PENN ROAR

Pennsylvania's Royalty Owners Action Report

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Corbett Administration Vigilant Amid Media Barrage

By: T. Walczak

The ongoing Marcellus shale exploration quickly became a political scare tactic in the 2010 election for the governorship. Those in opposition to the drilling readily pointed to the lop-sided campaign donations from the industry to Republican candidates and readily predicted an environmental "Armageddon." Newspapers statewide, and even the New York Times, regularly print stories which start by using real events, then project an outcome that indicts the drilling industry in an effort to shape public opinion. Often, by the time the results of the investigations are complete, the damage has been done and the incrimination difficult to roll back.

Most recently, the story of Crystal Stroud, of Bradford County gained national attention when she alleged drilling of a nearby gas well by Chief Oil & Gas polluted her well water and led to her family's health problems. The accusations fit the anti-drillers template perfectly, but when the investigation again exonerated the driller, there was no front page retraction.

After an extensive investigation, the heightened levels of barium and lead found in her water were determined to be naturally occurring and well documented in that area by the U.S. Geological Survey, since the late 1980's. In a letter to Ms. Stroud the DEP writes, "The Department's investigation indicates that the conditions documented in your water well reflect background conditions/pre-existing and that gas well drilling has not impacted your water supply."

Still, Governor Corbett and the DEP, under his appointed Secretary Michael Krancer, have not fallen prey to the reactionary temptations of the headlines, but have rather been effectively responsive to the outcomes of the extensive investigations that follow every complaint.

Case and point, the water problems first reported in Dimock, Susquehanna County in 2009 spurred blood-curdling screams of a state-wide moratorium on drilling and prematurely blamed "fracking" for the contamination. "No Fracking" soon became a common battle-cry and popular yard-art of the opposition. However, the extensive investigations that followed the Dimock complaint determined, in 2010, that it was the migration of shallow gas that was the cause of contamination, not the demonized "fracking." As a result, on Feb. 5, 2011, DEP, under Secretary Krancer, finalized the amendment to 25 Pa. Code Chapter 78, which updated existing requirements regarding the drilling, casing, cementing, testing, monitoring and plugging of oil and gas wells, and the protection of water supplies. The strengthened regulations require best well design and construction practices, including comprehensive measures to prevent gas migration as happened in Dimock Township, Susquehanna County.

These amendments are some of the most aggressive measures adopted by the agency, under an administration previously predicted to roll over for industry. But don't expect the reforms to stop there. In Governor Corbett's first executive order on March 8, 2011, the Marcellus Shale Advisory Committee was formed "to oversee how we can build around this new industry and how we can make certain we do this while protecting our lands, our drinking water, our air – all the time growing our workforce.''

Their recommendations to the Governor are due July 22, 2011, summarizing workgroup meetings covering the topics of: 1. infrastructure, 2. public health, safety & environmental protection, 3. local impacts & emergency response, and 4. economic & workforce development. The commission was chaired by Lt. Gov James Cawley and was comprised of leaders of every field affected by the exploration.

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Serving the Citizens Who Own
National Association
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Our Country's Natural Resources

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www.portal.state.pa.us/portal/server.pt/community/marcellus_shale_advisory_commission/20074

However, these commitments never stop the raucous mobs of drilling protestors that can often be seen on the front steps of the Rachael Carson Building in Harrisburg, when the Governor's Marcellus Shale Advisory Commission meets. Yet these type protests were noticeably missing during the Rendell administration, where the most attention paid to the drilling boom was the failed attempt to assess a severance tax, which, as documented in the January '11 and March '11 Penn ROAR, did little to protect the environment or improve infrastructure in Marcellus country.

The recommendations of the Advisory Commission will be the basis for all of Governor Corbett's policies regarding the Marcellus, including the advice of the local impact working group on the Impact Fee. Also, expect much action to be taken on the recommendations made by DEP in their letter to the commission.
http://media.kjonline.com/documents/DEPLetter06031.pdf

NARO-PA has used these advisory commission meetings effectively to gain attention to our rights as royalty owners and the issues we are fighting for. This culminated with NARO-PA Chapter President presenting to the Local Impacts and Emergency Response Workgroup. Re-read the summary of her recommendations in the May 2011 Penn ROAR. These meetings have served as an effective forum for reminding our state government, at its highest levels, who we are as the mineral owners and letting them know that we are paying attention. ●

NARO-PA at the Marcellus Shale Advisory Commission meeting.
Pictured left to right: Trevor Walczak, NARO-PA VP, Lt. Gov. James Cawley, and Jacqueline Root, NARO-PA President.

Gas Leasing 101:

Written by: Attorney Dale A. Tice

What is a Division Order?

Many landowners who have been reading about the development of the Marcellus shale or have attended educational workshops are familiar with production units. The gas leases used by companies drilling in the Marcellus allow the gas companies to combine or pool the properties of multiple landowners into a production unit. The unit defines that area that the company intends to produce natural gas from by drilling multiple horizontal wells. All of the landowners with acreage in the unit will share in the royalties based on their proportional ownership of the unit.

