



**Testimony of:
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**Senate Democratic Conference
Public Forum on Hydraulic Fracturing**

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Thank you to the Senate Democratic Conference for giving Riverkeeper an opportunity to testify on the Senate legislative proposals related to shale gas extraction using hydraulic fracturing, which I will refer to as hydrofracking, in the State of New York.

Riverkeeper is a member-supported watchdog organization whose mission includes safeguarding the environmental, recreational and commercial integrity of the watershed that provides New York City its drinking water. Riverkeeper is actively involved in advocacy and public education surrounding the issue of shale gas extraction via horizontal drilling and hydrofracking, in particular because of its potential impacts on New York's water supply.

Legislative action on the issue of hydrofracking is imperative given the substantial flaws and omissions in the New York State Department of Environmental Conservation's (DEC) Revised Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (RDSGEIS) and significant gas industry exemptions that exist in New York's regulations. My testimony will focus on four areas where legislative action is urgently needed. Specifically, I will discuss the need for: (1) a health impact assessment; (2) closure of a regulatory loophole that currently excludes the gas industry from hazardous waste requirements; (3) clarification of municipal home rule authority; and (4) a moratorium on the issuance of high-volume hydrofracking permits, for at least a year, to provide DEC with the time necessary to address serious deficiencies with the RDSGEIS.

The NYS Legislature Should Mandate an Independent Health Impact Assessment on Hydrofracking

DEC declined to include an assessment of potential health impacts in the scope for the RDSGEIS, despite the growing body of evidence that shale gas extraction operations are making people sick.¹ Residents living near shale gas operations have reported health issues ranging from dizziness, sinus disorders, bronchitis and other respiratory symptoms to depression, nausea, fatigue, headaches, anxiety, difficulty concentrating, and cancer.² In March, a study from the

¹ Final Scope for RDSGEIS at 52 (Feb. 6, 2009), available at http://www.dec.ny.gov/docs/materials_minerals_pdf/finalscope.pdf.

² See, e.g., ATSDR, Health Consultation, Garfield County (March 13, 2008), available at http://www.atsdr.cdc.gov/HAC/pha/Garfield_County_HC_3-13-08/Garfield_County_HC_3-13-08.pdf; Earthworks, Health Survey Results of Current and Former DISH/Clark, Texas Residents (Dec 17, 2009), available at http://www.earthworksaction.org/library/detail/health_survey_results_of_current_and_former_dish_clark_texas_residents/.

Colorado School of Public Health found that cancer risks were 66 percent higher for residents living less than half a mile from oil and gas wells than for those living farther away, with benzene being the major contributor to the increased risk.³ This same study highlights the fact that chronic exposure to ozone, prevalent at gas production sites, can lead to asthma and pulmonary diseases, particularly in children and the aged.

The medical community has taken several actions this year to warn the Governor not to allow high-volume hydrofracking in New York without understanding its health impacts. In October 2011, 250 physicians and medical professionals wrote a letter to Governor Cuomo calling for a comprehensive public health impact assessment.⁴ In December 2011, Dr. Sandra Steingraber, Lois Gibbs and Fran Drescher echoed that call with 19 NY-based cancer advocacy groups in a letter to Governor Cuomo asking for the same assessment.⁵

High level federal health officials are also asking for more research to be done on the health impacts of hydrofracking, including Christopher Portier, the Director of the National Center for Environmental Health at the federal Centers for Disease Control and Prevention in Atlanta, Georgia. As one of the most respected researchers on health issues, Portier stated, “More research is needed for us to understand public health impacts from natural gas drilling and new gas drilling technologies.”⁶ Ignoring recommendations from medical professionals and moving forward in New York without a proper health impact assessment is unwise, and unacceptable.

Moreover, there is established precedent for preparing health impact assessments to evaluate the impacts of hydrofracking. In 2007, a health impact assessment was performed for the Bureau of Land Management and Minerals Management Service for oil and gas development proposals on Alaska’s North Slope.⁷ This assessment led to new requirements for air quality analysis and monitoring of any oil related contaminants in subsistence foods, along with more worker education. In 2010, a draft health impact assessment was completed in Garfield County, Colorado for proposed natural gas development in Battlefield Mesa. The draft assessment concluded: “that [the] health of the Battlement Mesa residents will most likely be affected by chemical exposures, accidents or emergencies resulting from industry operations and stress related community changes.”⁸ The researchers went on to recommend a set of mitigation measures to reduce the health threats to local residents. The Battlement Mesa assessment was halted for political reasons. Nonetheless, it clearly demonstrates the feasibility and utility of

³ Lisa M. McKenzie, et al., Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources (March 2012), available at <http://www.eriesing.com/human-health-risk-assessment-of-air-emissions-from-development-of-unconventional-natural-gas-resources/>.

⁴ Physician Sign-On Letter to Governor Cuomo (Oct. 5, 2011), available at <http://www.psealthyenergy.org/resources/view/198813>.

⁵ Letter to Governor Cuomo on Cancer Risks of HVHF (Dec. 12, 2011), available at <http://www.psealthyenergy.org/resources/view/198831>.

⁶ Kevin Bacos, “Christopher Portier, CDC Scientist, Says Tests Needed on Gas Drilling Impact” Huffington Post, Jan. 4, 2012, http://www.huffingtonpost.com/2012/01/04/christopher-portier-gas-drilling_n_1184776.html.

