

Volume 3

Industrial Gas Drilling Reporter



August 6, 2009

Introduction

For over a year Riverkeeper has tracked the prospect of industrial gas drilling in New York State. While gas drilling in New York is not new, what is new is the magnitude, scope, and location of the proposed drilling method of high-volume hydraulic fracturing. Indeed, industrial gas drilling throughout the Marcellus Shale and other shale reserves in New York has the potential to impact the environment and communities dramatically.

Riverkeeper's *Industrial Gas Drilling Reporter* compiles information from around the country associated with this activity – from New York's ongoing environmental impact study to reported drinking water contamination in states where Marcellus industrial gas drilling already occurs.

Our goal is to educate our members and the general public on this important and dynamic issue, and to help concerned citizens make informed decisions during the public participation component of New York's upcoming draft Supplemental Generic Environmental Impact Study. Riverkeeper will update this Reporter periodically.

This is Volume 3 of Riverkeeper's Industrial Gas Drilling Reporter. Visit our website to review Volumes 1 and 2: <u>http://www.riverkeeper.org/campaigns/safeguard/gas-drilling/</u>

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Acknowledgements

This volume of the *Industrial Gas Drilling Reporter* was prepared by James L. Simpson, Riverkeeper Staff Attorney; Hilary Atkin, Riverkeeper Legal Intern; Jennifer McAleese, Riverkeeper Legal Intern., and Craig Michaels, Riverkeeper's Watershed Program Director.

Riverkeeper is grateful for the support and generosity of our members, and to the New York Community Trust, the Robert Sterling Clark Foundation and the Scherman Foundation, Inc. for support of our watershed program.

Cover photo taken from the front porch of John Denton in Pavillion, Wyoming (Freemont County). This hydraulic fracturing is into the tight sands formation, approximately 8,000 – 10,000 feet underground. Used by permission of Pavillion Area Concerned Citizens and Powder River Basin Resource Council: www.powderriverbasin.org.

Riverkeeper is an independent environmental organization dedicated to protecting the Hudson River, and its tributaries, and the New York City drinking water supply. For more information about us please visit <u>www.riverkeeper.org</u>.

Riverkeeper is a member of the Clean Drinking Water Coalition, comprised of certain environmental signatories to the 1997 New York City Watershed Memorandum of Agreement.

Riverkeeper is a founding member of the Waterkeeper Alliance (<u>www.waterkeeper.org</u>) an international organization that works with over 180 Waterkeepers to protect waterways around the globe.

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Background

What is the Marcellus Shale?

The Marcellus Shale is a layer of deep sedimentary rock, deposited by an ancient river delta, with the remains of it now forming the Catskill Mountains. The vast Marcellus Shale extends from Tennessee, through most of West Virginia, across Pennsylvania and eastern Ohio, and into the Southern Tier of New York, including the Catskills and the West-of-Hudson portion of the New York City Watershed. New York's portion of the Marcellus Shale is approximately 18,750 square miles and is very deep – over 1 mile below ground.

What is Hydraulic Fracturing?

New technology, called hydraulic fracturing, allows drilling companies to extract natural gas from this shale. Natural gas is trapped within fractures between the grains of this fine-grained rock. Drillers drill down vertically into the shale, turn 90 degrees to drill horizontally (sometimes over a mile in length), and then inject water, sand and chemicals under high pressure to release the gas. The pressurized water forms fractures in the rock, which sand and chemicals then prop open.

What are some of the Environmental Impacts?

There are many environmental impacts associated with hydraulic fracturing, or "hydrofracking." Among them are water consumption and wastewater disposal, use of toxic chemicals, substantial truck traffic, air pollution, noise from the loud hydrofracking operations, potential groundwater contamination, and surface water runoff from these large industrial sites. The cumulative effect of these impacts may indeed transform entire communities – turning previously rural, agrarian areas into "fractured communities."