To properly apportion royalties, the gas company will calculate each landowner's interest in gas production from wells drilled on the unit – this interest is expressed as a number called the Decimal Interest. The decimal interest is calculated by dividing the number of acres the landowner has in the unit by the total number of acres in the unit, multiplied by the royalty percentage under the gas lease. For instance, a landowner who had signed a lease with 15% royalties and now has 200 acres in a 600 acre production unit would have a decimal interest as follows:

200 / 600 X .15 = .04999999

Thus, if one well on the unit produced $1,000,000 of natural gas, the landowner's share would be:

$1,000,000 X .04999999 = $49,999

Similarly, if six wells produced $6,000,000, the landowner's share would be:

$6,000,000 X .04999999 = $299,999

Before receiving their first royalty check, most landowners will be asked to sign a document called a Division Order which will list the property owner's decimal interest in the gas produced from a pooled production unit. Though some gas companies do not use division orders, many of the large gas producers will require the return of a signed division order before issuing any royalties.

There are a number of issues to consider before signing a division order. Checking the math to make sure that the gas company has calculated the decimal interest correctly is obviously important, but landowners must also read the document carefully. In some cases the division order may attempt to change the terms of the oil and gas lease, possibly removing some of the protections that the landowner negotiated into the lease. Most division orders will also include a warranty of title by the person signing, which is advantageous for the gas company, but not for the landowner. Because a division order is a binding legal document that will directly impact a landowner's royalties, it is generally recommended that a division order be reviewed by an experienced oil and gas attorney before signing.

What does it mean to deduct post-production costs from royalties?

The primary financial incentive for landowners to sign an oil and gas lease is the royalty payment. While some of the cash-bonus payments that landowners have received seem large, the potential royalties far exceed even the most substantial signing bonus. The leases offered very early in the gas leasing boom often paid the state minimum 1/8 (12.5%) royalty. However, leases in

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2010 more commonly include royalties in the range from 15% to 20%, or even higher.

Many gas leases provide that the landowner's royalty accrues "at the wellhead." This language is generally interpreted to mean that the gas company pays all of the costs incurred to drill the well and move the gas from the target formation to the surface. After the gas reaches the top of the wellhead and the landowner's royalty attaches, the gas company and the landowner then share in all of the costs necessary render the gas into a marketable product and to transport the gas to the point of sale. These costs are often referred to as "post-production costs."

While there are many variations in the verbiage, the bottom line is that the large majority of the leases used by the operators in the Marcellus Shale allow the gas company to deduct post –production costs from the landowner's royalties. Like all lease provisions, however, this is a negotiable point. If the subject property is located in an area of interest to the gas companies, it may be possible to request an addendum to the lease specifically providing that the landowner's royalty is paid without deductions to treat and transport the gas.

It is difficult to generalize regarding the impact of deductions for post-production costs on landowner royalties. Nevertheless, it is always to the landowner's benefit to restrict the gas company's right to deduct such costs from the royalty share. There is even concern that the deductions may provide an opportunity for a company to deliberately underpay the landowner royalty. In fact, a lawsuit that recently settled for millions of dollars alleged that two energy companies deliberately underpaid royalties to the federal government. http://tinyurl.com/34jey53.

As always, it is recommended that landowners who are considering signing a gas lease consult with an experienced oil and gas attorney to ensure that the lease clearly and unambiguously states that royalties are paid without deductions for post-production costs. In addition, it is beneficial for the landowner to retain the right to audit the books of the gas company in order to verify that the royalties are calculated fairly and properly.

What is a Shut-In Royalty?

Natural gas drilling in the Marcellus Shale is taking off. In 2010 alone over 1,200 natural gas wells have been drilled in the Marcellus region of Pennsylvania: http://www.marcellus.psu.edu/images/well_animation.gif

Despite the recent trend toward lower natural gas prices, the pace of drilling has accelerated and is expected to further increase over the coming years. But while wells are being drilled now, the pipeline infrastructure to transport the gas to consumers is far from complete. Pipeline companies are currently in the process of constructing the gathering lines, but in many cases the wells are completed and capable of production before the pipeline that will connect to the well is in place. The expression used to describe a well that is capable of gas production but is not yet connected to a pipeline is "shut-in."

The typical oil and gas lease does not include any type of provision specifically stating when the gas company must market the gas that is capable of being produced from a well. However, the lease will in most cases provide for some form of compensation to the landowner during the period when gas is not sold from the leased premises. Various terms have been used to label this payment, but most often this is found in the lease as the "shut-in royalty."

The concept of a payment for the time from when the well is drilled until the gas is marketed sounds appealing, but in reality the shut-in royalty is often structured as a nominal payment made annually that does not adequately compensate the landowner for the time when royalties are not forthcoming. An additional concern is that the gas company could choose to voluntarily shut-in a well that is connected to a pipeline, thus holding the gas in reserve. From a purely economic standpoint, the decision to hold a well as shut-in may make sense when the price of natural gas is low, particularly if there is reason to believe that the price of gas may significantly increase in the future. However, for a landowner who has been patiently waiting for royalties and finally sees the producing well connected to a pipeline, the prospect of an indefinite postponement of the wealth from royalties can be discouraging.

The time to address these concerns is during gas lease negotiations. One solution is to negotiate for an increased shut-in royalty, though even a substantially larger payment is unlikely to approach the potential royalties. Another possibility is to place a fixed time limit on how long the lease can be maintained in effect solely by payment of the shut-in royalty. Finally, it is generally advisable to include verbiage in the lease placing a duty on the gas company to make a good-faith effort to market gas production from a well within a reasonable time period. ●

Gas Well Drilling and Your Private Water Supply

Excerpts from Penn State University Water Fact Sheet
#28, rev. Sept. 15, 2008

Gas well drilling has occurred for decades in much of western and northern Pennsylvania with about 40,000 active gas wells in the state and approximately 4,000 new wells drilled each year. Most of these wells tap gas reserves a few thousand feet below the earth's surface. With discoveries of new gas reserves in the Marcellus shale and new drilling technologies to reach previously untapped gas reserves, both the number and depth of gas wells are expected to rise dramatically over the next decade.

