

January 11, 2012

Attn: dSGEIS Comments
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-6510

Re: Comments on Revised Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas, and Solution Mining Regulatory Program Well Permit Issuance for Horizontal Drilling and High Volume Hydraulic Fracturing in the Marcellus Shale and Other Low-Permeability Gas Reservoirs

The Environmental Working Group is pleased to submit the following comments¹ on the New York State Department of Environmental Conservation's draft supplemental generic environmental impact statement on horizontal drilling and high volume hydraulic fracturing.² EWG is a non-partisan, non-profit organization dedicated to using the power of information to protect public health and the environment.³ As part of that mission, EWG produces original research including reports on U.S. oil and natural gas drilling. For the last several years, EWG has conducted extensive research on the drilling technique known as hydraulic fracturing in which drilling companies inject a mix of water, sand and chemicals (some of them toxic) under high pressure into natural gas and oil wells. The fluid breaks open underground rock formations and allows natural gas and/or oil to flow to the surface. This process is proposed to be used by drilling companies in New York in conjunction with horizontal drilling to extract natural gas from shale formations.

EWG's analysis of the SGEIS shows that there is not enough science to support the state's decision to proceed with high-volume hydraulic fracturing and horizontal drilling. Based on the available evidence, the state's proposed protections are inadequate, creating a high likelihood of serious water contamination and other problems. Costs to clean up polluted water could run into the billions of dollars while employment opportunities for New Yorkers in the drilling industry are likely to be modest. Our recent research indicates that drilling companies persuaded many New York residents to sign natural gas leases without disclosing the risks of gas drilling as part of a land acquisition campaign that Oklahoma City-based Chesapeake Energy Corp. has termed a "land grab" in its annual report.⁴ Chesapeake has acquired natural gas leases in New York, among other states. Several New York residents said they did not even know what hydraulic fracturing was when they signed their leases. At the same time, natural gas drilling companies were disclosing to their investors daunting lists of possible mishaps including leaks, spills,

¹ These comments are filed in addition to separate Environmental Working Group comments on the New York State Department of Environmental Conservation's proposed high volume hydraulic fracturing regulations.

² N.Y. State Dep't. Evtl. Conservation, Supplemental Generic Evtl Impact Statement 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 (2011) [hereinafter NYDEC SGEIS].

³ See Evtl. Working Group, <http://www.ewg.org> (last visited Dec. 5, 2011).

⁴ Chesapeake Energy Corp., Annual Report (form 10-K), at 4 (Mar. 1, 2011).

explosions, bodily injuries, limited insurance coverage, and death. If the state were to proceed with drilling, it would impose a highly risky process on landowners who did not know what they were getting into. The state has an obligation to assess the scope of the industry's apparent deception and to determine whether landowners were victims of fraud before allowing drilling to occur. Finally, the drilling industry has shown that it is willing to engage in an ongoing violation of the Safe Drinking Water Act in its hydraulic fracturing operations. Until the industry shows that it can abide by the law, allowing high-volume hydraulic fracturing in New York would essentially reward law breaking. There are simply too many risks and unanswered questions about high-volume hydraulic fracturing and horizontal drilling for New York to approve this extraction process. The state must conduct a more rigorous investigation of this type of drilling based on the best science to determine how and whether it can be conducted safely.

Natural Gas Drilling is Extremely Risky

Natural gas drilling and hydraulic fracturing is an extremely risky activity by drilling companies' own admission. For years, gas drillers have consistently sent their shareholders and potential investors long lists of potential hazards "inherent" in or "naturally incident to" drilling.⁵ The reason for these warnings: federal law, enforced by the U.S. Securities and Exchange Commission, aims to protect investors against fraud by requiring companies that sell stock to disclose "the most significant factors that make the offering speculative or risky."⁶

For example, XTO Energy Corp., a subsidiary of Exxon Mobil Corp., the nation's leading natural gas producer, has told its investors for years that:

"Our operations are subject to inherent hazards and risks, such as fire, explosions, blowouts, formations with abnormal pressures, uncontrollable flows of underground gas, oil and formation water and environmental hazards such as gas leaks and oil spills. Any of these events could cause a loss of hydrocarbons, pollution or other environmental damage, clean-up responsibilities, regulatory investigations and penalties, suspension of operations, personal injury claims, loss of life, damage to our properties, or damage to the property of others . . . As protection against operating hazards, we maintain insurance coverage against some, but not all, potential losses. We do not believe that insurance coverage for all environmental damages that could occur is available at a reasonable cost. We believe that our insurance is adequate and customary for companies of similar size and operation, but losses could occur for uninsured risks or in amounts exceeding existing coverage. The occurrence of an event that is not fully covered by

