

RIVERKEEPER®

Volume 6

Industrial Gas Drilling Reporter



February 19, 2010

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INTRODUCTION

Since the summer of 2008 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 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 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 as this process moves forward.

This is Volume 6 of Riverkeeper’s *Industrial Gas Drilling Reporter*. Visit our website to review Volumes 1 - 5: <http://www.riverkeeper.org/campaigns/safeguard/gas-drilling/>.

NOTE: Links to all websites in this volume are current as of the release date. Should a link not work, please cut and paste the link into a web browser.

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Acknowledgements

Riverkeeper is grateful for the support and generosity of our members, and to the New York Community Trust, and the Scherman Foundation, Inc. for support of our Watershed Program.

Cover photo of a well site during active Marcellus Shale drilling in Upshur County, West Virginia, in 2008. (An additional water storage pit is not in the photo.) Used by permission of West Virginia Surface Owners' Rights Organization: www.wvsoro.org. Copyright WVSORO, June 2008.

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

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 (www.waterkeeper.org) an international organization that works with over 190 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?

Hydraulic fracturing allows drilling companies to extract natural gas from shale reserves such as the Marcellus. Natural gas is trapped within fractures between the grains of this fine-grained rock. Staged from a massive platform (towering hundreds of feet above ground), 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, wastewater disposal, use of toxic chemicals, substantial truck traffic, air pollution, noise from the loud, twenty-four hour hydrofracking operations, potential groundwater and well water contamination, deforestation, roadbuilding 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.

For a recent Q & A on environmental fears regarding industrial gas drilling, see:

<http://www.reuters.com/article/idUSN1721925220100217>

What is the New York City Watershed?

The New York City Watershed, largely in the Catskills, is the source of tap water for over 9 million New Yorkers. 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 8 million New York City residents and 1 million upstate 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.

Possible gas drilling within the New York City Watershed, and in or near the Catskill Park, is one key reason why Governor Paterson ordered the New York State Department of Environmental Conservation to update its 1992 environmental impact study on gas drilling.

What About Other Important Environmental Areas?

The Marcellus and Utica Shales underlie most of the Catskills and the Southern Tier of New York. This area is home to the "forever wild" lands of the Adirondack and Catskills parks, and the vast systems of creeks and rivers that comprise the upper Delaware River Basin, the Mohawk River, the upper Hudson, the Finger Lakes, and the renowned trout fishing streams of the Catskills. Numerous other state parks, preserves, and wetland areas provide critical habitat for fish and wildlife, serve a variety of ecosystem functions such as water filtration, and are also major tourist and recreational areas. These areas all warrant significant attention and no drilling should be allowed until proper rules and regulations have been promulgated that adequately address concerns of environmental contamination and negative impacts to the special character of these regions. Hydraulic fracturing should not threaten anyone's drinking water, whether it flows up from a local well, or down from the cool, clear streams of the Catskills.

SEQRA UPDATE

On December 31, 2009, the public comment period closed for the New York State Department of Environmental Conservation (DEC) draft Supplemental Generic Environmental Impact Statement (DSGEIS) governing potential industrial gas drilling in New York State. Based on conversations with State officials, Riverkeeper understands DEC received in excess of 13,000 individual comments. This is an unprecedented level of public participation.

No horizontal hydraulic fracturing into the Marcellus Shale or other shale reserves will take place in New York until the State reviews and responds to these comments, issues a final SGEIS, and then a findings statement pursuant to the State Environmental Quality Review Act (SEQRA).

DEC has not given any indication when it will issue a final SGEIS. The following identifies several significant comments submitted to DEC.

RIVERKEEPER COMMENTS ON THE DSGEIS

Riverkeeper submitted over 150 pages of comments on the DSGEIS, detailing more than 200 specific deficiencies with the draft plan. Our comments included a detailed Case Studies report of findings by state regulators where hydraulic fracturing has contaminated drinking water and led to other environmental impacts. In sum, our comments documented that DEC rushed the DSGEIS out the door too soon without adequate review and preparation; therefore, the DSGEIS was woefully inadequate in many critical areas and lacked a sound scientific basis.

See: <http://www.riverkeeper.org/campaigns/safeguard/gas-drilling/>

JOINT TECHNICAL COMMENTS SUBMITTED BY NRDC, EARTHJUSTICE, RIVERKEEPER, AND CATSKILL MOUNTAINKEEPER

Together with NRDC, Earthjustice, and Catskill Mountainkeeper, Riverkeeper also submitted joint comments on the DSGEIS. These detailed expert comments included a summary memorandum and several detailed reports prepared by expert consultants. Thirty-three organizations, including Environmental Advocates, NYPIRG, Trout Unlimited, Damascus Citizens for Sustainability, and Delaware Riverkeeper Network, among many others, endorsed these comments.