Gas well drilling is regulated by the Oil and Gas Act of 1984. This act regulates the permitting, construction, and abandonment of gas wells drilled throughout the state. Before drilling a gas well in Pennsylvania, the operator must obtain a permit including a map that shows the location of the well, proximity of the well to coal seams, and distances to nearby surface water and water supplies. The map must include the projected horizontal boreholes, property lines, and acreage which will be disturbed during drilling. A bond of $2,500 for a single well or $25,000 for a number of wells must be posted with the permit to ensure compliance with environmental regulations related to well drilling. The permit also requires notification of surface land owners and coal mineral right owners at the well site along with all drinking water supply owners within 1,000 feet of the gas well. Notification of these various stakeholders is done by certified mail. As a result, homeowners with private wells or springs which are located within 1,000 feet of the proposed gas well site should receive notification by certified mail during the permit process.

Section 208 of the act specifically includes language to protect nearby drinking water supplies. This includes a requirement that gas well drilling operators restore or replace any water supply determined by the Department of Environmental Protection (DEP) to be polluted as a result of nearby gas well drilling. The gas well operators are presumed to be responsible for pollution of any water supply within 1,000 feet of the gas well.

The operators can use any one of five defenses to prove they are not responsible for water contamination including:

- The pollution existed prior to the drilling
- The landowner or water purveyor refused to allow the operator access to conduct a pre-drilling water test
- The water supply is not within 1,000 feet of the well
- The pollution occurred more than six months after completion of drilling
- The pollution occurred as the result of some cause other than drilling

To preserve their defense, most gas well operators will collect the necessary pre-drilling water quality information from all water supplies within 1,000 feet of their drilling operation.

An employee or subcontractor from the certified laboratory will visit homes within 1,000 feet of the proposed gas well site to collect the water samples. This ensures that the samples are collected correctly using proper methods and materials. To ensure data quality, documentation must be completed for each sample showing proper sample collection, preservation, handling procedures and chain of custody.

Here are some important things to remember if you are visited by someone wanting to test your water:

- Do not deny access to the water testing laboratory personnel. It is important to note that gas well operators are NOT presumed responsible for water supply problems if the complaint comes from someone who refused them access to a water supply.
- Get the name and company affiliation of any person asking to sample your water supply and ask for proof of identification.
- Tell the person testing your water supply as much as you know about your water supply including approximate depth, age, and treatment devices. This information will help them to determine proper sampling locations. It may also help the gas drilling company to choose proper drilling techniques to avoid causing problems to your water supply.
- Ask what water quality tests will be performed by the laboratory on your water sample. This list may help you decide if you want to have your own, more

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extensive water test done at you own cost.
• Ask the lab employee to send a copy of the water test results to you.

Homeowners who have their water supply tested as part of a pre-drilling survey have the right to receive copies of the water testing results. Ask when you can expect to receive these water test results.
Gas well construction involves extensive disturbance including roads, drilling pads and pipelines. Drilling pads alone may be four to six acres in size for deeper gas wells. Various regulations are in place to protect surface water and groundwater from erosion and sedimentation due to these disturbances.

Erosion and sediment plans will require the use of filter fence, sediment traps, vegetation, hay bales, culverts with energy dissipaters, and rock road entrances to minimize erosion.
These plans also include a requirement to restore vegetation to the drill site pad within nine months of well completion by planting grass, trees, or food plots. Enforcement of erosion and sediment problems related to gas well operations is overseen by the DEP, Bureau of Oil and Gas Management and each county's Conservation District.
New protections were placed in the 1984 Oil and Gas Act to ensure that groundwater aquifers are not contaminated by drilling fluids, brines and wastes. A thick, steel casing is cemented into place from the ground surface to below the deepest fresh water aquifer. This freshwater protection string segregates the fresh groundwater from the drilling process and prevents waste fluids from entering freshwater aquifers.

How to find a laboratory to perform the testing:

1. The DEP Laboratory Accreditation Program offers a "Search PA Accredited Environmental Laboratories" option at the following Web site www.depweb.state.pa.us/labs. Choose "Laboratory Accreditation Program" on the right-hand side of the page. Scroll to "Search Environmental Laboratories." Use this search to find a laboratory accredited to perform these tests.
2. Contact a local laboratory and ask if it can perform the above testing or if it could help you find a laboratory.
3. Contact the DEP Laboratory Accreditation Program via e-mail at eplabaccredit@state.pa.us or via telephone at 717-346-7200.

What to ask/tell the laboratory before you send samples:

1. Inform the chosen laboratory that you are a homeowner who wants to have well water tested for Oil & Gas Pre-Drill parameters.
2. Ask the laboratory if it is accredited to perform the requested testing. If the laboratory is not, ask if it will subcontract to an accredited laboratory.
3. Ask the laboratory if it provides sample-collection services. DEP recommends that a third party (a consultant or the laboratory) collect and transport the sample for testing.
4. Instruct the laboratory to perform the testing and reporting of your sample(s) in accordance with all Chapter 252 Accreditation Requirements.

Homeowners can sign up for DEP's e-notice system to receive notice of well permit applications DEP has received for wells in the area they choose. The Web site address is: http://www.ahs2.dep.state.pa.us/eNOTICEWeb/.●

Check out the NARO-PA Chapter website:

http://www.naro-us.org/Pennsylvania

NARO members can log in to the members only message board to get reliable information about natural gas drilling in Pennsylvania.