⁵ See, e.g., Southwestern Energy Company, Annual Report (form 10-K), at 38 (Feb. 25, 2011) ("our operations are subject to all the risks normally incident to the operation and development of natural gas and oil properties, the drilling of natural gas and oil wells and the sale of natural gas and oil, including but not limited to encountering well blowouts, cratering and explosions, pipe failure, fires, formations with abnormal pressures, uncontrollable flows of oil, natural gas, brine or well fluids, hydrocarbon drainage from adjacent third-party production, release of contaminants into the environment and other environmental hazards and risks and failure of counterparties to perform as agreed.").

⁶ See 17 C.F.R. § 229.503(c) (companies must disclose "most significant" risks).

insurance could adversely affect our financial condition and results of operations.”⁷

Chesapeake, the nation’s second-leading natural gas producer has said in its disclosures to investors since at least 1996 that “horizontal and deep drilling activities involve greater risk of mechanical problems than vertical and shallow drilling operations.”⁸ The documents did not specify what the problems might be. Horizontal and deep drilling activities are those that are likely to occur in New York. The DEC should ask Chesapeake to explain its statement and should ask Chesapeake and other companies to explain what it means that their insurance might be inadequate before the DEC allows high volume hydraulic fracturing and horizontal drilling.

These drilling risks are not just hypothetical. State officials in Colorado, Ohio, Pennsylvania, and Wyoming have documented water pollution from natural gas drilling in recent years. As far back as 1987, the U.S. Environmental Protection Agency detailed dozens of cases of gas and oil drilling-related contamination in a report to Congress.⁹

Cleaning Contaminated Drinking Water Could Cost Billions

Cleaning up polluted water can be extraordinarily expensive — if it can be done at all. If upstate drilling causes contamination to New York City’s unfiltered water supply, the DEC estimates that the cost of building a filtration plant to clean up the pollution is \$8 billion **at a minimum**. Addressing pollution to private water wells could be expensive, too. The State of Pennsylvania estimated in 2010 that it would cost almost \$12 million to extend public water lines to 19 families in the town of Dimock who can no longer drink their well water because of natural gas drilling pollution.¹⁰ In 2004, Canada-based Encana Oil & Gas improperly cemented and hydraulically fractured a well in Garfield County, Colo., causing natural gas and associated contaminants to pollute a nearby creek with unsafe levels of carcinogenic benzene.¹¹ As of last

⁷ XTO Energy Corp., Annual Report (form 10-K) (Mar. 31, 2003).

⁸ Chesapeake Energy Corp., Annual Report (form 10-K), at 4 (Mar. 1, 2011).

⁹ URS Corp., Phase I Hydrogeologic Characterization of the Mamm Creek field Area in Garfield County (2006), <http://cogcc.state.co.us/> (follow links for “Library” and then “Piceance Basin”) (prepared for Bd. of County Comm’rs, Garfield County, Colo.); Colo. Oil & Gas Conservation Comm’n, Order No. 1V-276 (Sept. 16, 2004), <http://cogcc.state.co.us/> (follow link for “Orders”); Ohio Dep’t of Natural Res., Report on the Investigation of the Natural Gas Invasion of Aquifers in Bainbridge Township of Geauga County, Ohio (2008); Scott E. Bair, et al., Expert Panel Technical Report, Subsurface Gas Invasion Bainbridge Township, Geauga County, Ohio (2010), (submitted to Ohio Dep’t of Natural Res., Div. of Mineral Res. Mgmt.), <http://www.dnr.state.oh.us/bainbridge/tabid/20484/Default.aspx>; Ohio Dep’t of Natural Res., Order No. 2009-17 (Apr. 14, 2009), <http://ohiodnr.com/portals/11/bainbridge/2009-order-by-chief.pdf>; Consent Order & Settlement Agreement in re Cabot Oil & Gas Corp. (Dep’t Env’tl. Prot. Dec. 15, 2010); Settlement Agreement in re Windsor Energy (Wyo. Dep’t Env’tl. Quality Apr. 13, 2007), http://deq.state.wy.us/volremedi/downloads/Web%20Notices/Windsor%20Well_Clark/AR-M550N_20070419.pdf; U.S. Env’tl. Prot. Agency, Report to Congress: Management of Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas, and Geothermal Energy (1987), <http://www.epa.gov/osw/nonhaz/industrial/special/oil/rtc1987.pdf>.