See: <http://www.riverkeeper.org/campaigns/safeguard/gas-drilling/>

NRDC COMMENTS

The Natural Resources Defense Council provided comments on the DSGEIS, concluding that the document failed to show that Marcellus drilling could be conducted in New York without significant risk to public health and natural resources.

See: <http://www.riverkeeper.org/wp-content/uploads/2010/01/Marcellus-Shale-DSGEIS-Comments-NRDC-final.pdf>

In addition, on behalf of NRDC, the law firm of Sive, Paget & Reisel submitted comments detailing impacts to municipalities: http://www.riverkeeper.org/wp-content/uploads/2010/01/Marcellus-Shale-DSGEIS-Comments.SPR_.pdf

U.S. EPA COMMENTS

The EPA's DSGEIS comments strongly criticized any plan to drill within the New York City Watershed. EPA stated it "has serious reservations about whether gas drilling in the New York City Watershed is consistent with the vision of long-term maintenance of a high quality unfiltered water supply." EPA recommended that the NYS Department of Health become a co-lead agency. EPA is also concerned that conditions in New York have changed so much since 1992, that using DEC's 1992 GEIS as a "baseline" for this supplemental review is not adequate. Further, EPA expressed concern about drinking water quality impacts to those outside the New York City Watershed.

See: http://www.riverkeeper.org/wp-content/uploads/2010/01/EPA-Marcellus_dSGEIS_Comment_Letter_plus_Enclosure.pdf

See also: <http://www.reuters.com/article/idUSTRE5BU31O20091231>

NEW YORK CITY CALLS FOR PROHIBITION ON DRILLING IN NYC WATERSHED

The New York City Department of Environmental Protection (NYCDEP) submitted detailed comments on the DSGEIS. The City concluded that industrial gas drilling "poses an unacceptable threat to the unfiltered, fresh water supply of nine million New Yorkers, and cannot be safely permitted within the New York City watershed."

Read NYCDEP's cover letter:

http://www.nyc.gov/html/dep/pdf/natural_gas_drilling/12_22_2009_impact_statement_letter.pdf

Read NYCDEP's detailed comments:

http://www.nyc.gov/html/dep/pdf/natural_gas_drilling/nycdep_comments_final_12-22-09.pdf

Read NYCDEP's Final Impact Assessment Report:

http://www.nyc.gov/html/dep/pdf/natural_gas_drilling/nycdep_comments_final_12-22-09.pdf

MAYOR BLOOMBERG AGAINST DRILLING RISKS

While simultaneous rallies on both sides of the drilling debate took place this past January, NYC Mayor Michael Bloomberg voiced his opposition to drilling within the City's unfiltered water supply.

See: <http://www.reuters.com/article/idUSN2519291120100125>

NYC COUNCIL OPPOSES DRILLING WITHIN NYC WATERSHED

The New York City Council recently sent a letter to Governor Paterson expressing its opposition to industrial gas drilling within New York City's drinking water supply watershed. The letter was signed by 41 of 50 members of the NYC Council.

See: <http://www.riverkeeper.org/wp-content/uploads/2010/02/Gas-Drilling-Council-Letter-to-Gov-Paterson.pdf>

NYC COUNCIL SPEAKER QUINN AGAINST DRILLING

New York City Council Speaker Christine Quinn publicly announced her opposition to drilling in the NYC Watershed and called on Gov. Paterson to retract the draft SGEIS and restart the environmental review process. Speaker Quinn made the announcement at a public rally in NYC, where several other state and NYC officials, including U.S. Representative Jerrold Nadler, expressed concern about the dangers of drilling in the NYC Watershed.

See: http://www.nydailynews.com/news/2010/01/05/2010-01-05_critics_drill_dave_on_water_plan.html

<http://dnainfo.com/20100104/manhattan/city-council-speaker-christine-quinn-joins-fight-against-fracking>

NYS DEC EMPLOYEES UNION COMMENTS ON STATE DRILLING PLAN

The AFL-CIO union of professional, scientific, and technical staff at the New York State Department of Environmental Conservation (“Division 169”) submitted a letter to the DEC stating without reservation that they believe hydraulic fracturing should be restrained for at least the next year. They found significant omissions and deficiencies in the DSGEIS, including failure to evaluate the cumulative impacts of drilling, failure to adequately plan for wastewater disposal, failure to require regulation of water withdrawals, and significant industrialization of rural and semi-rural areas.

See: <http://www.riverkeeper.org/wp-content/uploads/2010/01/signed-final-12-28-09-PEF-Encon-Letter.pdf>

MAYOR OF BINGHAMTON CALLS FOR STRONGER REGULATIONS

The mayor of the City of Binghamton submitted formal comments on the DSGEIS, calling on the governor to withdraw the document, broaden the scope of the impact study, and commit to stronger regulations than those proposed.

