

Spill Name: ... GAS WELL

Cause of Spill: EQUIPMENT FAILURE


Material Spilled: CRUDE OIL    Resource Affected: GROUNDWATER  
 Material Spilled: NATURAL GAS    Resource Affected: GROUNDWATER

Caller Remarks:


"CALLER CONCERNED ABOUT WATER WELL. DRILLERS DRILLING NEARBY CAUSED PROBLEM - DRILLING EAST AND 1 MILE AWAY. caller never had problem til today. fd on scene now (yorkshire). caller concerned about impact."

DEC Investigator Remarks:













... "DALE FOX DRILLING GAS WELL ON BIXBY HILL RD, FREEDOM. NATURAL GAS ESCAPED THRU FAULT IN SHALE, AFFECTED PROPERTIES APPX 1 & 1/2 MILES SW ON WEAVER RD. TOWN OF YORKSHIRE. GAS BUBBLING IN RON LEWIS'S POND. BUBBLING IN DITCH WEST SIDE OF WEAVER RD. 12 FAMILIES EVACUATED. GAS IN LEWIS'S BASEMENT (BUILT ON SHALE). FARMERS WELL IN BARN 11708 WEAVER RD (STEVE WOLDSZYN) VENTED TO OUTSIDE. GAS COMING UP THOU GROUND IN LEWIS'S YARD." ... "GAS STILL BUBBLING IN POND & SIDE OF RD." ... "POND MINOR BUBBLING. HE IS WORRIED APOUT DRINKING WATER" ...

-  **Affected Houses**


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-  **Selected NYS Spills**

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- Gas, Oil & Other Wells**
-  Gas Well
-  Gas Well Plugged
-  Oil Well
-  Oil Well Plugged
-  Other Well
-  Other Well Plugged
-  Storage Well
-  Storage Well Plugged
-  Solution Brine Well
-  Solution Brine Well Plugged
-  Confidential
-  Dry Hole

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-  **Selected Parcels**

54

N E W Y O R K

Eddy Rd

Weaver Rd

Ron Lewis

Robert & Rose Noel

Steven & Diane Woldszyn Jr.

Wayne & Ruth Weaver

Jeanette Titus

C A T A R A U G U S

Delmad Rd

Bixby Hill Rd


Bixby Hill Rd

90

0 1 mi

ALLEGANY COUNTY  
DEPARTMENT OF HEALTH7 Court Street, County Office Building  
Belmont, NY 14813-1076Loreen Ballengee, MS  
Public Health Director  
E-mail: ballenl@alleganyco.com585-268-9250 800-797-0581  
Fax: 585-268-9264Thomas E. Hull, MS  
Deputy Public Health Director  
Director of Environmental Health  
E-mail: hullte@alleganyco.com

June 16, 2009

To: Michael J. McCormick, Legislator  
Allegany County Legislative District IVFrom: Thomas E. Hull, M.S.   
Allegany County Department of HealthSubj: Residential Water Investigation  
Property of David Eddy/1366 Trapping Brook Road, Andover, NY 14807

Dear Legislator McCormick:

The water well serving Mr. Eddy's residence on Trapping Brook Road in Andover, NY, has a reported completed depth of 360 feet. A well of this depth should provide water of very high quality, as long as the integrity of the well or aquifer from which it draws water has not been compromised. Of note, this well was reported to have been serviced in 2004 by David Root of Root Water Well Specialists in Scio, NY, and was determined at that time to be in very good condition.

Mr. Eddy alleges that prior to about four months ago, his water well provided water of very good quality. However, at about that time, and allegedly after U.S. Energy had done some gas well "fracturing" (drilling) approximately 1,000 feet from his well, he began having water problems that included "muddy water", "oil" in the water, and a "gas smell" to the water.

Mr. Eddy made contact with U.S. Energy, the New York State Department of Environmental Conservation (POC: Brian Jandrew), and this Health Department (POCs: Anne King & Thomas Hull). The information was developed as a result of these contacts:

- U.S. Energy at some point apparently offered Mr. Eddy an indeterminate amount of money in the form of a check, which Mr. Eddy allegedly refused to cash.
- Mr. Eddy claimed that U.S. Energy "went through" the water table twice. As a result of the concerns he expressed to them after this, when he started having problems with his water, U.S. Energy tested Mr. Eddy's water, would not provide him with the test results, but told him the tests showed no contamination of the water.