¹⁰ See NYDEC SGEIS, supra note 2, at 6-47; Laura Legere, DEP Drops Dimock Waterline Plans: Cabot Agrees to Pay \$4.1M to Residents, Scranton Times-Tribune, Dec. 16, 2010, <http://thetimes-tribune.com/news/gas-drilling/dep-drops-dimock-waterline-plans-cabot-agrees-to-pay-4-1m-to-residents-1.1077910>.

¹¹ URS Corp., supra note 9; Colo. Oil & Gas Conservation Comm’n, supra note 9.

September, three groundwater monitoring wells near the creek still showed unsafe levels of benzene — after more than seven years of cleanup efforts including the use of an air-sparging system designed to remove benzene from the water.¹² It is unclear how much this cleanup has cost, but seven years of effort is likely to be very expensive.

DEC Would Allow Drilling Too Close to Groundwater, Aquifers

In the face of these risks, the proposed drilling standards in the SGEIS fall short of what is needed to protect New Yorkers. In the past decade, natural gas and associated contaminants in documented cases of natural gas drilling pollution in Colorado and Ohio have traveled between 2,300 and 4,000 feet horizontally where they have contaminated water supplies.¹³ According to a study of 68 water wells in Pennsylvania and New York, published earlier this year by the National Academy of Sciences, water wells within about 3,300 feet of active shale gas wells had concentrations of methane 17 times higher on average than those farther away. Some water wells between 1,500 and 3,000 feet from shale gas wells had potentially explosive concentrations of methane.¹⁴ Yet New York plans to allow drilling as close as 500 feet from private water wells, 500 feet from aquifers used for major municipal water supplies and 2,000 feet from other public water supplies.¹⁵ Even the 4,000-foot buffers for New York City's and Syracuse's unfiltered watersheds are too close because horizontal wells that begin outside the buffer could extend 4,000 feet or more back toward the watersheds potentially allowing hydraulic fracturing directly beneath reservoirs and dams.¹⁶

The state has proposed to allow drilling within 1,000 feet of New York City's underground aqueducts if a site-specific analysis were conducted. But because the area is laced with underground channels that could carry toxic fluids and gas, the city wants to bar drilling less than seven miles from its aqueducts. It is unclear how the DEC developed its 1,000-foot permit zone or any of its other setbacks. The available evidence suggests that these distances are much too close. More research is needed to determine how and whether drilling can be conducted safely near water supplies.

¹² Letter from Scotty Mann, Hydrogeologist/Project Manager, Rule Engineering, LLC, to Charlie Jansen, Encana Oil & Gas (Dec. 6, 2011),

<http://cogcc.state.co.us/Library/PiceanceBasin/WestDivideCreekSeep/Divide%20Creek%20Report2011-09.pdf>.

¹³ URS Corp., supra note 9, at 5-10; Colo. Oil & Gas Conservation Comm'n, Order No. 1V-276 (Sept. 16, 2004); Ohio Dep't of Natural Res., Report on the Investigation of the Natural Gas Invasion of Aquifers in Bainbridge Township of Geauga County, Ohio 6 (2008); Bair, E. Scott, et al., Expert Panel Technical Report, Subsurface Gas Invasion Bainbridge Township, Geauga County, Ohio 3-113 (2010), <http://www.ohiodnr.com/mineral/bainbridge/tabid/20484/default.aspx> (submitted to Ohio Dep't of Natural Res., Div. of Mineral Res. Mgmt.); Ohio Dep't of Natural Res., Order Number 2009-17 (Apr. 14, 2009) (see attachments A, B).

¹⁴ Stephen G. Osborn, et al., Methane Contamination of Drinking Water Accompanying Gas-Well Drilling and Hydraulic Fracturing, 108 PNAS 8172-76 (2011), <http://www.pnas.org/content/108/20/8172>.

¹⁵ NYDEC SGEIS, supra note 2, at ES 20-22.

