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NY's clean water advocate

Testimony of:
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U.S. Environmental Protection Agency
Hydraulic Fracturing Study Public Hearing
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Broome County Forum Theatre
Binghamton, New York

Testimony presented during the public hearing will be shortened in consideration of time limitations.

Introduction

I would like to thank EPA for allowing the opportunity for public comment on this important study. I am here today representing Riverkeeper, an environmental watchdog organization that protects the Hudson River and the New York City Watershed. Riverkeeper is also a founding member of the Waterkeeper Alliance, a global environmental movement uniting more than 190 Waterkeeper organizations around the world.

For decades, Riverkeeper has worked with local, state, and federal agencies on a variety of enforcement and permitting issues and look forward to continuing our work with EPA in furtherance of our shared goals of watershed protection and environmental enforcement.

To date, there has been no comprehensive study of the potential environmental impacts of hydraulic fracturing. We commend EPA for its commitment to conduct such a study and we trust that the Environmental Engineering Committee of the SAB will provide an independent and unbiased assessment, utilizing experts in areas of geology, hydrology, and toxicology, among other areas.

The more we learn about the risks of hydraulic fracturing, the more skeptical we are that regulatory agencies have adequately considered the potential adverse environmental impacts of hydraulic fracturing. Further, we are concerned that state agencies lack the adequate resources to fully administer even the existing systems of permitting, monitoring, inspection, and enforcement of regulations related to gas drilling. The prospect that states are headed toward a dramatic increase in permitting hydraulic fracturing operations is even more alarming.

EPA's Proposed Criteria to Determine Case Study Locations

Riverkeeper submitted written comments to EPA about the scope of the Science Advisory Board's (SAB) study on March 29, 2010 on behalf of Riverkeeper, Natural Resources Defense Council (NRDC), and 13 other Waterkeeper member organizations that protect watersheds that have been or may be affected by hydraulic fracturing. We also testified before the SAB in April 7, 2010 in Washington, D.C. All comments are available on our web site, www.riverkeeper.org.

EPA posed eight specific questions for stakeholders to address in this round of public hearings, related to the criteria for selecting case studies and study design:

Criteria for selecting case studies

(1) Are the proposed selection and prioritization criteria appropriate?
(2) Would you suggest revised or additional criteria to better identify, screen, and prioritize sites for field investigations and case studies?
(3) Are there other research questions that a case study approach would be uniquely able to address?
(4) Are you aware of potential candidate sites or case studies that would be useful for this study? If so, what are the characteristics that would make the candidates appropriate for this study on the relationship between HF and drinking water resources?

Study design

(1) Can you suggest additional pathways of exposure that could impact drinking water resources from the hydraulic fracturing process?
(2) In your experience, what are the most important processes and pathway(s) of exposure that would adversely impact drinking water resources?
(3) What current practices in your region do you think pose the most threat to drinking water resources from hydraulic fracturing?
(4) Can you provide data, studies, reports, or other information to help us assess the relative importance of these potential impacts?

Riverkeeper will be submitting written comments that address all of the above questions. For purposes of this public hearing, I will briefly address the fourth question in each category.

Today Riverkeeper released a report entitled *Fractured Communities* which describes hundreds of cases around the country where state and federal regulators determined that industrial gas drilling operations, including those that utilize hydraulic fracturing, are the known or suspected cause of environmental contamination. These cases include impacts to groundwater, drinking water, surface water as well as air and soil contamination. While some of these cases were documented in an EPA study in September 2009, those that were not should be included in the Science Advisory Board's current study.

These impacts result from deforestation, roadbuilding, water withdrawals, improper cementing and casing of wells, over-pressurized wells, gas migration from new and abandoned wells, the inability of wastewater treatment plants to treat flowback and produced water, underground injection of brine wastewater, improper erosion and sediment controls, truck traffic, compressor stations, as well as accidents and spills.

Despite industry rhetoric to the contrary, the environmental impacts of industrial gas drilling are real and indisputable.

To be sure, the case studies highlighted in our report are just a sampling of problems that regulators, landowners, municipalities, and local communities continue to uncover nationwide and around the globe. In the absence of proper preventative measures, environmental assessments, strong regulations and enforcement mechanisms, the cumulative environmental

impacts of the industrialization of rural landscapes remains unknown, and the impacts of gas drilling operations continue to result in environmental degradation.

These findings demand that EPA's proposed research approach examine all aspects of hydraulic fracturing, including an analysis of cumulative impacts.

The Need for Increased Regulation and Oversight

There are two overarching reasons why we have clean drinking water in this country: regulation and enforcement. It is regulation and enforcement that has allowed us to reclaim our streams and rivers from pollution, and it is regulation that enables cities like New York City to maintain a high quality unfiltered drinking water supply, where regulation is augmented by cooperative agreements, equitable land acquisition programs, and conservation. Unfortunately, many regulations are enacted after in-depth scientific studies confirm concerns about certain environmentally destructive practices. And enforcement, while crucial, occurs after-the-fact.

At a time when the oil & gas industry should be on its best behavior, the industry continues to operate with impunity and lobby against federal regulatory oversight. Even as the impact of the Gulf disaster continues to shine a light on the true costs of deregulation, the industry continues to cut corners at the expense of workers and communities across America. Instead of acknowledging risk and undeniable impacts, executives and spokespeople demonize the opposition. Rather than full disclosure, there is secrecy coupled with empty promises of cooperation.

EPA staff must continue working with states to ensure that regulation and enforcement are top priorities and must utilize all possible avenues to stem the tide of oil and gas pollution in this country.

Concluding Remarks

In December 2009, the New York State Department of Environmental Conservation's own union members were so concerned about the deficiencies in the state's draft environmental impact statement for hydraulic fracturing that the union submitted its own comments on the plan saying that further study was needed.

And they were right. Further study is needed. And EPA and its Science Advisory Board should not bow to scare tactics by the industry that further study and increased regulation is going to be bad for the American public, or private landowners, or the economy.

On the contrary, it would be inexcusable to continue to let these companies operate with impunity, without accountability, without oversight, without permits, without proper regulations and without adequate enforcement.

We propose the following specific topics for SAB consideration during the advisory process:

1. The adverse impacts to groundwater supplies associated with all aspects of hydraulic fracturing; including but not limited to groundwater consumption; wastewater containment

and disposal; potential contamination through existing pathways such as abandoned wells and existing geological faults and fractures; and spills and leaks.

2. The adverse impacts to surface water supplies associated with all aspects of hydraulic fracturing, including but not limited to surface water consumption, wastewater containment and disposal, the addition of impervious surfaces, stormwater impacts, and spills and leaks.

3. The cumulative impacts to drinking water resources (both groundwater and surface water supplies) from region-wide industrial gas drilling utilizing hydraulic fracturing.

4. The need for actual field studies to supplement any review of existing literature and data.

EPA must ensure that its current study on hydraulic fracturing remains scientifically sound, unbiased and free of political pressure from any special interest. The agency should stand by its commitment to use a lifecycle analysis approach in order to measure the diverse range of impacts that result from gas drilling and the current study should lead the way for other long-term scientific assessments on this and other important environmental issues.

Thank you for your consideration and for your ongoing dedication and commitment to environmental protection and scientific excellence.

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