<http://www.cityofbinghamton.com/Library/pages/mayor/Comments%20to%20DEC%20on%20Gas%20Drilling.pdf>

NATIONAL PARK SERVICE EXPRESSES CONCERNS OVER DRILLING

The National Park Service submitted comments on the DSGEIS. The Park Service expressed concerns for the potential harm hydraulic fracturing could cause to resources and values of the Park Service:

See: <http://www.riverkeeper.org/wp-content/uploads/2010/01/NPS-Comments-on-NYSDEC-dSGEIS-12-31-09.pdf>

FORMER NUCLEAR REGULATORY COMMISSIONER ASKS FEDS TO REGULATE DRILLING

A former member of the Nuclear Regulatory Commission, Forest Remick, has called on the EPA to regulate natural gas drilling, in order to prevent air pollution and water contamination. Remick acknowledges the benefits of natural gas as an energy supply over other sources, but says the inherent production risks are too great to ignore.

See: <http://thetimes-tribune.com/opinion/editorials-columns/guest-columnists/feds-should-regulate-natural-gas-drilling-1.511814>

NORTHERN WESTCHESTER WATERSHED COALITION JOINS CHORUS OF LAWMAKERS CONCERNED ABOUT DRILLING IN NYC WATERSHED

The Northern Westchester Watershed Coalition, a group of 12 Westchester County towns, expressed their concern to NYS DEC Commissioner Grannis about industrial gas drilling within the New York City Watershed. Approximately 85% of Westchester County obtains its water supply from the Catskill and Delaware systems west of the Hudson.

See: http://www.riverkeeper.org/wp-content/uploads/2010/02/NYS_DEC_Marcellus_Shale_-_NWCC.pdf

DAILY NEWS REPORTS GOVERNOR PATERSON IN RUSH TO BEGIN DRILLING

The New York Daily News reported that DEC's Division of Mineral Resources (the DEC division in charge of the DSGEIS review) gave the other DEC divisions only a few days to review and comment on the 805-page draft document before it was released to the public. The article reports that senior officials ordered DEC to release the DSGEIS quickly.

See: http://www.nydailynews.com/ny_local/2010/01/31/2010-01-31_daves_rush_to_drill_upstate.html

EDITORIAL BOARDS COMMENT ON DSGEIS

NY TIMES

The New York Times has marked its opposition to Marcellus drilling in the New York City Watershed. The Times cited NYCDEP's expert scientific report and comments, and recommended that the watershed be put permanently off limits to drilling.

See: <http://www.nytimes.com/2010/01/02/opinion/02sat2.html>

ALBANY TIMES-UNION

The Albany paper has urged the DEC Commissioner to heed the advice of the EPA regarding drilling in New York State. The paper urged the DEC to follow the EPA recommendation to expand the DSGEIS analysis of the potential environmental and health impacts of drilling, especially in light of the potential impacts to the New York City water supply.

See: <http://www.timesunion.com/AspStories/story.asp?storyID=887114&category=OPINION>

NEW YORK DAILY NEWS

The NYC-based paper called on Gov. Paterson to block any attempt to drill within the New York City Watershed. Citing comments by the NYC DEP and the EPA, the editorial implores the State not to sacrifice New York's water.

See: http://www.nydailynews.com/opinions/2010/01/11/2010-01-11_protect_new_yorks_water.html

JOURNAL NEWS

The Journal News commented on New York City's and EPA's comments on the DSGEIS. The paper echoed the concerns of both agencies that hydraulic fracturing poses a serious danger to the New York City Watershed and statewide drinking water supplies. The paper also took the position that the DEC's proposed regulations would be insufficient to guard against this hazard.

See: <http://www.lohud.com/apps/pbcs.dll/article?AID=20101060311>

Read Riverkeeper's Letter-to-the-Editor in Response:

<http://www.lohud.com/article/20100109/OPINION/1090317/-1/newsfront/Gas-drilling-a-threat-to-NYC-watershed>

SYRACUSE POST-STANDARD

The Syracuse paper has asked Gov. Paterson to take several measures to ensure that the New York water supply is not jeopardized by hydraulic fracturing. In addition to supporting measures for an analysis of cumulative impacts and a drilling delay until completion of a federal study in November, the paper is calling for an outright ban in areas such as the New York City Watershed.

See: http://blog.syracuse.com/opinion/2010/01/gas_drilling_debate_gov_david.html

DAILY MESSENGER

The upstate paper has questioned the environmental review process conducted by the DEC over the past year and asked the responsible state authorities to ensure that the potential side effects of hydrofracking are not ignored.