¹⁶ See id. at ES-20; N.Y. City Dep't of Env'tl. Prot., Final Impact Assessment Report, Impact Assessment of Natural Gas Production in the New York City Water Supply Watershed D3 (2009) [hereinafter NYDEP 2009].

Too Few State Inspectors

Even if the state had more protective measures in place, the DEC lacks the staff to adequately regulate heavily industrialized and highly complex shale gas drilling. The state currently has just 14 inspectors to oversee 13,000 existing natural gas and oil wells according to Reuters.¹⁷ DEC Commissioner Joe Martens acknowledged this shortcoming in a December 9 television appearance stating that “we have about 16 people in our oil and gas bureau. That’s clearly not enough to handle the activity should we go forward with high volume hydrofracking...we won’t permit wells if we don’t have the staff to properly oversee the activity.”¹⁸ Commissioner Martens estimated in an online chat last October that the state will need to hire 225 more inspectors at a cost of \$25 million by the fifth year of drilling and suggested later that the revenue would come from drilling fees and possibly taxes on the drilling industry.¹⁹ We agree with Commissioner Martens that high volume hydraulic fracturing and horizontal drilling should not proceed without adequate staff to regulate it.

State Lacks Facilities to Treat Toxic Wastewater

The DEC acknowledges that New York’s wastewater treatment plants may not be equipped to remove toxic chemicals from the millions of gallons of wastewater generated by hydraulic fracturing.²⁰ According to 59 scientists and engineers with experience in water treatment systems, chemistry and disposal of radioactive materials among other disciplines, it is, at best, uncertain that there are any treatment systems that are available to treat hydrofracking wastewater, otherwise known as “flowback.”

“Potential contaminants of concern known to be in some flow-back fluids include benzene and other volatile aromatic hydrocarbons, surfactants and organic biocides, barium and other toxic metals, and soluble radioactive compounds containing thorium, radium, and uranium,” the scientists wrote to New York Gov. Andrew M. Cuomo on Sept. 15, 2011. “Municipal filtration systems were not designed with such hazards in mind, and the ability of the filtration systems to remove such hazardous substances has received little, if any, study. We believe, however, the best available science suggests that some of these substances would pass through the typical municipal filtration system.

“There simply is not an adequate knowledge base to conclude that filtering would remove all, or even most, of the hazardous substances found in flow-back fluids from hydraulic fracturing,” the scientists wrote.²¹

¹⁷ Edward McAllister, Insight: NY Water at Risk from Lack of Natgas Inspectors?, Reuters, July 29, 2011, <http://www.reuters.com/article/2011/07/29/us-newyork-shale-drilling-idUSTRE76S5FA20110729>.

¹⁸ Joseph Martens, Television Appearance on WMHT (Dec. 9, 2011).

¹⁹ Joseph Martens, Online Chat (Oct. 8, 2011), <http://governor.ny.gov/citizenconnects/?q=content/nys-dec-commissioner-joe-martens>.

²⁰ NYDEC SGEIS, supra note 2, at 6-62.

²¹ Letter from Robert Howarth and 58 other scientists to N.Y. Governor Andrew M. Cuomo (Sept. 15, 2011).

An alternative to taking the waste to wastewater treatment plants is underground injection, but these practices have been associated with earthquakes, most recently near Youngstown, Ohio. In response to these recent quakes, the Ohio Department of Natural Resources halted injection of drilling wastewater into a disposal well in Youngstown that appears to be the source of the quakes. The state also halted injections within a five-mile radius of the well. The well associated with the earthquakes had received millions of gallons of wastewater from natural gas drilling operations, mostly in Pennsylvania.²² Underground injection wells can also leak and intersect with abandoned oil and natural gas wells, causing groundwater contamination.²³ Before New York approves high volume hydraulic fracturing and horizontal drilling, the DEC should know exactly how companies can safely dispose of wastewater from drilling.