- Research archived PENNROAR newsletters.
- Post a story of interest
- Visit the NARO Store for gas & oil publications
- Browse other state chapters to find out what's happening in other plays

Pipelines: Digging Deeper into Regulations

By: Bill Wilson

In her testimony at the En Banc Hearing held by the Pennsylvania Public Utility Commission (PUC) on April 22, 2010, Marcellus Shale Coalition (MSC) President Kathryn Klaber identified three key points:

• Industry support for the regulation of gathering pipelines consistent with the comprehensive requirements of 49 CFR 192 overseen by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA). The Marcellus Shale Coalition supports the Public Utility Commission becoming a state agent for the purpose of inspecting and enforcing these current, federal safety regulatory requirements.

• The Marcellus Shale Coalition believes gathering facilities are regulated appropriately for safety under the federal law and that existing regulations, which articulate very specific design, operation and maintenance standards and protocols will address development of the Marcellus Shale safely and efficiently.

• The Marcellus Shale Commission believes the regulation of natural gas gathering for safety purposes is an independent issue from utility regulation and the two issues should not be intermingled.

Why should property owners, and the citizenry in general, be cautious of the impact of implementing the federal rules as stated?

Because if one takes a serious in depth look at the federal regulations CFR49 part 192, they will find the following:

§ 192.1 ***What is the scope of this part?***

(a) This part prescribes minimum safety requirements for pipeline facilities and the transportation of gas, including pipeline facilities and the transportation of gas within the limits of the outer continental shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331).

(b) This part does not apply to—

(4) Onshore gathering of gas—

(ii) Through a pipeline that is not a regulated onshore gathering line (as determined in §192.8);

§ 192.8 **How are onshore gathering lines and regulated onshore gathering lines determined?**

(a) An operator must use API RP 80 (incorporated by reference, see §192.7), to determine if an onshore pipeline (or part of a connected series of pipelines) is an onshore gathering line. The determination is subject to the limitations listed below. After making this determination, an operator must determine if the onshore gathering line is a regulated onshore gathering line under paragraph (b) of this section.

API RP80, an American Petroleum Institute 50+ page document, basically says that gathering lines start at a point where production lines end, such as where multiple production lines come together or a treatment facility is located, and end at a processing facility or at a transmission line.

(b) For purposes of §192.9, What requirements apply to gathering lines? "regulated onshore gathering line" means:

(1) Each onshore gathering line, or segment of onshore gathering line, with a feature described in the second column that lies in an area described in the third column; and ***(**the additional information in the regulation between (1) and the following chart was omitted as not relevant to most locally planned Gathering System Pipelines**)

Type	Feature	Area	Safety buffer
A	—Metallic and the MAOP produces a hoop stress of 20 percent or more of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part	Class 2, 3, or 4 location (*see* §192.5)	None.

Pipelines digging deeper continued from page 7

MAOP is the Maximum Allowable Operating Pressure and SMYS is Specified Minimum Yield Strength (generally assigned by the manufacturer). Most gathering lines being built locally will probably have a MAOP greater than 20% SMYS, so Class 2, 3, and 4 will be regulated and fall under the same standards as those imposed on interstate transmission lines, as stated in § 192.9

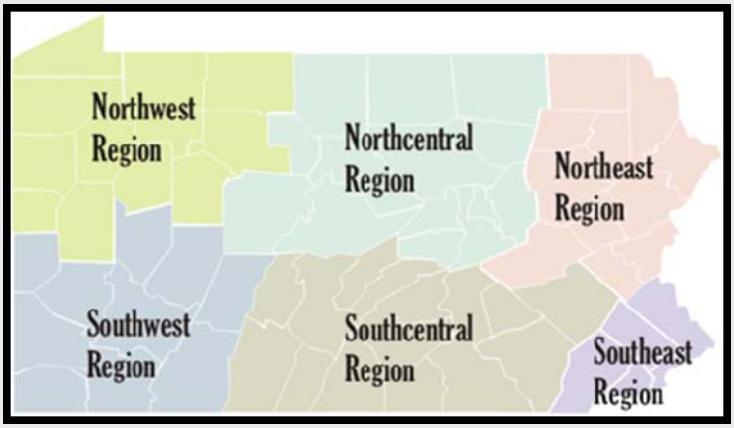
> (c) *Type A lines.* An operator of a Type A regulated onshore gathering line must comply with the requirements of this part applicable to transmission lines, except the requirements in §192.150 and in subpart O of this part. However, an operator of a Type A regulated onshore gathering line in a Class 2 location may demonstrate compliance with subpart N by describing the processes it uses to determine the qualification of persons performing operations and maintenance tasks

192.150 deals with *Passage of Internal Inspection Devices* and subpart O encompass *Gas Transmission Pipeline Integrity Management.*

The Class areas in the chart are as follows: Class 1 locations have 10 or less dwelling units per mile within 220 yards of the pipeline, Class 2 have 11-46 dwelling units so located and class 3 and 4 are more densely populated areas.

NOTE: Class 1 locations do not fall under the protective provisions of the federal regulations, and if Pennsylvania adopts the federal regulations as recommended by the Marcellus Shale Coalition, they won't. For that reason NARO members should contact their State representatives and senators and request state regulation at a higher level.