See: <http://www.mpnnow.com/opinions/x1820922783/Drilling-for-gas-Go-slow-ensure-safety>

FRACTURED COMMUNITIES

TEXAS MAYOR WARNS NEW YORKERS ABOUT AIR AND WATER IMPACTS

Mayor Calvin Tillman of DISH, Texas spoke to a large crowd in Oneonta, NY February 16, 2010 and warned of impacts from hydraulic fracturing, based on his town's experience with drilling in the Barnett Shale. Mayor Tillman warned of carcinogens in the air, noxious odors, and road impacts. He cautioned about the lure of money promised from landmen, and encouraged the creation of off-limits areas. Mayor Tillman is expected to speak on Saturday, February 20, 2010 at 7pm at Binghamton's East Middle School.

http://www.thedailystar.com/local/local_story_048040012.html

http://www.newschannel34.com/news/local/story/Dish-Texas-Mayor-to-Talk/XK_D1M2nqkis1SNw9YsqTQ.csp

VIDEO – PROTECT NEW YORK STATE DRINKING WATER

This video documents the visual impacts of hydraulic fracturing, as well as the potential impacts to drinking water throughout New York.

<http://www.youtube.com/watch?v=OHBjw2hZ4U4>

PA DRILLER FINED \$85,000 FOR WELL MISMANAGEMENT

The Pennsylvania Department of Environmental Protection fined Atlas Resources, LLC, for violations of the state environmental laws. The violations include failure to implement proper erosion and sedimentation control measures, improper site restoration, and the discharge of residual and industrial waste, including diesel fuel, onto the ground.

See: <http://pittsburgh.bizjournals.com/pittsburgh/stories/2010/01/04/daily58.html>

DRILLERS PLEAD GUILTY TO ILLEGALLY DUMPING BRINE WATER

Two oil drillers for Swamp Angel Energy pleaded guilty to injecting 200,000 gallons of brine water into an abandoned well without a permit. The incident occurred in the Allegheny National Forest in McKean County, PA. They each face up to three years in prison and \$250,000 in fines. The guilty plea sends a strong signal to industrial gas drillers that they must dispose of wastewater properly.

See: <http://www.post-gazette.com/pg/10047/1036263-100.stm>

SRBC SHUTS DOWN PA DRILLER

The Susquehanna River Basin Commission (SRBC) ordered the cessation at two wells operated by Texas-based Novus Operating, LLC. The company began drilling wells without SRBC approval, despite SRBC's notification of the need for prior approval. The SRBC may seek civil penalties against the driller.

<http://www.srbc.net/pubinfo/press/docs/Project%20ReviewNaturalGasNovusCeaseOrder11310.pdf>

U.S. FOREST SERVICE ASKS JUDGE TO DELAY DRILLING ALLEGHENY NATIONAL FOREST

The U.S. Forest Service asked a federal judge to reverse a ruling that temporarily lifted a ban on drilling within the Allegheny National Forest. The court will hear argument on this issue March 9, 2010.

See: <http://www.post-gazette.com/pg/10049/1036858-100.stm>

PA OPENS STATE FOREST LAND TO HIGHEST BIDDER

As environmentalists and the US Forest Service try to curb drilling in Pennsylvania's Allegheny National Forest, PA Governor Ed Rendell has now leased rights to drill on 32,000 acres of state forest land, for which five energy companies bid \$128 million. In 2008, Pennsylvania had received \$160 million for the rights to drill on 74,000 acres. In total, there are now 410,000 acres of PA state land under lease to private companies.

See: <http://www.post-gazette.com/pg/10015/1028451-454.stm>

PA PLANS TO IMPOSE GAS TAX

Pennsylvania Gov. Ed Rendell intends to revive a tax plan on Marcellus Shale gas. The plan had been abandoned in budget negotiations last year. The governor said the projected revenue for the gas industry this year would support the tax. The plan could raise close to \$2 billion over five years.

See: <http://www.reuters.com/article/idUSN0910446320100209>

http://www.philly.com/inquirer/business/20100115_Rendell_to_revive_gas-drilling_tax_plan.html

VIDEO OF GAS COMPRESSOR IN OHIO SHOWS NOISE IMPACTS

This video documents the noise and impact from a natural gas compressor station. The New York State Department of Environmental Conservation did not analyze these impacts in the DSGEIS.

<http://www.youtube.com/user/NEOGAPINFO>

NYS DEC DENIES SEVERITY OF DRILLING ACCIDENT RATE

An environmental researcher in Ithaca, NY, compiled a list of 270 instances, taken from the DEC's own database, detailing instances of contamination and ecological damage related to natural gas production in New York over the past 30 years. DEC Commissioner Pete Grannis claims this figure is misleading and claims certain instances are simply "aberrations." The researcher, Walter Hang, expressed concern that many of the incidents have not been remediated decades later, including 29 of 40 abandoned gas wells.