Hydraulic fracturing requires up to 3 million gallons of water *per hydrofrack*, and typically each well is hydrofracked many times. The water must be trucked in, stored on-site, and the wastewater disposed of properly (nearly all of the fracking fluid injected returns to the surface, bringing with it materials from underground including brines, heavy metals, radionuclides, and organics). Even though the gas industry claims that toxic chemicals represent less than 1% of hydrofrack fluid, the U.S. Geological Survey explains that a typical 3 million gallon hydrofrack produces 15,000 gallons of chemical waste. In existing Marcellus wells outside of New York this waste is stored on-site in large holding ponds until trucks haul it away.

What is the New York City Watershed?

The New York City Watershed, largely in the Catskills, is the source of tap water for over 8 million New York City residents and over 1 million New Yorkers upstate. The entire New York City Watershed comprises approximately 4.2% of the State's land, yet supplies *unfiltered* drinking water to half the State's population. All surface water and stormwater runoff within the New York City Watershed drains into large reservoirs and travels via gravity through tunnels and aqueducts to the taps of 1 million upstate consumers and 8 million New York City consumers. The entire system delivers 1.2 billion gallons daily. The 1,560 square mile system in the Catskills (1 million acres) includes six reservoirs and their drainage basins, hundreds of miles of aqueducts and tunnels, and is home to approximately 60,000 people. The New York City Watershed, including its infrastructure, is the State's greatest natural resource and the City's greatest capital asset.

Riverkeeper played an instrumental role in protecting the source of this tap water when it helped structure the 1997 Watershed Memorandum of Agreement, a landmark agreement that establishes ground-rules for protecting the City's water supply. This agreement set the stage for the City to continue to receive a waiver from federal laws otherwise requiring filtration. This waiver is known as the filtration avoidance determination (FAD). The FAD allows the City to avoid building a new \$10 billion water filtration plant to filter City water, in exchange for strong watershed protection programs.

New York State Environmental Review

No hydraulic fracturing into the Marcellus Shale or other shale reserves will take place in New York until the State completes an update to its 1992 Generic Environmental Impact Statement (GEIS), pursuant to the State Environmental Quality Review Act (SEQRA). Riverkeeper helped shape the scope of review for this study. Each *Industrial Gas Drilling Reporter* will provide a status update on this critical environmental review.

View Riverkeeper's comments on the draft scope here:

http://www.riverkeeper.org/wp-content/uploads/2009/06/RvK comments gas drilling 121508.pdf

Read New York State Department of Environmental Conservation's final scope here:

http://www.dec.ny.gov/docs/materials_minerals_pdf/finalscope.pdf

Fractured Communities

NEW YORK TIMES - PROHIBIT DRILLING IN CATSKILL COUNTIES

The New York Times' Editorial Observer detailed the troubling trade-off regarding industrial gas drilling – possibly giving up the biological integrity, scenic wonder, and Catskill's overall ecosystem, including the New York City Watershed—in exchange for a potential supply of natural gas. The Editorial Observer called for a ban on drilling in Ulster, Greene, and Delaware Counties.

See: www.nytimes.com/2009/07/28/opinion/28tue4.html

PENNSLVANIA ORDERS DRILLING OPERATION TO STOP

The Pennsylvania DEP has issued a cease and desist order prohibiting U.S. Energy from continuing industrial gas drilling operations in Pennsylvania for failing to comply with the state's environmental laws. The company has had 302 documented violations in a period of 2 years and has only corrected one-third of them. PADEP Regional Director stated, "U.S. Energy has demonstrated a pattern of behavior that displays disregard for environmental regulations and laws, the consequences being the contamination of water and soil..." U.S. Energy has 30 days to clean up existing violations, but plans to challenge the order.

See: http://www.ahs2.dep.state.pa.us/newsreleases/default.asp?ID=5574

http://timesobserver.com/page/content.detail/id/519113.html?nav=5006

http://bradfordera.com/articles/2009/07/15/news/doc4a5d309ab73ce532012319.txt

NATIONAL GEOGRAPHIC DOCUMENTS INDUSTRIAL DRILLING

A few years ago National Geographic published a story documenting the impacts of industrial gas drilling in the western United States.