Look around where you live. You'll see that many landowners will be exempt from State and Federal protective measures unless you act. ●



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Appraising Natural Gas Royalty Interests in the Marcellus Shale

Part 2 of 3; Continued from May 2011 Penn ROAR

By: Rich Miller, Richard J. Miller & Associates Appraisals Inc.

Appraising Leased and Partially Developed Properties

Leased and partially developed properties present a difficult appraisal challenge requiring that the extent of "partial development" of the subject property, be defined. Are there any wells drilled on the property? Are there any wells drilled on adjacent/adjoining properties? Are there producing wells nearby? Have drilling permits been issued for the subject property and/or for adjacent properties? Has the operator issued a Notice of Development for the property? Are there well pads cut on the property? How far is the nearest producing well? Is it operated by the same company as the subject property? How far away is the nearest gas gathering pipeline? If there are no wells drilled or in progress on the property, how much time remains in the primary term of the lease? Is the property part of a "pooled unit" and, if so, what share of the production and sales from the unit would come to the royalty owner?

Depending on the answers to these questions (and many others), the property may fall somewhere on a spectrum ranging from Leased Undeveloped to nearly Producing. There is no simple way to place the property on the spectrum. A property with a well drilled but not producing (tests do not count), where there are no other wells in the surrounding area (same township or two or three away), or where there is no existing gathering system and no likelihood of a system being completed in the near future might as well be undeveloped from a royalty value standpoint. There is no reasonable way, short of speculation, to estimate when production and sales might begin, what the production rate(s) and decline trend would be, and what the price of gas might be at the time that production begins. Absent a Declaration of Pooling and appropriate division orders, the effective ownership interest is also unknown.

A property in some lesser stage of development would require a greater level of speculation in order to assign an "appraised" value. There can be a temptation to say that since the Lessee has made some efforts toward development, such as cutting a well pad or running a seismic survey, there is "value added" to the property. But that value, if any, does not accrue to the royalty interest except as may eventually lead to drilling and production. Depending on the language of the lease, such actions could be construed as "operations" and take the lease out of the primary term. This could result in (a) the termination of delay rental payments and/or (b) remove the possibility of any anticipated bonuses from extension of the lease or re-leasing of the property.

1. The Lessee finds economic production and the Lessor receives a royalty for so long as gas is produced and sold. This condition anticipates that future drilling on the property is followed by the production and sale of natural gas from one or more wells on the subject property or on lands with which the subject property is pooled or unitized and where the Lessor would receive a royalty on all sales of oil and/or natural gas for the duration of production from the property. This anticipated income can, in certain circumstances, be appraised and a value could be assigned to the future income stream using generally accepted appraisal methods such as a discounted cash flow.

2. The Lessee does not drill but negotiates to renew and/or extend the lease for another period of time. Where there is no provision in the lease for automatic extension the lessee would have to negotiate a renewal or an extension of the existing lease or a new lease. The terms of a new/renewed/extended lease could include a bonus payment, increased royalty, and/or increased rental payments, however, the amounts of these payments cannot be estimated with any certainty. While a new lease could result, the estimation of the terms and duration of the new lease are subject to speculation, would include too many opportunities for material error, and would not likely provide a reliable estimate of value.

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3. The Lessee does not drill and allows the lease to terminate. A valuation under this circumstance anticipates that on the expiry of the primary term the Lessee does not extend or renew the lease but allows the lease to lapse. At that time, a new lease could be written with another Lessee that might bring a bonus payment and/or additional delay rental payments at a market rate thereby creating a new income stream that could be valued by discounted cash flow. The valuation of the anticipated income from a new lease would require that two conditions be satisfied as of the date of appraisal. First, knowledge that an active leasing market would exist for properties similar to the subject property. The fact that the original Lessee allowed the lease to terminate would have to be considered a negative. Second, a knowledge of the bonus and/or delay rental payment rates likely to be offered at that time.

   Given the volatility of observed leasing offers, the estimation of the terms that would be offered at some point in the future cannot be done with any degree of accuracy and, as with the valuation of future royalty revenue, would include too many opportunities for material error, and would not likely provide a reliable estimate of value.

4. The Lessee finds uneconomic production and/or determines that a well is a dry hole and terminates further drilling. In this case there is no royalty income to be valued and a very low likelihood of releasing the property to a third party.

In Cases 1 and 2 there is potential future income but of an undetermined amount. In Cases 3 and 4 there is little or, more likely, no potential future income. The Lessor's interest therefore has some value or no value but neither circumstance can be known as of the appraisal date nor can the value of any future income, if any, be determined.●

To Drill or Not to Drill – Does Pennsylvania Recognize an Implied Covenant of Further Exploration?[1]

By Robert J. Burnett, Esquire

Over the last 18 months natural gas operators from all over the world have converged on Western Pennsylvania. Their goal has been to secure new leases from landowners holding valuable mineral rights in the deeper Marcellus Shale formation. This rush to access the Marcellus Shale is now creating tension between landowners with existing oil/gas leases and their respective lessees. The royalty payments generated from these older, shallow well leases pale in comparison to the large signing bonuses and high-volume royalties associated with deeper Marcellus wells. As such, many of these landowners are now trying to "get out" of their existing leases and sign new, potentially more lucrative, Marcellus leases.

Terminating a producing gas lease is difficult. Almost all gas leases have secondary terms of indefinite duration so long as gas is being produced "in paying quantities." Essentially, this means that an operator can maintain and hold the leased acreage with a single producing well. Does the operator, however, now have an obligation to explore the deeper Marcellus formation? Put another way, can the operator ignore the Marcellus formation and still maintain the lease? Some states have recognized an implied lease covenant which requires the operator to drill exploratory gas wells into unproven formations and strata or risk cancellation of the unexplored portions of the lease. This controversial covenant is popularly known as the "implied covenant of further exploration." This covenant, if recognized in Pennsylvania, could give many landowners the grounds to cancel older, shallow gas leases in favor of a Marcellus lease.