See: <http://www.pressconnects.com/article/20100111/NEWS01/1110329>

PA DEP TO HIRE 68 ADDITIONAL STAFF

Pennsylvania Governor Ed Rendell recently issued a mandate to the PA DEP to hire 68 new personnel to enforce environmental regulations regarding industrial gas drilling. The expansion is designed to account for the growth in the natural gas industry and will be funded from increased permitting fees.

See: <http://www.philly.com/philly/business/83009747.html>, and
<http://www.reuters.com/article/idUSN2812147220100128>

ALBANY RALLIES OVER FRACKING

The New York State capitol was the focal point of counterpoised rallies regarding industrial gas drilling in the Marcellus Shale in New York on January 25, 2010. About 400 environmental advocates faced off against approximately 300 landowners, business owners and other supporters of Marcellus exploration.

See: <http://www.timesunion.com/AspStories/story.asp?storyID=893281>

http://www.syracuse.com/news/index.ssf/2010/01/new_york_protesters_divided_ov.html

See also: http://www.huffingtonpost.com/alison-rose-levy/dont-frack-with-new-york_b_437184.html

EXPERT DEBATE TACKLES NEW YORK DRILLING

On the day of statewide protests and rallies for and against natural gas drilling in the Marcellus Shale, public radio and the Albany Times Union hosted an expert panel to debate the dangers of hydraulic fracturing. Panelists included David Gahl of Environmental Advocates, Dr. Robert Howarth of Cornell, Dr. Bruce Selleck of Colgate, and John Conrad of Conrad Geoscience.

See:

<http://www.publicbroadcasting.net/wamc/news.newsmain/article/3566/0/1603707/WAMC.Speakers.Corner/WAMC.and.Times.Union.Marcellus.Shale.Debate>

DRILLING TO START IN WEST VIRGINIA PARK

Chesapeake Energy will start drilling within Ogelbay Park in Wheeling, West Virginia despite concerns over wastewater disposal. Chesapeake intends to drill within 1,300 feet of the park's stables. Chesapeake paid park officials approximately \$800,000 for leases within the park.

See: <http://www.news-register.net/page/content.detail/id/534000.html?nav=515>

DON'T FRACK WITH CORNELL

Cornell University instituted a moratorium on natural gas drilling on university lands.

<http://www.campusprogress.org/fieldreport/5007/dont-frack-with-cornell>

Wastewater Disposal Issues

DUNKARD CREEK FISH KILL LINKED TO WASTEWATER DISPOSAL

The fish kill in Dunkard Creek, along the Pennsylvania-West Virginia border last year, was linked to a chemical and biological imbalance in the creek and to the nearby underground injection of drilling wastewater into an abandoned mine. Local residents have released a video of the creek, documenting the 43 miles of the waterway impacted by the event. The fish kill has decimated the ecosystem of the creek and surrounding area.

See: <http://video.aol.com/video-detail/dunkard-creek/2188261708>

Initial report: <http://www.post-gazette.com/pg/09268/1000694-113.stm>

UNDERGROUND INJECTION OF WASTEWATER INCREASES IN WV

West Virginia is turning to underground injection to dispose of brine wastewater from industrial gas drilling.

<http://www.statejournal.com/story.cfm?func=viewstory&storyid=73947>

PENNSYLVANIA WASTEWATER MAY END UP IN OHIO

Pennsylvania regulators have put limits on the amount of drilling wastewater that can be disposed of in the state's streams and rivers. With the gas boom fully underway, however, operators are looking to Ohio to take a portion of PA's wastewater. Pennsylvania companies will soon be trucking well waste to Ohio for injection into regulated disposal wells.

See:

http://www.dispatchpolitics.com/live/content/local_news/stories/2010/01/11/copy/PaBrine.ART_ART_01-11-10_A1_TEG89MH.html?adsec=politics&sid=101

NY WASTEWATER TREATMENT PLANT ACCEPTS HYDRAULIC FRACTURING WASTEWATER

Watertown, NY is accepting drilling wastewater for disposal in its municipal sewage treatment facility. The facility has been permitted to treat an initial 35,000 gallons of wastewater from five vertical wells into the Utica shale in Otsego County. In addition to concerns over the undisclosed chemicals present in the wastewater, the water also contains large amounts of salts and dissolved solids that traditional sewage treatment plants are not designed to handle. The wastewater treatment plant discharges into the Black River, which flows into Lake Ontario.

See: <http://www.watertowndailytimes.com/article/20100117/NEWS03/301179986>

SOUTHERN TIER'S LARGEST TREATMENT PLANT SURPRISED TO BE ON STATE LIST OF PLANTS TREATING DRILLING WASTEWATER

Officials from the Binghamton-Johnson City sewage treatment plant were surprised that DEC listed the facility in the DSGEIS as one of the plants that may treat wastewater from hydraulic fracturing.