See: http://ngm.nationalgeographic.com/ngm/0507/sights n sounds/index.html

http://ngm.nationalgeographic.com/ngm/0507/feature5/index.html

PA CITIZENS MUST PAY TO RESURFACE ROAD DESTROYED BY HYDRAULIC FRACTURING

Turkey Track, a road used by an oil and gas company to access wells in Kushequa Township, PA, is to be resurfaced and widened using taxpayer money. The oil company that uses the road, Atlas Drilling, will be contributing \$50,000 to the project, while the township has to borrow over \$290,000 to finance the project. Residents are concerned that the township cannot afford to pay for the damages caused by Atlas Drilling's use of the road.

See: http://www.kanerepublican.com/content/view/107525/1/

OBSTACLES TO TREATING FRACKING FLUID IN PA

Companies proposing to treat the millions of gallons of hydraulic fracking fluids in Pennsylvania are facing tough criticisms and regulations. The PA DEP has already cited fracking fluid as a cause of salt concentrations that exceeded water quality standards in the Monongahela River Basin. The DEP has proposed strict rules that would restrict treatment plants from discharging fluid that is high in salts. Citizens are also concerned with the chemicals that may be released into the water, including benzene and other known carcinogens.

See: http://scrantontimes.com/news/gas_drillers_face_tough_regulations_for_treating_wastewater

INDUSTRIAL GAS WELLS RELEASE RADIOACTIVE MATERIALS IN TEXAS

The most lethal byproduct of fracking may be radioactive materials. Hydraulic fracturing frequently causes Radium-226, Radium-228 and other naturally occurring radioactive materials (NORMs) to emit from wells. Exposure to radon gas, emitted as these elements decay, can cause serious health effects such as lung cancer. Exposure can occur from inhaling or ingesting particles or even standing next to a contaminated site. The environment is also not spared from the effects - one researcher discovered radium in the bones of ducks that were in a contaminated gas drilling site in Texas' Barnett Shale. About 140 sites in Texas have been decontaminated and over 1,000 barrels of radioactive waste removed. Many times NORM cleanups are pushed off until the drilling stops or the lease terminates. This means that the radioactive material is being left to decay at the expense of residents and the environment. Industry workers are equipped with a device that monitors their radiation exposure. However, residents are not afforded the same protection.

See: <u>http://www.dallasnews.com/sharedcontent/dws/news/localnews/stories/DN-norms_11wes.ART.East.Edition1.420fc23.html</u>

http://www.dentonrc.com/sharedcontent/dws/drc/localnews/stories/DRC_11-12_NORM2.200398aa0.html

CO MAY ALLOW DRILLING NEAR SITE OF A PAST NUCLEAR DETONATION

The Colorado Oil and Gas Commission is holding hearings on whether state regulators should permit drilling near the site of an underground nuclear explosion in western CO. The purpose of the controlled underground explosion, which took place in 1969, was to free up natural gas; however the gas was too radioactive to sell. The Department of Energy prohibits drilling within 40 acres of this site.

See: http://www.forbes.com/feeds/ap/2009/07/14/ap6655229.html

FIRST MARCELLUS SHALE DRILLING PERMIT ISSUED IN LACKAWANNA CTY, PA

The PA Department of Environmental Protection issued the first industrial drilling permit in Lackawanna County, PA (home of Scranton for a drill site in Greenfield Township.

See: <u>http://www.thetimes-</u> tribune.com/news/business/first_lackawanna_county_gas_drilling_permit_issued_

WELLS CONTAMINATED WITH CARCINOGENS IN MIDLAND, TX

As of June 30, the Texas Commission on Environmental Quality has found hexavalent chromium contamination, a known human carcinogen, in one-third of 125 wells tested in a community outside of Midland, TX. Hexavalent chromium is the same chemical that Erin Brockovich investigated in Hinkley, CA in the 1990s. Here, the highest reading was 5,250 parts per billion, more than 50 times the maximum allowed by the EPA. Texas environmental officials are trying to determine the extent of the contamination, and will ask the EPA to consider the site for Superfund status.