Abandoned Wells Could Spread Pollution

In 1987, the EPA concluded in a report to Congress that hydraulic fracturing can — and did — contaminate underground sources of drinking water. The EPA relied in part on a case study from West Virginia in which a water well became polluted after a nearby natural gas well was hydraulically fractured. State records showed that the gas well was protected by three layers of casing and cement to a depth of 4,500 feet and that it was fractured at a depth of 4,200 to 4,300 feet, far below the water well drilled to a depth of just 416 feet. However, there were four old natural gas wells within 1,700 feet that extended deeper underground than the gas well that was hydraulically fractured. Drilling experts say that the fractures could have intersected with these old wells, sending contaminants thousands of feet up the old wells where they could have broken out near the surface where groundwater is found.²⁴ The DEC reports that New York has about 75,000 abandoned oil and natural gas wells, only about half of which have been mapped.²⁵ The DEC calls for drillers to find and plug abandoned wells before drilling,²⁶ but with so many undocumented wells, there is no guarantee all would be found. These wells could serve as conduits for contamination resulting in groundwater pollution. It is important that the DEC establish scientifically based setbacks that prevent drilling near water supplies to reduce the risk of contamination through abandoned wells.

Flooding Precautions are Weak

Even with containments for drilling fluids proposed by the DEC, flooding of drilling sites could cause soil or water pollution by washing contaminants from waste pits or rupturing tanks of toxic fluids. The state proposes to prohibit drilling in 100-year floodplains, but flooding in New York in 2004, 2005, 2006, 2009, and 2011 exceeded 100-year levels in at least some counties where

²² Henry Fountain, Disposal Halted at Well After 11th Quake in Ohio, N.Y. Times, Jan. 2, 2012, at A11.

²³ U.S. Gov't Accountability Office, Safeguards Are Not Preventing Contamination from Oil and Gas Wastes (1989), <http://www.gao.gov/products/RCED-89-97>.

²⁴ Ian Urbina, A Tainted Water Well and Concern There May be More, N.Y. Times, Aug. 4, 2011, at A13; Dusty Horwitt, Envtl. Working Group, Cracks in the Façade 9-22 (2011).

²⁵ N.Y. State Dep't of Env'tl. Conservation, Div. of Mineral Res., Oil, Gas and Mineral Resources Annual Report 23 (2008), <http://www.dec.ny.gov/pubs/36033.html>.

²⁶ NYDEC SGEIS, supra note 2, at 7-58.

high volume hydraulic fracturing is likely to occur. In addition, the state admits that maps showing the location of floodplains have been inaccurate in recent floods.²⁷

In a recent flooding incident in Owego, N.Y., floodwaters covered a Superior Well Services facility up to a level of eight feet. Among other things, the facility holds fluids that are used for hydraulic fracturing. A consultant for Superior Well Services says that it investigated the facility and found no evidence of serious contamination. The consultant found no evidence of a 150-gallon diesel spill that had been reported by Owego's deputy mayor, Kevin Millar, though it said there were puddles of water on the site with "visible sheen." The DEC also "noted petroleum on puddles of water." The consultant said that there were 16 empty 265-gallon containers of fracking fluid scattered around the site after the flood and that these containers had been empty before the flood. Full containers of fracking fluid inside a storage building were not affected, the consultant said. Millar, however, says he still has concerns, particularly about bags of dry chemicals that he saw submerged under water. "The [diesel] spill issue was minor compared to the possible chemical contamination," he said. Superior's consultant said that the dry bags of chemicals in the facility were disposed of after the flood. It is unclear what chemicals were contained in the bags. The DEC reported separately that a bomb squad from Endicott disposed of an estimated 25 pounds of explosives damaged by the flooding. Superior's consultant said that they were stored in explosion-proof containers and that after contact with floodwaters, they were rendered inert. Millar noted that the facility should never have been built in a floodplain. "It was really a shame it ever went there," he said.²⁸ Drilling facilities should not be located in floodplains, yet the DEC's proposed regulations create a high risk that they will indeed be located in flood-prone areas.

More Research Urgently Needed

Neither the DEC nor others have conducted the scientific testing to adequately inform policymakers about whether and how drilling and fracking can be conducted safely. In response to a 2009 Freedom of Information Law request, the DEC reported it had not conducted or commissioned any studies on hydraulic fracturing chemicals during the last 50 years²⁹ — a time during which the agency said hydraulic fracturing had been used in the state without any "significant environmental impact."³⁰ The DEC has provided no evidence that it has conducted any tests since 2009.