Appendix 21 of the DSGEIS lists wastewater treatment plants with approved pretreatment plans, but it does not identify whether any of these plants have the capacity to treat gas drilling wastewater or whether they completed the requisite headworks analysis to determine if they are capable. DEC has been roundly criticized for presenting a misleading list of treatment plants in the DSGEIS. Officials from the Binghamton plant stressed that they do not have the capacity to treat this wastewater.

<http://www.pressconnects.com/article/20100111/NEWS01/1110353/Officials-surprised-to-find-Binghamton-Johnson-City-treatment-plant-as-end-point-for-fracking-waste>

CHESAPEAKE CLAIMS IT WANTS TO REUSE 100% OF PRODUCED WATER

Chesapeake Energy stated recently it has a goal of reusing 100% of all produced water from industrial gas drilling in the Marcellus Shale by the end of this year. In addition, Chesapeake also wants to explore underground injection wells. Chesapeake stated it wants to eliminate the need for wastewater treatment.

See: <http://www.theintelligencer.net/page/content.detail/id/534291.html>

CHESAPEAKE WITHDRAWS PLANS TO INJECT WASTEWATER INTO WELL NEAR FINGER LAKES

Chesapeake Energy has withdrawn its plans and permit application to dispose of wastewater in a former gas well in the Town of Pulteney, NY. Local residents and officials were concerned about the impact the project might have on the local water supply and nearby Keuka Lake.

See:

<http://www.stargazette.com/article/20100216/NEWS01/100216013/Update++Chesapeake+withdrawing+Pulteney+wastewater+site+plans>

<http://www.stargazette.com/article/20100214/NEWS01/2140353>

Impacts to Air Quality – Lessons from the Barnett Shale

INCREASED CONCERNS OF BENZENE IN TEXAS

DISH, Tex., is contending with air impacts as a result of the intense hydraulic fracturing in the Barnett Shale. The town has a number of wells and gas compressors within its town. Recently, it has found heightened levels of various carcinogens and neurotoxins in the air. The town released a dispersion model of airborne contaminants in the DISH area, showing benzene and carbon disulfide above regulatory limits. The Texas Commission on Environmental Quality (TCEQ) also released air monitoring results showing benzene above acceptable limits on residential property.

See:

http://www.dentonrc.com/sharedcontent/dws/drc/localnews/stories/DRC_maps_0124.aa1070db.html#

TCEQ's finding on the DISH, TX air study:

<http://www.tceq.state.tx.us/implementation/barnettshale/bshale-health>

TCEQ Barnett Shale monitoring information:

<http://www.tceq.state.tx.us/implementation/barnettshale/bshale-main>

BENZENE LEVELS EXCEED REGULATORY LIMITS

The TCEQ reported recently that more than one out of every five natural gas well sites in the Barnett Shale is emitting benzene in excess of regulatory limits. The TCEQ had previously announced "the air is safe" following a three-day test in the Forth Worth area. The agency had claimed the test had monitored 126 sites, but in fact had studied only 8. The recent results were derived from the monitoring data from 94 sites.

See: <http://www.star-telegram.com/local/story/1926512.html>

FORT WORTH, TEXAS RETHINKS SUPPORT OF GAS DRILLING

Fort Worth has over 1,000 gas wells and has long supported drilling in the Barnett Shale. However, recent reports of benzene in air from hydraulic fracturing are making the city's leaders rethink their support for the industry. The city may rewrite rules that currently allow drilling in residential neighborhoods.

See: <http://www.star-telegram.com/242/v-print/story/1948278.html>

<http://online.wsj.com/article/SB10001424052748703575004575043654062770726.html>

TEXAS FACING INCREASED DRILLING COMPLAINTS

The Texas TCEQ has announced new complaint and investigation procedures as complaints from DISH and the surrounding area continue to mount. One component of the new procedures is to respond to all complaints within 12 hours.

See: http://www.dentonrc.com/sharedcontent/dws/drc/localnews/stories/DRC_Gas_1225.e7fb972.html

Truck Traffic Impacts

PA TO CRACKDOWN ON TRUCKING IMPACTS

The Pennsylvania Public Utility Commission announced an increase in enforcement related to trucks hauling water, sand, stone, and drilling chemicals. They have received complaints that trucks are not complying with state rules.

See: http://www.puc.state.pa.us/General/press_releases/Press_Releases.aspx?ShowPR=2456

<http://thetimes-tribune.com/news/crackdown-on-marcellus-haulers-1.617459>

PA ENFORCEMENT OFFICIALS WRESTLE WITH TRUCK IMPACTS

Even Pennsylvania judges are unsure how to handle impacts from Marcellus Shale trucks. Impacts result from thousands of heavy Marcellus trucks travelling on country roads not designed for the weight. Approximately 50 Pennsylvania judges and municipal and state police officers gathered recently to discuss the issue.

