



Developments in Marcellus Shale

By *Herbert K. Sudfeld, Jr.*



Pennsylvania sits directly atop the Marcellus Shale formation, the largest unconventional natural gas reserve in the world. A recent Penn State study found the formation may

hold 489 trillion cubic feet of natural gas – more than double the natural gas reserves of Saudi Arabia. In economic terms, development of the Marcellus Shale is expected to create hundreds of thousands of new jobs and hundreds of billions in royalty and lease payments to landowners, with expected total revenues exceeding that to be spread among industry players over the life of the gas reserve, which could span 50 years or more.

The Marcellus Shale rock formation has been reported to be roughly the size of Greece. It lies about 5,000 to 6,000 feet, or roughly one mile, below the surface. How deep is 5,000 to 6,000 feet? It is more than four Empire State Buildings stacked end to end, as deep as the deepest part of the Grand Canyon and more than 17 football fields laid out goal line to goal line.

The rock formation actually outcrops (comes to the surface) about 10 miles southwest of Syracuse in Marcellus, NY, from where the formation gets its name.

Here in Pennsylvania, the north central part of the state has seen the most activity related to the shale, but oil and gas leasing is occurring just outside Pittsburgh and extending through the central and north central part of the state. The Delaware River Basin, which encompasses much of the northeastern part of Pennsylvania, is currently under a drilling moratorium imposed by the Delaware River Basin Commission (DRBC) while it drafts rules

and regulations for drilling operations that may impact the Delaware river and its environment.

How Does the Gas Occur?

Natural gas occurs within the Marcellus Shale in three ways:

1. Within the pore spaces of the shale;
2. Within vertical fractures (joints) that break through the shale; and
3. Absorbed on mineral grains and organic material.

Most of the recoverable gas is contained in the pore spaces, which are extremely tiny and poorly connected, making it difficult to obtain the gas.

The greatest amount of gas is recoverable from an intersection of various and numerous fractures throughout the shale. These fractures allow the gas to flow through the rock and into the well bore. Thus, an extensive fracture network allows one well to drain gas from a very large volume of shale. These fractures or joints are vertical, so a vertical bore hole that goes straight down would intersect very few of them. However, a horizontal well drilled perpendicular to the most common fracture orientations should produce from a maximum number of such fractures. Picture a well that goes down vertically 5,000 feet then makes a right or left turn horizontally and proceeds another 3,000 to 5,000 feet.

Hydrofracing

In order to increase the productivity of a well, a gas drilling company needs to increase the number of fractures using a technique known as hydraulic fracturing or hydrofracing. This is the process of creating fissures, or fractures, in the underground formations to allow the natural gas to flow.

This method uses high pressure water or a gel to induce fractures in the rocks surrounding the well bore. The high pressure of the water or gel injection fractures the rock and pushes the fractures open. To keep the fractures open, several tons of sand are propelled down the well and into the pressurized portion of the hole. The sand holds open the fractures after the pressure is released, providing improved permeability for the flow of gas to the well.

Normally a hydraulic fracturing operation is only performed once in the life of a well. However, new techniques indicate that when a well begins to produce less gas, it may be fractured again to continue being a productive well.

Most recently, the Pennsylvania Department of Environmental Protection (PADEP) is enacting new regulations that will prevent well drillers from treating the frac water discharged from the well bore in sewer treatment plants throughout the state that discharge into rivers and streams.

On April 19, 2011, Chesapeake Energy Company experienced a gas well blow out in Bradford County due to equipment failure on one of its wells. Both the PADEP and the U.S. Environmental Protection Agency (EPA) are investigating the blow out to determine how much, if any, toxic frac fluid may have seeped into nearby streams. This is the third well control incident in the last 10 months. The EPA states the PADEP is the lead investigative agency but is still asking for a full report on this latest incident.

Gas Leases and Signing Bonuses

Many landowners who own the mineral rights to their property have been approached with offers to lease their land

to various exploration and drilling companies.

The size of the signing bonuses that have been paid is directly related to the level of uncertainty on the part of the gas exploration company and the number of other buyers competing to make the purchase or lease.

At Fox Rothschild, we who have negotiated these gas leases have seen signing bonuses ranging from \$10 to \$100 per acre for the earliest signed leases, up to \$6,200 per acre. Most of the signing bonuses have been in the range of \$4,500 to \$5,750 per acre. However, these fluctuate periodically due to the price of gas and the timing on the part of the gas companies for drilling in a particular area.

Gas Royalties

While the upfront signing bonus has generated a great deal of interest from property owners because of the immediate impact of receiving a check for tens of thousands to perhaps over a million dollars simply for signing a lease, the gas royalty should ultimately pay most of these landowners a far greater reward.