²⁷ NYDEC SGEIS, *supra* note 2, at 7-76; U.S. Geological Survey, [Flood of April 2-3, 2005, Neversink River Basin, New York](#) (2006), <http://pubs.usgs.gov/of/2006/1319/>; U.S. Geological Survey, [Remnants of Tropical Storm Lee Cause Record Flooding in the Susquehanna River Basin](#) (2011), <http://ny.water.usgs.gov/leeindex.html> (see table of provisional flood peaks and flood frequency estimates); NYDEC SGEIS, *supra* note 2, at 2-32-33.

²⁸ Letter from Sean K. Grady, Conestoga-Rovers & Assoc., on behalf of Superior Well Serv., to John Okesson, N.Y. State Dep't of Env'tl. Conservation, Region 7 (Nov. 8, 2011); N.Y. State Dep't of Env'tl. Conservation, Spill Nos. 1107403 & 1107477; telephone interview with Kevin Millar, Owego Deputy Mayor (Jan. 3, 2012).

²⁹ N.Y. State Dep't. of Env'tl. Conservation, Freedom of Information Law Response to Request #08-2658 (Jan. 14, 2009) (request submitted by Env'tl. Working Group Dec. 12, 2008).

³⁰ N.Y. State Dep't of Env'tl. Conservation, [Draft Scope for Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program Well Permit Issuance for Horizontal Drilling](#)

The EPA recently issued a draft report on tests it conducted on groundwater near a major oil and natural gas field in Pavillion, Wyoming and found “likely impact to ground water that can be explained by hydraulic fracturing.” Among the findings that led the EPA to conclude that hydraulic fracturing may have been the cause of contamination were highly elevated levels of benzene in a deep groundwater monitoring well.³¹ Benzene is a known human carcinogen toxic in drinking water at anything above five parts per million.³² This study is ongoing. The EPA is making the draft available for public comment and peer review. Separately, the EPA is conducting a national study on hydraulic fracturing’s impacts on water quality that is scheduled to be completed in 2014. Why shouldn’t the DEC wait for the conclusion of these two studies and conduct its own rigorous scientific analyses before opening the door to high volume hydrofracking?

The DEC investigated cases of contamination in Pennsylvania, but this investigation appears to be cursory. There have been documented cases of water contamination from shale gas drilling affecting more than 30 families in Pennsylvania in addition to the National Academy of Sciences study that found an association between dangerous levels of natural gas in water wells and the proximity of those water wells to natural gas wells.³³ There are additional anecdotal cases in which landowners have alleged harm to their water and negative health effects from gas drilling.³⁴ These cases have appeared after drilling companies have drilled only about 4,000 shale gas wells in Pennsylvania or four percent of the projected 100,000 wells that may be drilled in the state.³⁵ The DEC should conduct a detailed analysis of all contamination incidents in Pennsylvania to date, develop appropriate statistical measures, and then quantify the probability of similar occurrences in New York for the estimated 50,000 to 60,000 wells that may be drilled in the state.³⁶

In its draft environmental impact statement, the DEC inaccurately dismissed the National Academy of Sciences study, stating that of the nine water wells tested for methane in New York, the researchers found very low levels of methane in eight wells outside a gas extraction area and even lower levels of methane in the water well inside a gas extraction area. The DEC implies that this evidence proves that there is little risk of methane migration in New York as opposed to in Pennsylvania.³⁷ However, a closer look at the DEC’s analysis shows that the natural gas well in New York that the department singles out was non-producing and mislabeled as an active well

and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and other Low-Permeability Gas Reservoirs 4 (2008).

³¹ U.S. Evtl. Prot. Agency Office of Research & Dev., Investigation of Ground Water Contamination near Pavillion, Wyoming xiii (Draft 2011).

³² U.S. Evtl. Prot. Agency, Basic Information about Benzene in Drinking Water, <http://water.epa.gov/drink/contaminants/basicinformation/benzene.cfm> (last visited Nov. 16, 2011).

³³ Consent Order & Settlement Agreement in re Cabot Oil & Gas Corp., supra note 9; Marc Levy, DEP Fines Chesapeake \$1 Million, Associated Press, May 18, 2011.

³⁴ Eliza Griswold, Situation Normal All Fracked Up, N.Y. Times Magazine, Nov. 17, 2011, at 44.

³⁵ See id.

³⁶ NYDEC SGEIS, supra note 2, at 2-1.