- Mr. Eddy stated that U.S. Energy had offered to install a water treatment system to remedy the problems Mr. Eddy was having, at their cost, but with an indication to Mr. Eddy that they would maintain the system only if the water was contaminated. Since U. S. Energy reported that the water tests they conducted were satisfactory, Mr. Eddy was concerned that meant a water treatment system would be installed at no cost to him, but that the maintenance costs (he indicated up to \$500/month) would fall on him.
- Anne King made a site visit to Mr. Eddy's property to take a water sample for bacteriological analysis. The test result came back satisfactory, with no bacteriological contamination found on this analysis.
- Mr. Jandrew confirmed that U.S. Energy had committed to install a water treatment (filtration) system at Mr. Eddy's house, to treat the ongoing water problems. This treatment system was installed on Friday, June 12, 2009. (See attached photographs).
- Mr. Jandrew provided me with copies of the water test results on the sampling U.S. Energy conducted on Mr. Eddy's well (See attached water sample test results). Of significance, of the tests conducted, those for methane, ethane, and "petroleum hydrocarbons" were all "Non-Detects", meaning the compounds weren't found in the water at the lowest analytical levels the tests conducted would measure. All analyses were conducted using U.S. Environmental Protection Agency (EPA) analytical methods.
- Mr. Jandrew indicated to me that he was not convinced that U.S. Energy's drilling activity was directly related to the problems Mr. Eddy subsequently had with his water. He indicated he couldn't say the drilling activity wasn't the cause of the subsequent water problems, but that he didn't have enough information to make that determination with any certainty.
- On June 17, 2009, Mr. Jandrew provided me with a copy of a letter he received from U.S. Energy, dated June 15, 2009 (see enclosed letter), that detailed events concerning the Mr. Eddy's water problems beginning with water samples taken by U.S. Energy on May 11, 2009. This letter contains updates on the situation through the present time. Within the letter, U. S. Energy documents the results of water testing conducted by Culligan, which indicated there were trace amounts of oil in the water, and included a recommendation for installation of a carbon water treatment (filtration) system to treat Mr. Eddy's water. U.S. Energy instructed Culligan to go ahead and install the treatment system, for which they agreed to pay. U. S. Energy also indicated they would pay for the system's maintenance until such time as periodic water testing proved the water was not impacted by their activities.
- Personally, I spoke with Mr. Eddy on two occasions. In my opinion, Mr. Eddy should continue to closely monitor his water situation to ensure no additional problems arise. U.S. Energy has installed a treatment system, and Mr. Eddy should be able to determine if that system is treating the water such that it is of suitable quality for all household uses. U.S. Energy should also be fully responsible for maintaining the treatment system for as long as it is determined to be necessary, even if that length of time this is required is of indeterminate length. However, with respect to these two issues (his water quality post-treatment system installation, and the

maintenance of the system by U.S. Energy) Mr. Eddy should continue to use Mr. Jandrew as his primary point of contact, and may need to hire legal counsel to represent him if any further action regarding U.S. Energy and their activities impacting his water well is deemed to be necessary.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

290 BROADWAY

NEW YORK, NY 10007-1866

DEC 30 2009

dSGEIS Comments  
Bureau of Oil & Gas Regulation  
NYSDEC Division of Mineral Resources  
625 Broadway, Third Floor  
Albany, NY 12233-6500

Dear Sir or Madam:

The U.S. Environmental Protection Agency (EPA) has reviewed the September 2009 draft Supplemental Generic Environmental Impact Statement (dSGEIS) that was prepared by the New York State Department of Environmental Conservation (NYSDEC) Division of Mineral Resources on the Oil, Gas and Solution Mining Regulatory Program Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs. The purpose of the dSGEIS is to satisfy the requirements of the State Environmental Quality Review Act (SEQRA) for NYSDEC to review and process permit applications for the horizontal drilling and hydraulic fracturing (hydrofracturing) of natural gas bearing shales, including the Marcellus Shale. This letter responds to NYSDEC's requests for comments on the dSGEIS and presents EPA's major concerns. Technical comments on the dSGEIS are enclosed.

EPA believes that the analysis and discussion of cumulative and indirect impacts in the dSGEIS need to be significantly expanded. Even with its generic format, the dSGEIS should discuss the impacts that may result from past, present, and reasonably foreseeable future projects as well as those impacts associated with gas drilling and hydrofracturing that may occur later in time or at a distance from the immediate project site. For example, as the New York State Public Service Commission (PSC) has the regulatory authority over the construction and operation of the natural gas gathering pipes, the dSGEIS does not include an evaluation of the environmental impacts of the separate yet interrelated actions of siting and constructing gathering lines. EPA also notes that the dSGEIS does not analyze the impacts from new drilling service industries that would undoubtedly result. To ensure a full analysis of cumulative and indirect impacts, we recommend that the PSC become a cooperating agency and that the PSC-related issues be fully integrated in the finalization of this document, and that all potential environmental impacts for the actions of drilling, hydrofracturing, collecting and transporting natural gas from the Marcellus Shale be assessed. Such collaboration may also provide the opportunity to coordinate actions in order to minimize the amount of flaring of gas between the time of opening a well and the construction of gathering lines.

In addition, a greater emphasis needs to be placed on the potential health impacts that may be associated with gas drilling and hydrofracturing. EPA suggests that the New York State Department of Health (DOH) join NYSDEC as a co-lead on the SEQRA document. Not only does DOH have expertise to offer on health impacts, but it was delegated primary enforcement responsibility (primacy) of the Safe Drinking Water Act



by EPA. This is of direct interest to EPA as we are responsible for overseeing DOH's implementation and enforcement of the drinking water program.