A gas royalty is a share of the well's income. The standard in the industry for a gas royalty is 12.5 percent of the value of gas produced by the well. However, we have successfully negotiated gas royalties of 18 to 22 percent for some of our clients. As a result, the royalties paid to a property owner from a well yielding more than 1,000,000 cubic feet of natural gas per day can be hundreds of thousands of dollars per year.

Unfortunately, production levels in most wells fall rapidly, yielding lower amounts year after year.

The Pennsylvania Supreme Court, in *Kilmer v. Elexco Land Services, Inc.*, 605 Pa. 413, 990 A.2d 1147 (2010), held that the Guaranteed Minimum Royalty Act was not violated by landowners' lease and should be read to permit calculation of royalties at the wellhead, as provided by the net-back method contained in the lease that provided for deduction of post-production

costs, e.g., production or gathering taxes, costs of treatment of the product to render it marketable as well as costs of transportation to market. Of course, one negotiating a lease should clearly define these post-production costs and provide for a calculation of royalty that excludes such costs.

In a more recent case, the U.S. District Court for the Western District of Pennsylvania in *Frederick et al. v. Range Resources-Appalachia, LLC*, C.A. No. 08-288 Erie, decided March 17, 2011, approved a class action settlement agreement where the class had asserted Range Resources had improperly reduced the amounts of royalties by improperly using the point of sale volume of gas, rather than the volume of gas collected at the wellhead, improperly adjusting volumes by applying temperature and pressure; improperly assessing and deducting costs of marketing; assessing management fees; and failing to pay royalties on the value of the sale of liquid hydrocarbons.

Long-Term Yield

The long-term yield of Marcellus Shale wells is uncertain. Some industry analysts believe these wells will produce slower but profitable quantities of gas for decades. It is also possible many wells can be refractured in the future using improved technologies, and the same drilling pad may be reused to drill multiple horizontal wells in different directions, leaving Marcellus Shale drilling with many future options.

Fox Rothschild has the Marcellus Shale business well-covered. With more than 250 lawyers throughout the Commonwealth of Pennsylvania in five offices – including Pittsburgh – we offer a full array of legal services to landowners, gas companies, drillers, water treatment and waste companies, property developers and vendors.

Our environmental attorneys are well-acquainted with the federal and state environmental statutes and regulations that govern all aspects of the Marcellus Shale in obtaining air, water and waste permits, as well as permits needed for construction,

such as NPDES stormwater construction permits, wetlands permits and E&S approvals as well as providing defense in construction or toxic tort litigation.

Fox's real estate and zoning/land use attorneys have extensive experience in leasing, acquisition, land use and zoning, along with construction and real estate-related litigation. We provide assistance to landowners negotiating lease and royalty agreements with almost every major gas company involved in the Marcellus Shale gas play, and we work with developers looking to construct warehouses, housing and other necessary amenities necessitated by the burgeoning gas exploration business.

Litigation arising out of Marcellus Shale activities can take many forms, including permit appeals, civil and criminal enforcement proceedings, contamination and toxic torts, as well as commercial litigation and condemnation. Our Pennsylvania litigation team – part of the firm's national network of more than 200 trial attorneys – represents clients in the full range of judicial, regulatory and administrative proceedings.

Fox's trusts estates, and tax lawyers work with Pennsylvania landowners to address federal, state and local tax and estate issues, ensuring clients receive the maximum after-tax benefit from their lease and royalty payments, estimated to be more than \$250 billion over the course of the Marcellus Shale gas play.

Many landowners in the Marcellus Shale region are nonprofit hunting clubs, social clubs or other organizations with members interested in receiving the economic benefit that results from lease of the club's land and receipt of royalties from gas production. Our attorneys are well-versed in issues impacting such nonprofit organizations and are experienced in helping these groups formulate structures that allow members to receive these benefits in a tax-efficient manner.

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National Brownfields Conference in Philadelphia Has Record Attendance and Draws Focus on Opportunities in Marcellus Shale

By M. Joel Bolstein



On April 4, 2011, I attended the Brownfields 2011 Conference at the Pennsylvania Convention Center. To say it was well attended would be an understatement. The crowd was enormous at the plenary session, and it was standing room only at several programs I attended. This is the same conference that used to draw 300 attendees in a good year, and this year it attracted more than 5,000.