Pennsylvania currently recognizes three (3) implied covenants: i) the implied duty to protect the leased premises from drainage caused by adjoining operations; ii) the implied duty to reasonably develop the leased premises; and iii) the implied duty to market the gas extracted from the land. These duties will be implied in every gas lease unless expressly negated by the parties' written lease. In order to appreciate the significance of the implied covenant of further exploration, a brief description of the currently recognized covenants is warranted.

The implied covenant to protect against drainage requires the operator to drill an offset well in certain situations. Gas is fugitive and can migrate from one part of a reservoir to another. Without an offset well to capture the gas, the resource may be depleted by gas wells outside the leasehold but within a common reservoir. In the absence of an express clause to the contrary, Pennsylvania courts have recognized an implied covenant to drill a well "offsetting" those on adjoining tracts. In Kleppner v. Lemon, the Pennsylvania Supreme Court observed that the operator "...shall put down so many wells as may be reasonably necessary to secure the oil, for the common advantage of both lessor and lessee." *See*, Kleppner v. Lemon, 35 A. 109 (Pa. 1896). A breach of this covenant results in the permanent loss of the gas resource and can justify cancellation of the entire lease.

Pennsylvania also recognizes an implied duty to reasonably market the gas. This covenant requires the operator to diligently market the gas. The covenant is generally implicated when the operator takes little or no effort to secure a pipeline to the well, thereby denying the landowner his or her extraction royalty. The Pennsylvania Supreme Court long ago noted that upon the discovery of gas, the operator is "under an obligation to operate for the common good of both parties" and pay the extraction royalty. *See*, Iams v. Carnegie Natural Gas, 45 A. 54, 54-55 (Pa. 1899). Without a pipeline to transport the gas to market, no royalty is ever generated and the operator runs the risk of breaching this covenant.

Finally, Pennsylvania law generally requires an operator to reasonably develop proven formations. Upon the discovery of gas in paying quantities, the operator is under an obligation to drill additional wells as reasonably necessary to recover as much of the gas from that formation. The operator is required to engage in further development only if the additional wells would be "profitable" This covenant, however, was recently limited by the Pennsylvania Supreme Court in Jacobs v. CNG Transmission Corp., 772 A.2d 445 (Pa. 2001). In Jacobs, the court held that there is no duty to develop if the lease itself provides the lessor compensation (*i.e.,* delay rentals, gas storage fees, etc.) during the period of non-production. "An implied covenant to develop...exists only when the

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only compensation to the landowner...is royalty payments resulting from extraction." Jacobs, 772 A.2d at 455. If the lease provides for the payment of delay rentals or gas storage fees, Pennsylvania will no longer imply a duty to develop the leasehold.

As noted above, the implied covenant of reasonable development, even in its post-Jacobs form, only applies to proven formations. In other words, the obligation to develop the leasehold only arises after gas is discovered "in paying quantities." What about unproven formations or strata? Is there a duty to explore all horizons and strata located within a leasehold? A minority of courts and commentators have suggested that there exists an implied duty to explore such unproven formations.

The covenant, in essence, requires the operator to drill exploratory wells in the unproven formations or horizons located within the leasehold footprint. Colorado and Arkansas have both recognized this covenant as a means of discouraging the practice of holding a large leasehold with a minimally producing well. "Production on only a small portion of the leased land does not justify allowing the lessee to hold the entire leasehold indefinitely, thus depriving the lessor of receiving royalties from another arrangement." Bryd v. Bradham, 655 S.W.2d 366, 367 (Ark. 1983). Colorado has further observed that the operator "may not hold the land merely for speculation in the hope that non-viable mineral holdings will become economic at some unknown time in the future..." North York Land Associates v. Bryon Oil Industries, 695 P.2d 1188, 1191 (Colo. Ct. App. 1985). Thus, in jurisdictions that recognize this covenant, an operator cannot simply drill a well and then cease all further exploratory operations. *See*, Ezzel v. Oil Associates, 22 S.W.2d 1015 (Ark. 1930) (lessee's obligation to explore is ongoing, even after paying quantities are discovered); *See also* Davis v. Ross Production, 910 S.W.2d 209, 212 (Ark. 1995) (an implied covenant exists on the part of the lessee to explore the property with reasonable diligence). The operator is under a duty to investigate, test and explore other areas of the leasehold or risk cancellation of the lease. *See*, Carter v. Arkansas Louisiana Gas Co., 36 So. 2d 26 (La. 1948) (it is an implied condition that the lessee will test every part of the leased premises).

In establishing a breach of this covenant, the landowner does not have to demonstrate that the unproven formations or horizons would be profitable. "[T]he implied covenant of further exploration does not need such proof, but rather requires the lessor to show unreasonability by the lessee in not exploring further..." *See*, Gillette v. Pepper Tank Co., 694 P.2d 369, 372 (Colo. Ct.App. 1984). The inquiry does not focus on whether gas "in paying quantities" would be found. Instead the focus is on whether a reasonably prudent operator would have "tested" the unproven formations. The loss or damage to the landowner from the lack of exploratory testing is difficult to quantify. As such, the usual remedy has been cancellation of the unexplored portions of the lease. *See*, Gillette v. Pepper Tank Co., *supra*; North York Land Associates v. Bryon Oil Industries, *supra*.