³⁷ Id. at 4-38.

by the researchers in the National Academy of Sciences article.³⁸ According to former oil industry executive James “Chip” Northrup, non-producing wells are much less likely to result in natural gas migration, so it is inaccurate to say that nearby water wells would be protected from migration if the basis for the conclusion were analysis of a non-producing well. Indeed, Northrup reports, industry data show that over time, active wells are very likely to develop gas leaks.³⁹ The DEC ought to remove this inaccuracy and issue a correction in its final environmental impact statement.

Companies Ignore Safe Drinking Water Act

Last year, investigators for the Energy and Commerce Committee of the U.S. House of Representatives reported that from 2005 to 2009, oil and gas service companies had injected more than 32 million gallons of diesel fuel, or fluids containing diesel fuel, in hydraulic fracturing operations in 19 states. They also found that no state or federal regulators had issued the required permits for this use of diesel fuel, an apparent violation of the Safe Drinking Water Act. Since 2005, Congress has exempted hydraulic fracturing from the act except for hydraulic fracturing with diesel.⁴⁰

In response to the investigation, the drilling industry did not deny that companies had injected diesel without the required permits. Instead, the industry said that it could not comply with the law because the Environmental Protection Agency had never issued regulations to implement the measure.⁴¹ The law, however, is clear. It says that drilling companies may not inject diesel in hydraulic fracturing operations without a permit. Yet this is exactly what they have done -- to the tune of 32 million gallons in 19 different states including just across the border in Pennsylvania. Having flouted a major federal environmental law, natural gas companies now want to drill in New York. The only conceivable answer to their request is, NO.

To allow natural gas companies to drill now would be to reward their blatant disregard of federal law and to put the health of millions of people at risk. The natural gas and oil industry has won exemptions from almost every major piece of federal environmental law except the requirement to obtain permits if drillers used diesel in fracking fluids, yet drilling companies cannot even comply with this limited provision. Until drilling companies prove that they can comply, New York should not permit high volume hydraulic fracturing and horizontal drilling.

³⁸ N.Y. State Dep’t of Env’tl. Conservation, Annual Well Production Data, API Well Number 31077237830000.

³⁹ James “Chip” Northrup, Gastem’s Test Well as the Duke Methane Study Anomaly, <http://www.scribd.com/doc/73405864/Anomaly-in-the-Duke-Methane-Study>.

⁴⁰ Letter from U.S. Representatives Henry A. Waxman, Edward J. Markey, and Diana DeGette to Lisa Jackson, Adm’r, U.S. Env’tl. Prot. Agency (Jan. 31, 2011).

⁴¹ Tom Zeller, Jr., A Gas Drilling Technique Is Labeled a Violation, N.Y. Times, Feb. 1, 2011, at B1.

Gas Drilling Creates Jobs — for Out-of-State Workers

New York needs jobs now. But the DEC estimates that 77 percent of the workforce on initial drilling projects would consist of transient workers from out of state. Not until year 30 of shale gas development would 90 percent of the workforce be New York residents, the DEC predicts. Thomas Power, former chairman of the University of Montana economics department and an authority on energy industry employment echoed the DEC in recent comments to the New York Times about claims that natural gas and oil drilling jobs would improve employment prospects nationally. “It’s not going to make a dent in the unemployment rate,” Power said, “because the vast majority of people who have those skills are very busy right now pursuing oil and gas.”⁴² In other words, any wells drilled in New York are likely to be drilled by people from other states already engaged in natural gas drilling. The drilling industry will create few jobs for New Yorkers while exposing the state to significant health and financial risks.

Conclusion

EWG thanks the DEC for the opportunity to comment on its revised draft supplemental generic environmental impact statement. A variety of evidence shows that high volume hydraulic fracturing and horizontal drilling poses significant risks to the state, the state is currently unprepared to regulate the drilling industry, scientific study of drilling risks is lacking and drilling companies are likely engaging in deceptive and illegal behavior. Against these risks, the jobs benefits the industry would provide are likely to be modest. The DEC should not approve high volume hydraulic fracturing and horizontal drilling until rigorous analysis shows that the benefits can outweigh the costs. At this point, the process is too risky to allow in the Empire State.

Sincerely,



Dusty Horwitt
Senior Counsel
Environmental Working Group

⁴² Richard A. Oppel, Jr., Perry Presents a Jobs and Energy Proposal With an Oil and Gas Industry Sound, N.Y. Times, Oct. 15, 2011, at A12.