While it was a national conference, as the host state, Pennsylvania had a separate area on the exhibit floor, and the Pennsylvania Department of Environmental Protection (PADEP) made a number of special presentations regarding brownfields opportunities. PADEP Deputy Secretary Denise Brinley spoke on a panel dedicated to brownfields opportunities arising out of the development of the Marcellus Shale formation in north central Pennsylvania. Brinley's presentation was standing room only, showing how much interest there is in development opportunities in the Marcellus Shale. Members of the Marcellus Shale industry have told local economic development agencies there is a pronounced shortage of warehouse and storage space in the counties where the wells are being drilled as well as a housing

shortage for the influx of workers for the gas industry and all the ancillary businesses. The gas companies have for now taken over local hotels and put up "no vacancy" signs. They have also resorted to building so-called "man camp"-like dormitories for workers who cannot find housing. I was told rooms in Williamsport that used to rent for \$300 a month several years ago now go for \$1,800 a month.

In addition to the presentations, Pennsylvania hosted an Economic Redevelopment Forum on the exhibit hall floor of the conference, where Scott Dunkelberger from the Pennsylvania Department of Community and Economic Development (PADCED) noted there is still ample funding left in the Industrial Site Reuse (ISR) fund (the Act 2 fund), and he invited applications for assessment and remediation grants for brownfields sites. In prior years, when the real estate market was booming, this would be the time of year when the ISR fund would be nearly tapped out of its \$5 million annual appropriation and PADCED would tell grant applicants they would have to wait until July 1 when the new fiscal year starts. Apparently there are not quite as many takers this year, so state brownfields grant funding is still available. That funding can be obtained by partnering with a local economic development agency or

municipality, which can obtain assessment grants up to \$200,000 and remediation grants up to \$1 million.

As someone who spends a lot of time working on brownfields redevelopment projects, the great turnout at the April conference in Philadelphia may be a sign the brownfields market in Pennsylvania is ready for renewal. There are pockets of expanded economic activity in Pennsylvania, such as the enormous growth in the counties experiencing the Marcellus Shale boom, that are now tempting many brownfields developers back into the market. During a recent trip to Williamsport, Troy and Towanda, I witnessed the growth taking place. In addition to the construction of well pads and access roads, new hotels are being built, along with treatment facilities and other businesses connected to the Marcellus Shale. I would invite anyone who has been active in real estate development in southeast Pennsylvania to visit north central Pennsylvania and see what is happening there. Brownfields developers, along with homebuilders, may find new opportunities there.

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Tax Court Renders Favorable Decision on Rehabilitation Credits

By Jerald David August



Bowes', investment in the rehabilitation of an historic government building (East Hall, a National Historic Landmark property in

In Historic Boardwalk Hall, LLC. v. Commissioner, 136 T.C. No. (2011) the Tax Court ruled a limited liability corporation (LLC) formed to facilitate a corporation's, i.e., Pitney

Atlantic City, New Jersey) had business purpose and was not a sham. The investment was designed to earn the controlled entity of Pitney Bowes, Historic Boardwalk Hall, LLC, rehabilitation credits under section 47. The Tax Court ruled the corporate partner was entitled to its distributive share of the claimed rehabilitation tax credits.

The Tax Court determined the LLC formed by New Jersey Sports and Exposition Authority (NJSEA) and the investment corporation (corporate partner), to allow corporate partner investment in the rehabilitation of the historic hall/government-owned building and obtain section 47 rehabilitation tax credits, had objective economic substance based on the fact the corporate partner did not enter

into the transaction solely for tax credits but also to invest with a realistic possibility of realizing economic gain or profit and the corporate partner's investment provided NJSEA with more money than it otherwise would have had; the development fee involved was a legitimate expense; and there were real risks involved. The court also viewed the legislative purpose to the rehabilitation credit provision and found the evidence in this case was not inconsistent with such purpose. The court rejected the government's arguments that the corporate partner never obtained partner status, the benefits and burdens of the hall's ownership were never transferred in a sale to the partnership and the purchase option, under which NJSEA could buy back the hall, did not cause the taxpayer's reporting of the rehabilitation credits to be erroneous. The Tax Court further rejected the IRS' determination under the anti-abuse regulation, Treas. Reg. §1.701-2(b), to recast the transaction so as to deny the corporate partner its desired allocation of the section 47 rehabilitation credits.

Economic Substance of Transaction Upheld

The court found there was both an objective profit motive and subject business purpose present under the facts. See *CM*

Holdings, Inc., 90 AFTR 2d 2002-5850, 301 F3d 96, 2002-2 USTC ¶50596 (CA-3, 2002) (conjunctive two-part test applied by Third Circuit). The IRS argued Boardwalk Hall had no possibility of earning a profit apart from a three percent fixed return and the benefits related to the rehabilitation credits. For the subjective test, the IRS argued Boardwalk Hall had no business purpose because it was intended solely to facilitate NJSEA's sale of rehabilitation tax credits to Pitney Bowes.