Several prominent oil and gas jurisdictions, such as Texas and Oklahoma, have expressly rejected the covenant. Texas has held that no implied covenant of further exploration exists independent of the implied covenant of reasonable development. Sun Exploration & Production Company v. Jackson, 783 S.W.2d 202 (Texas 1989). In Jackson, the Supreme Court of Texas explained that there is no distinction between an exploratory well and a developmental well: the operator need not drill unless there is an expectation of profit. The Jackson court further held that, in a "failure to explore" case, the landowner must still prove a "reasonable expectation of profit" in the unproven formations. *See* Jackson, 783 S.W.2d at 204. This standard requires the landowner to prove that a reasonably prudent operator would have "a reasonable expectation of profit" in drilling on a unproven formation. *Id.* at 204; *See also* Clifton v. Koontz, 325 S.W.2d684 (Texas 1959). A landowner in Texas has a steep burden and must prove that gas exists in profitable quantities. *See* Jackson, 783 S.W.2d at 204; *See also* Mitchell v. Amerada Hess Corp., 638 P.2d 441, 449 (Okl 1982) (following Texas and holding there is no implied covenant to further explore after paying production is obtained). Colorado, Arkansas, Louisiana and possibly Kansas have rejected this approach and do not consider profitability when analyzing a breach of the implied covenant of further exploration.

It is unclear whether Pennsylvania recognizes this covenant. In Aye v. Philadelphia Co., 44 A. 555 (Pa. 1899), a lease provided that a test well would be drilled within six months and, if oil was discovered, a production well would be drilled. Aye, 44 A. at 556. A test well was drilled but it was dry and no oil was discovered. The operator never conducted any further exploration. The Pennsylvania Supreme Court held that

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there was an implied duty to drill other test wells:

> ". . . there is an implied obligation on the lessee to proceed with the exploration and development of the land with reasonable diligence. . . "

Aye , 44 A. at 556. Because the operator had failed to conduct any further exploratory activities, the Aye court found that the operator had abandoned the lease. *See also*, Calhoon v. Neely, 50 A. 967, 968 (Pa. 1902). (failure to explore premises for over nine years after drilling dry hole constituted surrender of the lease). While the Aye court did not expressly announce or state that an implied covenant of further exploration exists in Pennsylvania, the court did recognize an implied duty to drill test wells.

More recently, in Jacobs v. CNG Transmission Corp., 332 F. Supp. 2d 759 (W.D. Pa. 2004), the Western District of Pennsylvania concluded that the operator had surrendered its rights to the deeper gas formations by failing to conduct any exploratory activities for nearly forty years:

> "Here the defendant failed to conduct any exploration or development of the leasehold during the primary term and in the subsequent thirty-eight years that followed."

Jacobs, 332 F. Supp. 2d at 796. The Jacobs court further than noted that the operator's protracted inactivity had deprived the landowner "of the right to have exploration of the property undertaken." *Id.* at 796. In order to remedy this breach, the court cancelled the operator's rights in any substrata below "the hundred foot sands" where the operator had been engaged in gas storage. *Id.* The unexplored, deeper gas formations were therefore severed from the original lease so as to give another operator the opportunity to explore and develop those deeper horizons. In support of this remedy, the Jacobs court cited the Aye opinion and observed that "Pennsylvania law has consistently recognized that an unexplained failure to develop an oil and gas lease. gives rise to a fair presumption of abandonment." *Id*. at 796. Although the Jacobs court did not specifically reference the implied covenant by name, it arguably applied the policy behind the covenant and prevented the operator from holding unexplored horizons for an indefinite period of time. *But see*, Penneco Pipeline Co. v. Dominion Transmission Inc., 2007 WL 1847391 (W.D. Pa. 2007) (rejecting landowner's claim that deeper strata should be severed due to inactivity and non-production). As such, Jacobs could be a subtle sign that Pennsylvania may soon be joining the minority of jurisdictions that recognize this implied covenant.●

Yaw's Oil and Gas 'Invoice Itemization' Bill Passes Senate

Currently, Pennsylvania does not require gas companies to list deductions from royalties paid to landowners on monthly payments.

Senate Bill 460 now moves to the House of Representatives for consideration.

For more information about SB 460, see the archived March 2011 & May 2011 Penn Roar @ www.naro-us.org

Legislative Update:

The Impact of the Impact Fee

By: T. Walczak

The precarious place where political pressure collides head-on with campaign promises is where we find the Marcellus Shale Impact Fee. Candidate Corbett openly opposed a severance tax, while the Republican house and Senate pledged no new taxes. Meanwhile, each negative headline the Marcellus exploration grabbed was used to beat the drum for popular support of a severance tax. The budget battle only fanned the flames.

The Impact Fee became a nuance born out of expediency, most notably with Senator Mary Jo White, who chairs the Senate Environmental Resources and Energy Committee. She stated that "We want to be clear to distinguish an impact fee from a tax. A fee is tailored to defray the cost of an activity, while a tax is levied on an activity and the revenue redistributed elsewhere – a redistribution of income," said White. "We've all been put on notice that there will be no new taxes. This is an attempt to provide some relief to communities that experience direct impacts due to drilling." If that were the case, 100% would be returning to the communities seeing the impact, right? Maybe we should keep reading…

As amended by the committee, Senate Bill 1100 would set the fee at a flat $40,000 in the first year of production, followed by $30,000 in year two and $20,000 in year three. A fee of $10,000 would be assessed from years four through 10. White said the schedule reflects the decrease in community impacts as the well production decreases.