See: http://www.lubbockonline.com/stories/071209/sta_462323123.shtml

http://txsharon.blogspot.com/2009/07/midland-hexavalent-chromium.html

BUSINESSES AND APARTMENTS EVACUATED IN OHIO DUE TO GAS LEAK

A construction vehicle punctured an industrial drilling well in Mayfield Heights, OH, leading to the evacuation of several businesses and apartment complexes. Residents are concerned with potential health effects. Bass Energy refused to comment, and the owner threw a reporter's microphone when asked about the evacuations (see video). Bass Energy is assessing damages.

See: http://blog.cleveland.com/metro/2009/07/gas_leak_in_mayfield_heights_f.html

http://www.newsnet5.com/news/19991581/detail.html (video)

BARNETT SHALE WELL SPEWS FRACKING FLUID

An Encana gas well in the Keller Neighborhood of Dallas, which is over the Barnett shale, had a valve malfunction, causing fracking fluid to spew out of the well and onto neighboring residential properties. Residents from 100 yards away reported the substance smelled awful and left a film on their plants, which subsequently began to wilt and die.

See: <u>http://www.nbcdfw.com/news/local/Mysterious-Substance-Rains-Down-on-Keller-Neighborhood.html</u>

http://www.msnbc.msn.com/id/31807273/ns/local_news-dallasfort_worth_tx/

UNKNOWN CULPRIT BOMBING OIL WELLS IN CANADA

A community paper in British Columbia, Canada received an anonymous letter in October 2008 warning EnCana, a gas producer, to shut down its gas plant and 150 feeder wells by a deadline. EnCana did not comply; subsequently, bombs were set off on several pipelines, wellheads, and facility shacks. A police investigation led by Canada's anti-terrorist force was launched, but no bomber was found. The bomber struck again on Canada Day and the Fourth of July. The bombings have split the community apart, and locals that complain about oil drilling are visited by the police. Some locals allege that they have been harassed by police or industry informers.

See:

http://www.canadianbusiness.com/markets/commodities/article.jsp?content=20090817_10006_10_006&utm_source

EXPERTS ADVISE WASTEWATER TREATMENT PLANTS TO BE WARY

A consultant for the Ithaca wastewater treatment plant warned that wastewater treatment facilities may not be equipped to properly treat fracking fluid and should be wary of doing so. Some wastewater treatment plants view fracking fluid as a new source of revenue; however, it may come at too high of a price. Officials have seen suspended solids increase downstream of these plants.

See:

http://www.theithacajournal.com/article/20090709/NEWS01/907090345/1126/Experts+question+tr eated+gas-drilling+fluid

LANDOWNERS SUE DRILLING COMPANIES OVER MARCELLUS SHALE LEASES

Ten landowners in Westmoreland County in Pennsylvania have filed lawsuits against drilling companies, claiming that they are owed millions of dollars because the companies backed out of lease agreements after gas prices plummeted.

See: http://www.pittsburghlive.com/x/pittsburghtrib/s 634250.html

http://www.istockanalyst.com/article/viewiStockNews/articleid/3357688

DAILY STAR EDITORIAL: PREPARE NOW FOR DRILLING

The Daily Star, in Oneonta, NY urged citizens to prepare for natural gas drilling before the drilling companies arrive. The paper warned that citizens should be proactive and make preparations, such as mapping aquifers and wetlands, and obtaining baseline figures for water and road quality. Teamwork between citizens, municipalities, and counties is strongly encouraged and proactive measures must be taken now.

See: http://www.thedailystar.com/opinion/local_story_187074556.html

NEW YORKERS CALL FOR STATE-WIDE BAN ON FRACKING

New Yorkers protested against hydraulic fracturing on the steps of New York City Hall on Wednesday, July 1, calling for a statewide ban. Protesters were concerned about the chemicals used in the fracking process, some of which are toxic.

See: http://www.theepochtimes.com/n2/content/view/19031/

FORUM IN BATH, NY

On June 22, 2009See link below for a forum on the effects of drilling in the Marcellus Shale on local water, held on June 22, 2009.

http://www.shaleshock.org/video-from-june-22-2009-forum-in-bath/

HESS CORP. MAKES A PLAY FOR LEASES AROUND BINGHAMTON

Over 700 landowners in Binghamton and Conklin agreed to an offer of \$66 million and 20 percent royalties to lease their land to Hess Corp for 7 ½ years for industrial drilling. The deal covers 19,000 acres and is part of Hess' plan to acquire leases to a large amount of the Marcellus Shale.