The Tax Court dismissed the arguments by noting section 47 is intended to encourage taxpayers to participate in what would otherwise be an unprofitable activity. The court added that when the rehabilitation tax credits were taken into account, the objective profit test was adequately satisfied. Further, because Boardwalk Hall pursued the risk-laden objective of rehabilitating a landmark convention center for use as a special events center, the court found the subjective business purpose requirement was also met. In sum, the Tax Court concluded Boardwalk Hall had economic substance and was not a sham.

Partnership Status

The IRS also argued Pitney Bowes was not a partner in Boardwalk Hall because it had

no meaningful stake in its success or failure and its interest in Boardwalk Hall was more like debt than equity. The Tax Court dismissed these arguments, stating Pitney Bowes and NJSEA joined together in a transaction with economic substance to allow Pitney Bowes to invest in the East Hall rehabilitation. Further, the court noted the decision to invest provided a net economic benefit to Pitney Bowes through its three percent preferred return and rehabilitation tax credits.

Rejection of Application of Partnership Anti-Abuse Regulation

Finally, the IRS argued it was necessary to recast the transaction under Treas. Reg. §1.701-2(b), the anti-abuse transaction. Because of its finding that the transaction had economic substance, the court held it was inappropriate to then hear the case under the filter of this GAAR rule for partnerships.

This article first appeared as a post on the firm's [Federal Taxation Development blog](#).

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PA Commonwealth Court Decision Reinforces and Confirms Philadelphia Historical Commission Authority

By *William F. Martin*



On April 18, 2011, the Commonwealth Court of Pennsylvania filed a decision in *Turchi v. Philadelphia Board of Licenses and Inspections Review and Concerned Citizens in Opposition to the*

Dilworth Development, closing one chapter—and starting another—in a long-running dispute regarding the potential renovation and development of a condominium project in Philadelphia.

The Dilworth House was the home of former Philadelphia Mayor Richardson Dilworth and his wife. Located at 223-225

S. 6th Street, across from Washington Square, its construction is considered by some to have started the Society Hill revitalization in the mid-20th century. Since 2005, the current owners, John and Mary Turchi, have been seeking permits for the renovation and development of the historically designated building. While the plans for development have changed since the original application for a building permit was filed on May 16, 2006, the proposed development project currently consists of the renovation and preservation of the main portion of the Dilworth House, removal of certain side and rear wings and their replacement with a 16-

story condominium structure that would connect to the Dilworth House.

As the building is historically designated and is located within the Society Hill Historic District, its renovation requires approval of the Philadelphia Historical Commission, which granted such approval in a decision dated November 19, 2007. The decision was appealed by protesting nearby property owners to the Philadelphia Board of Licenses and Inspections Review (the Board), which, on September 9, 2008, reversed the Commission's grant of approval, determining that the Commission erred in concluding the proposed project

was not a demolition under the terms of City's Historic Preservation Ordinance, and further erred in determining the proposed development was "appropriate" under the Preservation Ordinance. Most significantly, the Board made such a determination without granting any deference to the determination of the Commission.

The landowner appealed to the Philadelphia County Court of Common Pleas, which concluded in a decision issued May 19, 2010, that neither the Philadelphia Code nor the City Charter imposed an obligation upon the Board to grant any specific deference on such matters to a determination by the Commission, and that the Board's standard of review was *de novo*.

It was this decision that was vacated by the Commonwealth Court on April 18, 2011.

The Commonwealth Court analyzed the Common Pleas Court decision through the prism of administrative agency law and

the general principle that an administrative agency's interpretation of the statute it has been charged to administer is entitled to deference absent "fraud, bad faith, abuse of discretion or clearly arbitrary actions." The Commonwealth Court determined the Commission was the local administrative agency charged by City Council with administering the Preservation Ordinance. It is composed of members with specialized knowledge and expertise in the area of historic preservation, so the Commonwealth Court concluded it was the Commission that was vested by City Council with the authoritative interpretive powers to execute and interpret the Preservation Ordinance. Those interpretations were deemed entitled to deference and they "become of controlling weight unless plainly erroneous or inconsistent."

Since the Board gave no deference to the Commission's interpretations and exceeded its scope of review, the Commonwealth Court vacated the decision of the

Common Pleas Court and remanded to the Board for a new determination in accordance with the decision. This decision significantly reinforces and confirms the authority of the Commission and emphasizes the need for developers to present full, complete and persuasive cases to the Commission when its approval is needed to secure City of Philadelphia permits. The case also, unfortunately, confirms the risks of development in the City when well-financed, motivated opponents to a project exist. In this circumstance, initial permit applications were filed close to five years ago, and a final decision regarding the issuance of permits is still in the future.

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