While EPA understands that this dSGEIS is the SEQRA documentation to specifically evaluate hydraulic fracturing, it supplements a 1992 SEQRA document. EPA is concerned that over the past 17 years since the 1992 GEIS was written, the "existing" environment and conditions in New York State have changed sufficiently that using the information from that report as a baseline for the dSGEIS will not take into account the cumulative impacts from habitat fragmentation, population increase, and climate change that may have occurred during that time.

EPA is particularly concerned about the potential risks associated with gas drilling activities in the New York City watershed and the reservoirs that collect drinking water for nine million people. As a signatory to the 1997 New York City Watershed Memorandum of Agreement (MOA), EPA strongly supports its major tenets, one of which is that watershed protection and community vitality can be achieved concurrently. Nevertheless, the potential for gas drilling in the watershed poses new challenges that were unanticipated at the point at which the MOA signatories agreed on a common approach to protect drinking water. Despite the mitigation measures already proposed by NYSDEC in the dSGEIS, EPA 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. As NYSDEC is well aware, the watershed supplies drinking water to over nine million people and the avoidance of filtration saves New York taxpayers billions of dollars that would be needed to construct and operate a water filtration plant should the watershed be compromised.

EPA agrees with the sentiments expressed by Acting Commissioner Steven Lawitts of the New York City Department of Environmental Protection (NYCDEP) in his December 23, 2009 comment letter to NYSDEC: "Balancing environmental and public health concerns with the need for adequate energy resources and economic development is a complex and challenging issue – not only in New York but throughout the nation." Acting Commissioner Lawitts also states, "New York City's watershed is a unique resource and deserves special attention and consideration." To address this concern, EPA recommends a very cautious approach in all watershed areas so that NYSDEC can gain experience with, as well as ensure it has the resource capacity for regulating, high volume hydraulic fracturing activities.

Periodically, EPA reviews drinking water quality in the New York City watershed to ensure that drinking water meets all drinking water standards. If gas drilling, however, adversely impacts water quality in the watershed, the city of New York would likely be required to build a filtration treatment system at an expenditure of \$10 billion in capital costs and \$100 million in annual operating costs. Clearly, it is in all our interests to avoid this scenario.

Although EPA has not had the opportunity to fully review the information contained in NYCDEP's Final Impact Assessment Report, we expect NYSDEC to incorporate appropriate technical information into the SEQRA document. Furthermore, we repeat

our proposal of late 2008, that NYSDEC partner with EPA and the NYCDEP to develop an enhanced oversight approach for the New York City watershed that would allow for coordination of regulatory programs such as stormwater permitting, industrial pretreatment, and underground injection control as they relate to horizontal drilling and high volume hydraulic fracturing of the Marcellus Shale. While protecting the New York City watershed is important because of the millions of New Yorkers who rely on this drinking water supply, we also have concerns about water quality impacts throughout the state. Just because fewer people rely on upstate water sources does not imply that these supplies are not also worthy of protection. Therefore, we extend an offer to partner with NYSDEC on similar coordinated efforts state-wide.

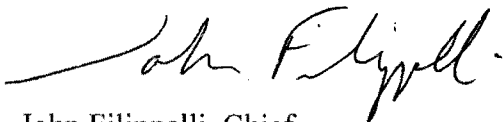
Moreover, EPA strongly recommends that the SEQRA documentation reflect any and all direct consultation with each of the Indian Nations in New York State as the dSGEIS does not specifically discuss the impact on the nations. While EPA is aware that NYSDEC has already taken steps in this regard, at the EPA annual Indian leaders meeting in November 2009, representatives of virtually every Indian Nation expressed serious opposition to hydrofracturing. Indian Nation concerns include the radioactivity of cuttings and flowback materials, the fate of toxic/carcinogenic chemicals used in hydrofracturing solutions, the impact on water quality and supply, climate impacts and long-term sustainability.

In addition, to the extent allowed by law, EPA encourages NYSDEC to release information regarding the composition of the hydrofracturing solutions that are expected to be used.

In conclusion, EPA believes that NYSDEC has prepared an informative dSGEIS on hydrologic fracturing of the Marcellus Shale. However, we have concerns regarding potential impacts to human health and the environment that we believe warrant further scientific and regulatory analysis. Of particular concern to EPA are issues involving water supply, water quality, wastewater treatment operations, local and regional air quality, management of naturally occurring radioactive materials disturbed during drilling, cumulative environmental impacts, and the New York City watershed. EPA recommends that these concerns be addressed and essential environmental protection measures established prior to the completion of the SEQRA process.

Thank you for the opportunity to comment on the dSGEIS. EPA's technical comments on the document are enclosed. If you have any questions, please call Lingard Knutson of my staff at (212) 637-3747.

Sincerely,



John Filippelli, Chief  
Strategic Planning and Multi-Media Programs Branch

Enclosure