See:<u>http://www.stargazette.com/article/20090706/NEWS01/907060359/Hess+Corp.+has+its+eyes+</u> on+gas-rich+Broome+land

DRILLING ALLOWED IN WEST VIRGINIA STATE PARK

A circuit court judge in West Virginia has ruled that the state Department of Environmental Protection erred when it denied a permit to drill in a state park. The state had agreed several decades ago that the original owners of the park would have the mineral rights, but the state agency interpreted state law as preventing mineral extraction in state parks. If the ruling stands, it will likely mean that the state wouldn't be able to deny drilling permits solely on the basis that the drilling would take place in a state park.

See: http://www.statejournal.com/story.cfm?func=viewstory&storyid=61672

FEDERAL AGENCIES STOP GEOTHERMAL PROJECT BECAUSE OF QUAKE FEARS

Two federal agencies stopped a California geothermal energy project from fracturing bedrock miles underground until a scientific study determines whether the project could produce earthquakes. The area is one of the most seismically active in the world. A similar project in Basel, Switzerland was shut down when it generated earthquakes. Such earthquake concerns echo the problems communities in Texas face where fracturing coincides with a recent increase in earthquakes.

See: http://www.nytimes.com/2009/07/14/business/energy-environment/14drill.html? r=2

COMMUNITY CONCERNS ABOUT PROTECTING FINGER LAKES

Community members in Schuyler County, NY have formed a task force to inform neighbors about Marcellus drilling and potential impacts to Seneca Lake.

See: http://www.weny.com/News-Local.asp?ARTICLE3864=9146490

http://www.wetmtv.com/news/local/story/Natural-Gas-Drilling-Task-Force/q1MkcPXXz0OMXkBTsvNZ4g.cspx

VIDEO OF DRILLING ACTIVITY IN BARNETT SHALE

To get a sense of what Marcellus drilling might look like, watch this video that shows aerial views of industrial gas drilling in the Barnett Shale:

http://www.youtube.com/watch?v=W3rXRgbLM68

Legislative Update

DRBC DELAYS RULING ON WATER WITHDRAWAL APPLICATION

Chesapeake Energy Appalachia has applied to withdraw 1 millions gallons of water per day from the Delaware River. The Delaware River Basin Commission (DRBC) held a public hearing on July 15, but the Commission has decided to extend the public comment period (until July 29, 2009) and postpone its decision until it can re-evaluate the proposal. This is the first possible approval of water withdrawals from the Delaware River for industrial gas drilling. The DRBC regulates water use from the Delaware River; nearly 15 million people rely on water of the Delaware River Basin for drinking water and industrial use (this includes drinking water for New York City). Concerns have been raised of the effect of the withdrawals on the water supply. The DRBC's next opportunity to act on this application is at its next public meeting on September 22, 2009.

http://www.state.nj.us/drbc/naturalgas.htm

http://www.wayneindependent.com/news/x1885901282/DRBC-reevaluating-gas-driller-plan

http://www.mcall.com/news/local/all-5gas.6960365jul16,0,389591.story

NYC DEP CITES WATER QUANTITY ISSUE TO DRBC

In a comment letter to the DRBC, the New York City Department of Environmental Protection (NYC DEP) cited concerns that the cumulative effect of water withdrawals from the Delaware River would impact NYC DEP's ability to comply with a 1954 decree from the U.S. Supreme Court that dictates how the Delaware River Basin is managed.

See: http://www.riverreporter.com/issues/09-07-30/editorial.shtml

DENVER POST URGES EPA TO STUDY FRACKING

The Denver Post urged the EPA to study further the effects of hydraulic fracturing, specifically contamination of drinking water, before passing additional regulations. The agency's previous study under the Bush administration focused on shallow coal-bed methane fracking, which EPA scientists criticized. The Denver Post is calling for a rigorous scientific study on the fracking process.