See: <http://www.sungazette.com/page/content.detail/id/538894.html?nav=5011>

Haynesville Shale Update

INVESTIGATION OF LOUISIANA CATTLE DEATHS DELAYED

In April 2009, 17 cows were found dead at a gas drilling site in the Haynesville Shale, Caddo Parish, Louisiana. In the nine months since, drilling and hydraulic fracturing have continued in area. The Louisiana Department of Environmental Quality has not made a finding regarding the cattle deaths, but at least one spokesman acknowledged the continued threat to public health, livestock and wildlife. The investigation is still open, without any explanation for the delay.

See: <http://www.shreveporttimes.com/article/20100112/OPINION03/1120305/1058>

<http://www.shreveporttimes.com/article/20100122/OPINION03/1220356/1058>

INDUSTRY NEWS AND ANNOUNCEMENTS

EXXON MOBIL ACQUISITION OF XTO

Exxon Mobil recently announced that it would acquire XTO Energy, a move which would make the corporation the largest U.S. natural gas producer and holder of gas reserves. Representative Ed Markey, chairman of the House Energy and Environment Subcommittee, expressed concern that the acquisition would result in more widespread use of hydraulic fracturing and resultant water pollution.

See: <http://www.reuters.com/article/idUSTRE60J53920100120>

MORE ENERGY COMPANY MERGERS EXPECTED

The potential for industrial gas drilling in the Marcellus Shale and elsewhere is fueling the potential for energy company mergers. Recent deals include Exxon Mobil's acquisition of XTO, Total of France buying a portion of Chesapeake's Barnett Shale interest, and Statoil buying a portion of Chesapeake's Marcellus interest. These deals are worth tens of billions of dollars.

See: <http://www.nytimes.com/2010/02/17/business/energy-environment/17merge.html>

PORTABLE TREATMENT SYSTEM DESIGNED TO TREAT WASTEWATER

The company HBC Systems has announced the viability of a portable wastewater reclamation system. The system would enable gas well operators to recycle water used in drilling and eliminate the need to transport fresh and wastewater to and from well sites. According to HBC, the system was successfully tested in the Haynesville Shale in 2009 in the reclamation of reserve pit water.

See: <http://www.environmentalleader.com/2010/01/22/green-machine-recycles-wastewater-used-in-hydraulic-drilling-process-for-natural-gas/>

LEGISLATIVE UPDATE

U.S. HOUSE COMMITTEE TO INVESTIGATE INDUSTRIAL GAS DRILLING

On February 18, 2010 the U.S. House of Representatives Committee announced an investigation into the potential impacts of hydraulic fracturing. The Committee is requesting information on chemicals used in the process, and the impact to public health and the environment. The Committee has received information from several industrial gas drillers that they have used diesel fuel in their fracturing fluids, potentially violating an agreement with EPA to cease this activity. The Committee sent letters to several drillers. Committee Chairman Henry Waxman drafted memorandum detailing the issue, the Committee's findings, and the need for additional investigation.

Read the Committee's memorandum explaining its action:

http://energycommerce.house.gov/Press_111/20100218/hydraulic_fracturing_memo.pdf

Read the letter sent to Halliburton:

http://energycommerce.house.gov/Press_111/20100218/lesar_letter.pdf

CENTRAL NY LEGISLATORS SPLIT ON FRACKING

Many New York legislators are still undecided on the issue of hydraulic fracturing in the Marcellus Shale, according to poll of central NY legislators by the Syracuse Post Standard. Of those still making up their minds, the biggest consideration is weighing the potential economic benefit to the State against the potential environmental and public health impacts. The survey suggests widespread appreciation of the dangers of hydraulic fracturing, even among the undecideds, with many legislators having introduced bills over the past year that address the potential threat on a piecemeal basis.

See: http://www.syracuse.com/news/index.ssf/2010/01/central_new_york_lawmakers_str.html

STATE SENATE OPPOSITION TO DRILLING

State Assemblymember Janele Hyer-Spencer has registered her opposition to DEC's DSGEIS. Citing numerous nationwide examples of the degradation and contamination of groundwater supplies, Assemblymember Hyer-Spencer called for a ban on drilling in the New York City Watershed.

See: <http://assembly.state.ny.us/mem/?ad=060&sh=story&story=34949>

NEW REPORTS AND STUDIES

VIDEO REPORT ON HEALTH EFFECTS OF DRILLING CHEMICALS

Dr. Theo Colborn of the Colorado-based Endocrine Disruption Exchange explains gas drilling techniques, health impacts, and preventive health and environmental measures in this video.