⁷ See Aaron Wernham, Building a Statewide Health Impact Assessments Program: A Case Study from Alaska (2009), available at http://www.nwpublichealth.org/docs/nph/f2009/wernham_fw2009.pdf.

⁸ Battlefield Mesa HIA/EHMS (2nd Draft), <http://www.garfield-county.com/environmental-health/battlement-mesa-health-impact-assessment-draft2.aspx>.

health impact assessments for evaluating risks to the health of local residents from hydrofracking and horizontal drilling operations.

New York has the opportunity to set the bar equally high when it comes to the health of its residents. Riverkeeper therefore strongly supports S6772, which would require the SUNY School of Public Health to undertake a health impact assessment for horizontal gas drilling and high-volume hydrofracking and suspend the issuance of all permits for high-volume hydrofracking until such an assessment is finalized.

The NYS Legislature Should Close the Hazardous Waste Loophole

The waste associated with hydrofracking poses significant health, environmental, and safety concerns. Hydrofracking fluid is laced with hundreds of chemicals, many of which are carcinogens. It takes up to eight million gallons of this chemical water to frack a single well, with approximately ten to 40 percent of such water flowing back as waste fluid. In addition to this flowback, radioactive material and extremely salty brine that are naturally present deep underground in shale formations are “produced” with the gas as waste. Drill cuttings, which include the rock cores from the thousands of feet through which each well is drilled (which includes naturally occurring heavy metals and radioactive materials), and the added drilling “mud” (which includes added chemicals and lubricants), also need disposal.

As the law currently stands in New York, all of this drilling waste is not considered hazardous waste, regardless of its toxic characteristics, because of a special exemption from state hazardous waste regulations. The hazardous waste loophole bill, S4616, would require hazardous waste resulting from oil and gas operations to be subject to the same regulations for hazardous waste generation, transportation, treatment, storage, and disposal that already apply to every other industry in the state. This bill places no extra burden on the oil and gas industry, but simply ends their special treatment. A matching bill, A7013, was passed by the Assembly in February with a vast majority in favor of this measure.

Riverkeeper strongly supports the passage of S4616 during this session.

The NYS Legislature Must Clarify Home Rule

Legislative action is likewise urgently needed to clarify that municipalities can exercise their home rule authority to dictate where oil, gas, and solution mining is a permissible use within their own borders, even when that activity is also subject to state regulation. Earlier this year, in two lawsuits of first impression, New York Supreme Courts upheld town ordinances which zoned out natural gas development within their borders. These decisions were both recently appealed, and are pending in New York’s Third Appellate Division.

To date, approximately 100 local governments throughout New York State have taken some action to restrict hydrofracking within their borders.⁹ If the law is not clarified, these localities may be forced to expend significant resources to defend the validity of their local laws. The legislature should act swiftly to pass S3472, which would merely clarify the law as it

⁹ See Food and Water Watch, Local Actions Against Fracking, <http://www.foodandwaterwatch.org/water/fracking/fracking-action-center/local-action-documents/>.

currently stands, which is that municipalities have the authority to enact or enforce local zoning ordinances or laws which determine permissible uses in their zoning districts.

A Moratorium is Needed to Give DEC the Opportunity to Address Myriad Deficiencies in the RDSGEIS

Finally, the DEC has indicated that it may finalize the RDSGEIS as early as this summer. Such an action on DEC's part would be completely unacceptable given its State Environmental Quality Review Act (SEQRA) obligations and the critical omissions in the RDSGEIS that still need to be addressed.

At a minimum, DEC needs to fully consider health impacts and address wastewater disposal issues, which it has failed to do in the RDSGEIS. Another critical omission in the RDSGEIS is DEC's complete failure to analyze the potential negative economic impacts of bringing high-volume hydrofracking to New York. DEC's over 250-page review of hydrofracking's potential economic impacts dedicates only a scant seven pages to potential costs.¹⁰ Those pages omit a draft report by the state Department of Transportation that found road maintenance alone will cost state and local governments up to \$378 million annually (\$222 million for local and \$156 million for state).¹¹ The report also contains no estimate of costs to communities associated with increased demand for community social services, police and fire departments, first responders, local hospitals, etc., ignores the potential negative impact to agriculture from land and water contamination risks, and dismisses potential negative impacts on tourism – one of New York's most important industries. In December, even DEC admitted its review on socioeconomics was inadequate, but it has failed to tell the public how it will address this gap.

The Governor has insisted that science will determine if New York State allows industrial gas drilling by means of high-volume hydrofracking. But he is breaking this pledge by failing to gather all of the facts before making a decision. The legislature has the opportunity to slow down this process by putting a moratorium in place, which would allow DEC to address these and other serious omissions. For these reasons, Riverkeeper supports S6261, which would suspend the issuance of permits until June 1, 2013, in addition to S6772, which would suspend issuance of permits until a health impact assessment is complete.

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Riverkeeper thanks the Senate Democratic Conference for the opportunity to participate in today's hearing and for the important role that it continues to play on the issue of hydrofracking in New York State. We look forward to continuing to work with the Senate on this area of significant environmental concern.

¹⁰ See Ecology and Environment, Inc., Economic Assessment Report for the Supplemental Generic Environmental Impact Statement on New York State's Oil, Gas, and Solution Mining Regulatory Program (August 2011), available at http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisecon0811.pdf.

¹¹ Draft Discussion Paper, Transportation Impacts of Potential Marcellus Shale Development, available at <http://www.pressconnects.com/assets/pdf/CB177299726.PDF>.