See: <u>http://www.denverpost.com/opinion/ci_12812305</u>

CONGRESS CALLS FOR EPA TO STUDY HYDRAULIC FRACTURING

Congressional Representatives are calling for further scientific study into the environmental impacts of hydraulic fracturing, in part to explore the recent reports of water contamination.

See: <u>http://www.propublica.org/feature/democrats-call-for-studies-industry-assails-proposals-regulate-fracking-713</u>

NYC COMPROLLER URGES SWIFT PASSAGE OF FRAC ACT

NYC Comptroller William C. Thompson, Jr. recently wrote to members of Congress to show his strong support for the Fracturing Responsibility and Awareness of Chemicals Act (FRAC Act). The FRAC Act would remove the hydraulic fracturing exemption from the Safe Drinking Water Act, and therefore ensure this activity is subject to the requirements of that law. The Act would also ensure public disclosure of chemicals used in hydraulic fracturing. Thompson cited how important the FRAC Act is to NYC's drinking water supply, and the negative repercussions that may fall on NYC ratepayers and residents if drilling is not done in an environmentally responsible manner.

See: http://www.comptroller.nyc.gov/press/2009_releases/pr09-07-174.shtm

Read the letter: <u>http://www.comptroller.nyc.gov/press/pdfs/07-13-09_letter%20-to%20-senator.pdf</u>

PA TO REGULATE SALT DISCHARGES FROM INDUSTRIAL DRILLING

The PA DEP has proposed regulations on salt discharges from industrial drilling in response to increased drilling and water pollution in the Monongahela River. High total dissolved solids (TSD) such as chloride and sulfate threaten PA waterways. Levels of brominated disinfection products (Br DBPs) have also increased. Increased gas drilling is thought to be the source.

See: http://pubs.acs.org/doi/full/10.1021/es901934m?cookieSet=1

http://www.depweb.state.pa.us/watersupply/cwp/view.asp?a=1260&Q=545730&watersupplyNav

WEST VIRGINIA DEP PROPOSES TOUGHER RULES ON INDUSTRIAL DRILLING

The West Virginia DEP has proposed rule changes on industrial drilling, mainly addressing pollution concerns from the fracking fluid. Changes include requiring all fluid storage pits to have synthetic liners to prevent leaks, forcing operators to remove all solid waste during reclamation of pits, changing design and construction standards for the pits, and requiring inspection of the pits. If passed, this would be the first significant changes to WV drilling rules in over 25 years.

See: http://wvgazette.com/News/politics/200907150773

http://blogs.wvgazette.com/watchdog/2009/07/15/gas-drilling-update-dep-proposing-tougherrules/

Link to the proposed law:

http://www.wvdep.org/Docs/17404_prop35CSR4%20Oil%20and%20gas.pdf

SEQRA Review Update

SOUTHERN TIER PAPER URGES DEC TO TAKE TIME TO PREPARE SGEIS

The Star Gazette, published in Elmira, NY, urged DEC to take time and carefully review potential environmental, health and safety hazards before it releases the draft Supplemental Generic Environmental Impact Statement (SGEIS). In the meantime, citizens and municipalities are asked to prepare for gas drilling and determine how their community will handle the impact.

See http://www.stargazette.com/article/20090710/VIEWPOINTS01/907100312/1121/Time+an+ally

DEC EXPECTED TO RELEASE REVIEW OF GAS DRILLING IN SEPTEMBER

See: http://www.pressconnects.com/article/20090712/NEWS01/907120392/1006/

Take Action

CORNELL COOPERATIVE EXTENSION TO HOST PUBLIC MEETINGS ON MARCELLUS SHALE

Cornell Cooperative Extension will host a series of public meetings across New York's Southern Tier to educate residents about issues associated with the development of natural gas production in the Marcellus Shale. The meetings will occur from 7-9 p.m. Three meetings took place in July. The tentative schedule for August is as follows:

Watkins Glen (Schuyler County), Aug. 5;

Liberty (Sullivan County), Aug. 17.

Residents should contact their local CCE Association for more details. In addition, CCE is planning a New York Marcellus Shale Summit on Monday, Nov. 30, 2009, at the Oswego Treadway Inn.

