surface. In Ohio, the interests of the mineral owner supersede those of the surface owner.

- Also employs mandatory pooling, often as a last resort and primarily in more “urban” areas of the state with many smaller tracts of land. There is no state minimum royalty.

What are primary property issues in the Northeast-Midwest region?

Limited public understanding of property ownership principles

As unconventional natural gas development spreads throughout the Northeast-Midwest region, it is becoming increasingly apparent that a mineral rights owner’s bundle of rights may not be as extensive as commonly thought. In particular, the pooling concept runs counter to the public’s intuitive understanding of property ownership; although pooling occurs in keeping with the existing regulatory structure, the practice gives producers, rather than mineral rights owners, an advantage in leasing negotiations. Given recent advances in directional drilling technology, pooling has become a favored means of reducing development costs for producers. Simply put, more oil and gas resources can be accessed and produced with limited investment in surface activity and less surface disturbance. With increased instances of pooling, some mineral rights owners have begun to understand that they may have limited control over the extraction of their resources:

“I was told that if I didn't take the offered lease that they could take the gas from under me, and pay me the state minimum royalty. ... Made me wonder what country I live in.”

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3 http://www.dep.state.pa.us/dep/deputate/minres/oilgas/fs2834.htm
4 http://www.chk.com/News/Articles/Pages/1590490.aspx
6 http://www.wvexecutive.com/featured/forced-pooling-both-sides-story
7 http://www.pagaslease.com/index.php?topic=5722.0
Imbalance in lease negotiation wherewithal

Even if the owner understands his or her rights, the contemporary leasing process also can be extremely complex, outstripping the mineral rights owners’ capacity to understand the specific situation well enough to act in his or her self-interest. For example: several national and international companies may have joint stake in a single site; companies may develop multiple adjacent or nearby sites simultaneously; or they may transfer ownership of leases during the lease term unbeknownst to the leasor. In Ohio, the discovery late last summer of a disconcerting “guide” for industry lease negotiators has caused a stir among advocates and government officials. The origin of the notebook remains unclear, but it has fueled concerns that the industry is actively engaging in practices that skew advantage over lesors.

Unexpected influence of “higher powers”

As natural gas development ramps up in the rural areas of the Northeast and Midwest, the need for pipelines to transport gas to regional markets also increases. Some surface owners are now grappling with eminent domain issues associated with the construction of pipelines through their properties. Companies will negotiate with landowners in an effort to establish a right-of-way easement to properties needed for a pipeline. However, once a proposed pipeline plan receives the necessary regulatory approval, companies may use the right of eminent domain to gain access to any property for which they were unable to obtain an easement.

A notable feature of the Northeast-Midwest natural gas boom has been the speed at which development is taking place. There is an incentive for natural gas producers to develop quickly: many early leases cost less than later leases. To avoid the expiration of those leases—and thus a loss of investment and the possible need to invest additional, greater resources in the same site—companies are developing very quickly when able to do so. Some authorities have enacted temporary drilling moratoria, including New York State and the Delaware River Basin Commission (which has jurisdiction over portions of northeastern Pennsylvania and southeastern New York State) to allow for time to sort out broader regulatory issues. Moratoria run counter to the producers’ goal of rapid development and have hence affected leasing processes. Some landowners in areas subject to a moratorium who signed early leases are now seeing those leases extended without

8 http://www.post-gazette.com/pg/11345/1196135-503.stm
their permission as companies claim force majeure. This legal term equates to an “act of God,” and producers are increasingly using it to protect their interests when government actions prohibit drilling. Other early lease-signers (who may have initially leased their mineral rights for a relatively low price) are now seeking the going rate for comparable leases; many are attempting to negotiate payment changes as their undeveloped leases approach expiration dates.12

Unexpected “side effects” of leasing

Many landowners are experiencing an unforeseen consequence of signing natural gas leases: the idea that their property may lose or have already lost value—or worse—that they have unintentionally defaulted on their mortgage. Some landowners are now worried that their neighbors’ or their own drilling leases will make their properties undesirable and difficult to sell, thereby reducing its value. And, as the New York Times recently reported, some lenders are now refusing to offer mortgages on properties with leases, and some are even considering the act of signing a natural gas drilling lease a default on the loan.13

What steps are underway to resolve the issues?

Some states have initiated programs to advise mineral and landowners addressing unconventional natural gas development in their communities. For example, the State of Maryland has launched a preemptive educational program for citizens and mineral rights owners to prepare them for the expected influx of speculators and leasing offers.14 Maryland does not currently allow unconventional natural gas development.

However, where states have not acted, and even where they have, landowners have begun pooling information and resources into associations and strategic alliances to protect their collective rights and interests. For example, in Broome County, New York, there are 19 landowner groups representing the majority of the county’s Marcellus area and municipalities. In Pennsylvania, the Northern Wayne Property Owners Alliance boasts 1,800 members, covers more than 100,000 acres and has served as a principle agent in many lease negotiations with the Hess Corporation. Drilling is currently restricted in most of Wayne County because it falls within the Delaware River watershed where the DRBC moratorium is in place. NWPOA has even played a role in the development of regulations for drilling activity in the area while official negotiations continue.15

![Photo: Rachel Dawson | Northern Wayne Property Owners Alliance at a Delaware River Basin Commission Meeting, July 2010](http://nwpoa.club.officelive.com/default.aspx)

In West Virginia, a group of landowners has formed the West Virginia Surface Owners’ Rights Organization\textsuperscript{16} to advocate for the protection of the interests of surface owners faced with natural gas activities on their land. The group is advocating for state regulatory changes to address what they see as gaps in protections for people and the environment. According to an article in Bloomberg Businessweek, “Gas companies can still sneak onto private property to survey well sites and roads without contacting the owners first, and landowners get no notice of plans to drill until the permit is filed, the group complains. Even then, they have only 15 days to object, with no right to a public hearing.”\textsuperscript{17}

Some regional banks have also responded to the natural gas rush by developing local programs to assist and advise landowners in negotiating leases.\textsuperscript{18}

\textit{Conclusion}

The process of leasing mineral rights in today’s shale boom can be a lucrative but daunting prospect for Northeast and Midwest landowners. It is in the best interest of the individual surface and mineral rights owner to seek experienced legal counsel and sound financial advice when engaging in leasing negotiations. Increasingly, community and regional groups (in person or online) are organizing in order to share lessons and increase collective knowledge of local leasing experiences. Given the rapid pace of natural gas development in the region, state agencies also are exploring their options for helping assure that potential lesors equip themselves with the tools necessary to protect their property and interests. So far, however, this involvement has occurred primarily at the far ends of the regulatory spectrum: either through moratoria on any development or a suggestion that landowners simply seek legal assistance.

\textsuperscript{16} http://www.wvsoro.org/
\textsuperscript{17} http://www.businessweek.com/ap/financialnews/D9PA0K8O2.htm
\textsuperscript{18} http://online.wsj.com/article/SB10001424052970204450804576625250740544780.html