See: <http://www.endocrinedisruption.com/about.people.php>

GAS COMPANIES SIDESTEPPING FRACKING REGULATIONS

A report by the Environmental Working Group reveals that federal oversight of hydraulic fracturing is sorely lacking. In particular, the report highlights the industry practice of replacing diesel fuel—which requires a permit—in fracturing fluid with similar compounds with equivalent toxicity, which do not require permitting.

See: <http://greeninc.blogs.nytimes.com/2010/01/20/gas-drilling-techniques-under-fire-again/>

COLORADO WILDLIFE THREATENED BY DRILLING

The Colorado Wildlife Federation has released a report concluding that oil and gas drilling on public lands in the state poses a significant threat to wildlife.

See: <http://abcnews.go.com/Business/wireStory?id=9615746>

TAKE ACTION

EPA ESTABLISHES GAS DRILLING TIP LINE

The EPA has set up a hotline for reporting dumping and other illegal or suspicious drilling-related activities. The hotline is accessible over the phone and via email.

See: http://www.epa.gov/region03/marcellus_shale/tipline.html

MAYOR OF DISH, TX TO SPEAK IN BINGHAMTON – FEB. 20, 2010

Mayor Calvin Tillman is expected to speak on Saturday, February 20, 2010 at 7pm at Binghamton's East Middle School. Mayor Tillman will talk about his town's experience with industrial gas drilling in the Barnett Shale. Admission is free.

See: http://www.newschannel34.com/news/local/story/Dish-Texas-Mayor-to-Talk/XK_D1M2nqkis1SNw9YsgTQ.csp

MANHATTAN INSTITUTE CONFERENCE: NATURAL GAS AND THE ENERGY ECONOMY – FEB. 24, 2010

The Manhattan Institute is hosting a conference on Wednesday, February 24, 2010. The topic is: Natural Gas and the Energy Economy – Potential for the U.S. and New York State. The keynote speaker is Robert Catell, Chairman of the Advanced Energy & Research Technology Center, SUNY, Stony Brook. The panelists are Timothy Considine, Professor of Energy Economics, University of

Wyoming; Craig Michaels, Riverkeeper's Watershed Program Director; and Timothy Lattimore, member of the Cayuga County Legislature and former Mayor of Auburn, NY.

Where: Harvard Club, 35 West 44th Street, New York, NY

When: February 24, 2010 – 8am to 11am

To RSVP: http://www.manhattan-institute.org/events/cepe_02-24-10.htm

LANDMAN REPORT CARD TO HELP LANDOWNERS NEGOTIATE WITH INDUSTRY

The ExtrAct group at MIT and citizen groups nationwide have developed a website designed to promote accountability among oil and gas companies. The Landman Report Card hosts landowners' reviews of energy companies and their representatives.

See: <http://www.landmanreportcard.com/>

SUNY – MARCELLUS SHALE PANEL – MARCH 1, 2010

The SUNY College of Environmental Science and Forestry (ESF) is hosting a panel discussion on March 1, 2010 about industrial gas drilling. Panelists include Joe Heath, general counsel for the Onondaga Nation; Katherine Nadeau of Environmental Advocates of New York; David Palmerton, President, Palmerton Group (who worked formerly for the drilling industry); Adam Schultz, Esq., Partner, Gilberti Stinziano Heintz & Smith, P.C. (who represents clients in the drilling industry); and Dr. Donald Siegel, professor of earth sciences at Syracuse University.

The panel discussion starts at 5pm, Monday, March 1, 2010 in Marshall Hall Auditorium on the ESF Campus in Syracuse, NY.

See: <http://www.esf.edu/communications/view.asp?newsID=333>

MARCELLUS SHALE CONFERENCE IN PITTSBURGH, PA – MARCH 3-4, 2010

The Pennsylvania Environmental Council has announced a Marcellus Shale Policy Conference on March 3-4, 2010 in Pittsburgh, PA. The conference will seek to identify strategies for sustainable development of the resource.

See: <http://www.pecpa.org/marcellus>

DRBC HEARING ON PROPOSED SURFACE WATER WITHDRAWAL

The Delaware River Basin Commission will hold a special a Public Hearing for Stone Energy Co.'s proposed surface water withdrawal and natural gas well on Wednesday, February 24, 3:00 pm to 7:00 pm at the Best Western Inn at Hunts Landing, 126 Routes 6 & 209, Matamoras, PA. Written comments on the project will be accepted until March 12, 2010.

One water withdrawal application is for 70 million gallons from the West Branch of the Lackawaxen River in Wayne County, PA. The other application is for shale gas well "M1" (known as the Matoushek well) also in Wayne County. Stone Energy drilled this well in 2008 without first obtaining

approval from DRBC. This application would “legalize” that well and allow hydraulic fracturing and other well development to proceed.

http://www.state.nj.us/drbc/notice_stoneenergycorp020910.htm