See: http://www.wbng.com/news/local/50475402.html

Cornell Cooperative Extension website: http://gasleasing.cce.cornell.edu/

CONTACT YOUR CONGRESSIONAL REPRESENTATIVES TO SUPPORT FRAC ACT

The "Halliburton Loophole" exempts hydraulic fracturing from the Safe Drinking Water Act. Riverkeeper and other environmental groups urge you to contact your senators and representative to repeal the Halliburton Loophole.

The Natural Resources Defense Council has posted a sample letter: http://www.nrdconline.org/campaign/nrdcaction 071409 a

SCREENING OF "SPLIT ESTATE" - FILM ON INDUSTRIAL GAS DRILLING

Split Estate is a film that follows industrial gas drilling in the western U.S. Landowners in this film do not own the rights to the minerals under their land, and oil and gas companies plan to drill on their property. The film discusses the exemptions currently enjoyed by the oil and gas companies which FRAC Act would repeal and the environmental and public health concerns that drilling creates.

Split Estate will be showing 14 times in NYC at the International Documentary Association's DocuWeeks Showcase. NY screenings will be at the IFC Center, 323 Sixth Avenue at West Third Street, New York NY 10014. Tickets can be purchased at <u>http://www.documentary.org/docuweeks09</u> or at the IFC Center Box Office Friday, August 7: 1:25 PM; 8:00 PM

Saturday, August 8: 2:55 PM; 9:50 PM Sunday, August 9: 12:00 PM; 4:30 PM Monday, August 10: 1:25 PM; 6:05 PM Tuesday, August 11: 2:55 PM; 9:50 PM Wednesday, August 12: 12:00 PM; 4:30 PM Thursday, August 13: 1:25 PM; 6:05 PM

For more information on the film: <u>http://splitestate.com/</u>

PUBLIC HEARINGS IN PENNSYLVANIA

Agencies are reevaluating and revising regulations in anticipation of industrial gas drilling. In August, there will be public hearings on regulatory revisions proposed by the Susquehanna River Basin Commission concerning the use of water in fracking procedures. The hearings will be held on August 4th at 7 p.m. at the Rachel Carson State Office Building in Harrisburg and Aug. 5th at 7 p.m. at the Holiday Inn-Elmira. The public can submit comments to the Commission until August 15th.

The PA Department of Environmental Protection will also hold a hearing regarding the TerrAqua Industrial Waste Discharge Permit application at the agency's northcentral regional office in Williamsport on August 10th at 7 p.m. Written comments will be accepted at the meeting and until August 24th.

See: http://www.pressconnects.com/apps/pbcs.dll/article?AID=200990709048

http://www.sungazette.com/page/content.detail/id/529216.html?nav=5011

DEP website: http://www.depweb.state.pa.us/news/cwp/view.asp?a=3&q=547648

SRBC website: http://www.srbc.net/pubinfo/docs/ProjReviewProposedRulemakingJuly09.pdf

ONLINE SEMINARS ON MARCELLUS SHALE

Penn State's College of Agricultural Sciences and Penn State Cooperative Extension is offering monthly online seminars on the impacts of industrial drilling in Pennsylvania. The webinars are designed to help prepare communities and local officials for drilling activities. Registration information for the webinars is available at <u>http://naturalgas.extension.psu.edu/Events.htm</u>. The one hour webinars will be held at 1 p.m. on the following dates:

Aug. 27: ``Marcellus Industry Direct Workforce Needs.'' Presenters: Jim Ladlee, Clinton County director for Penn State Extension, and Jeff Lorson and Tracy Brundage, Pennsylvania College of Technology.

Sept. 17: ``Community Response Options to Marcellus Shale and Energy Development." Presenters: Kathy Brasier, Penn State assistant professor of rural sociology, and Walt Whitmer, Penn State economic and community development extension associate.

Penn State also offered a seven-part series of online seminars that started in December and ran through May and covered topics such as local governments' roles in gas exploration, leasing concerns in the current economic climate, and the effects of deep-well drilling methods on water supplies. These previously held webinars can be viewed online at http://naturalgas.extension.psu.edu/webinars.htm.

See: http://online.indianagazette.com/articles/2009/06/27/news/indiana_county/10018350.txt