Introduced with much fanfare by Sen. Scarnati (R-25), SB 1100 moved through committee in one day, but not without some major amendments. The fast-tracked bill was widely accepted as a bargaining chip if the democrats pushed back hard in a budget battle. This indicates there may be some similarities to other previously proposed severance taxes. This can be documented in §2313 Environment Initiatives Distribution of Fee. This initiative spending accounts for 40% of the Impact Fees allocation.

Of the total revenue collected, 60% would go to local and county governments with drilling activity, and 40% would go for environmental and safety initiatives. Think "special projects." This 40% includes allocations to the commonwealth financing authority to only be used for projects, anywhere in the state, such as acid mine abatement, sewer and storm water improvements, plugging of abandoned wells, and grants for watershed protection. Portions are also set aside for allocations to the motor license fund and hazardous sites clean-up fund. I think we could call this portion a little redistributive…

Arguably, the case can be made that the component of the Impact Fee which credits 30% of the fee a company pays can be credited back to the driller if they donate to affordable housing programs, is also redistributive in nature. So by this definition, the fee is another 30% redistributive? At least this component stays in the county it came from.

However, before any distribution is made, a predetermined increasing yearly rate is first deducted from the special impact fee account for an automatic allocation to the County Conservation District Fund. Critics of the drilling industry have noted that a large portion of the violations cited by DEP have been for erosion and sediment control procedures not being adequately followed. This is a first move to empower the county conservation districts to compliment DEP in the interim between their inspections of operations.

The amended bill also sets aside $1 million a year for training and equipment for emergency responders in Marcellus Shale drilling areas. Funds generated for the county can even be used for property tax relief. Maybe we will have better luck with the gas than we did with the casinos…

Most notably eliminated in committee was the volume and price adjustment factors which, as originally proposed, multiplied in a formula to increase the fee collected if the well's production was better than average. This was the biggest similarity to a severance tax, which also would have made royalty owners liable for their share. With this provision eliminated, the fee no longer makes royalty owners liable for a percentage.

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The Impact of the Impact Fee Continued from page 15

The most attractive feature of this bill is clarification it provides to townships by establishing a model zoning ordinance, which a township cannot overstep if it hopes to get any of the money allocated from the fee. To date, confusion has existed across the commonwealth as to what a township can regulate in relation to natural gas drilling activities within its borders. This has resulted in numerous constitutional encroachments on our right to develop our mineral estate and an obstacle to the drilling companies who must attempt to work within these encroachments.

Overall, this is a bill that has gained some support as being the lesser of two evils. The liabilities to landowners have been replaced by some protections in the form of restricting zoning over-reaching. If this new tax gains industry support, what must be the concession on the lawmaker's behalf to them? How will that concession affect Pennsylvania's royalty owners?

However, as discussed in the severance tax examinations in the January and March 2011 Penn ROAR, these tax proposals subtract from Pennsylvania's ability to compete on the global natural gas market. While there are impacts that need to be addressed on a local level, the redistributive aspects are unacceptable to the Marcellus royalty owner.

As an alternative, the split should be 75/25 and the 25% allocation should restrict funding "initiatives" to Marcellus counties and the Marcellus Works bundle of bills. www.marcellusworks.net/ Trim the fat and lower the fee.

Politically speaking, most Harrisburg insiders feel we will see this bill passed by the end of 2011, since it will quiet the calls for a severance tax by the opponents of the drilling, as well as sidestep the casual critics who point to a no new taxes pledge. It may also have been agreed to behind closed doors as part of the budget battle, but tabled to potentially allow the Advisory Commission to provide cover. For those keeping score, if it walks like a duck and talks like a duck, naming it "cow" doesn't make it any less of a duck.

SB 1100: The Impact Fee's Model Zoning Ordinance:

The model zoning ordinance shall do all of the following:

(i) Authorize oil and gas development as a permitted use by right in all zoning districts except residential districts. The commission may develop a model zoning ordinance that allows oil and gas development in residential zoning districts by conditional use or special exception with conditions dependent on the density of existing uses within the district and the isolation distances achievable in each residential district.

(ii) Authorize natural gas compression stations:

(A) as a permitted use by right in all agricultural, industrial and commercial districts; and

(B) as a conditional use in all other zoning districts.

(iii) Authorize natural gas processing plants:

(A) as a permitted use by right in all industrial districts; and

(B) as a conditional use or special exception in agricultural districts.

The model zoning ordinance shall not do any of the following:

(i) Impose limitations on the hours of operation on drilling operations.

(ii) Impose limitations on noise, light, height or security or fencing on drilling operations, natural gas compressor stations or natural gas processing plants if the limitations are more stringent than limitations imposed on construction activities for other similar land uses. The model zoning ordinance may include limitations on noise, light, height and security and fencing for equipment or processes which are unique to the gas industry and which are rational, nondiscriminatory and reasonably defensible in the particular zone where they apply.

(iii) Have a permit review period for uses by right that exceeds 30 days for complete and responsive submissions.

(iv) Impose restrictions on vehicular access routes for overweight vehicles except as authorized under:

(A) 75 Pa.C.S. (relating to vehicles); or

(B) the Pennsylvania Municipalities Planning Code.

(v) Regulate storm water, erosion and sedimentation control or grading where the use is subject to regulation by the department through an Erosion and Sedimentation Control General Permit or similar permit.