

June 24, 2011

Comment letter to the DoE Natural Gas Subcommittee

Dear Members of the Subcommittee:

On behalf of the undersigned organizations, we thank you for the opportunity to comment on your work and the critical issues surrounding hydraulic fracturing for natural gas. This process is already having negative effects on health and the environment nationwide, even as gas development rushes forward unabated. Following are several issues that we feel must be part of your analysis and report.

As you know, there is strong concern about the lack of true community representation on this subcommittee—without involvement of the people most directly impacted, it will be impossible for the subcommittee to ascertain what changes must occur on the ground with regard to gas development and industry practices.

With this in mind, we are also greatly concerned that the charge of the subcommittee presupposes that natural gas drilling can be done safely within the current regulatory framework. This presumption closes the subcommittee off to the possibility that current state-based regulations are simply inadequate to protect water and air quality, public health, and communities. While we wish to engage this subcommittee and provide as much information, policy and technical expertise as possible as it makes its recommendations, the devastation natural gas has caused raises the distinct possibility that small regulatory adjustments or requests for voluntary changes by the industry will fall far short of the fundamental shift that is needed to truly protect these communities.

We urge the subcommittee to frame its recommendations in terms of the need to have a strong federal regulatory framework in place. This framework is critical to ensuring that development of natural gas, whether from shale, tight sands or coalbed methane, occurs with the minimum possible impacts to communities, public health, and the environment. While much of this framework will require legislative action to repeal exemptions to major provisions of keystone environmental laws created just for the oil and gas industry, this subcommittee can play a role in that process. We urge the subcommittee to acknowledge the important role that our federal environmental laws could play in making sure natural gas production occurs safely and with the utmost public confidence.

We are also concerned that the subcommittee's charge limits the scope of the recommendations to natural gas production. This focus leaves the communities faced with onshore oil development at a disadvantage. The public health and pollution impacts from oil development are the same, and oil and gas are most often regulated together on both the state and federal level and pursued by the same companies and contractors. We encourage the subcommittee to recommend changes that will protect communities facing both oil and gas operations in their backyards.

Within the context of providing comments and suggestions for specific regulatory changes the subcommittee could recommend, we provide the following suggestions:

1. Encourage the Environmental Protection Agency (EPA) to create strong rules around the use of diesel fuel in hydraulic fracturing

The 2005 Energy Policy Act created an “exemption to the exemption” by allowing diesel fuel to be regulated under the Safe Drinking Water Act (SDWA) when used during hydraulic fracturing. The EPA is currently undertaking a process to create guidance around how diesel fuel used in fracking is to be regulated as part of the Underground Injection Control program of the SDWA. Diesel fuel is highly toxic, and should be well-regulated on the federal level when injected near drinking water resources.

2. Direct the Department of the Interior to require disclosure of chemicals and other safety measures on federal leases

The Department of Interior (DOI) has broad discretion to require disclosure of chemicals used during the drilling process as part of the federal leasing process. In addition to disclosure of chemicals involved in hydraulic fracturing, the Interior Department should lead the way by instituting the most effective regulations for the entire lifecycle of oil and gas production. DOI should require that companies operating on public lands adhere to best practices to protect air, land, and water resources. Mandatory operating procedures will attempt to minimize the impacts of oil and gas production on public lands. (Please see the attached letter on DOI Energy Management Reforms for more details.)

3. Support EPA efforts to mitigate air pollution from natural gas operations

We encourage the subcommittee to direct the EPA to use any and all authorities it currently has under the Clean Air Act (CAA) to address air pollution deriving from the entire lifecycle of natural gas production. Air pollution occurs throughout the gas production lifecycle, from the use of diesel-powered drilling rigs, pick-up trucks, tractor-trailers, and earth-moving equipment, to the particulate matter dispersed from dust, natural gas flaring, and gas dehydration and separation equipment, to the drilling and work-over processes. EPA is reviewing air toxics standards for oil and natural gas production, transmission, and storage facilities, and two new source performance standards for onshore natural gas processing plants (one focused on emissions from equipment leaks of volatile organic compounds (VOCs) and the other for sulfur dioxide (SO<sub>2</sub>) emissions.) The subcommittee should encourage the EPA to make sure these rulemaking processes advance towards stringent regulations to protect public health.

4. Add exploration and production activities under the Toxics Release Inventory

The subcommittee should recommend including exploration and production activities of the oil and gas industry under the Toxics Release Inventory (TRI) of the Emergency

Planning and Community Right To Know Act (EPCRA). EPA has the authority to add new industries to TRI without direction from Congress.<sup>1</sup>

The subcommittee should recommend that there be full reporting of toxic chemical constituents (liquids, semi-solids, solids, proppants, and gases), “cradle-to-grave,” that are used in the oil and gas exploration and production processes (e.g., drilling, fracturing, well maintenance, and workover). (EPCRA, §§ 311 & 312);

#### 5. Broaden OSHA’s Hazard Communication Standard

The subcommittee should recommend that the Hazard Communication Standard under OSHA regulations be broadened so that the hazard determination is not made solely by the manufacturer<sup>2</sup> - meaning more chemical constituents would be required to be disclosed – and that OSHA regulations require complete and accurate disclosure on the Material Safety Data Sheets (MSDS') of all chemical constituents—not simply product names and not with inaccurate health effects data, which is currently the predominant case.<sup>3</sup> Finally, the subcommittee should recommend a tightening of OSHA's reporting and response requirements for worker exposure incidents at oil and gas exploration and production facilities.

#### 6. Require full public disclosure under the Safe Drinking Water Act

The subcommittee should recommend adoption of a modified form of the Colorado Oil and Gas Conservation Commission’s Rule 205 that would require maintenance of a complete chemical inventory on site and the posting of that information on a publicly accessible, agency-maintained website. We urge the subcommittee to recommend the sample regulatory language included here:

- a. Beginning \_\_\_\_\_, operators shall maintain onsite complete and accurate Material Safety Data Sheets for any Chemical Products brought to a well site for use downhole during drilling, completion, and workover operations, including fracture stimulation.
- b. Beginning \_\_\_\_\_, operators shall maintain a Chemical Inventory by well site for each Chemical Product used downhole or stored for use downhole during drilling, completion, and workover operations, including fracture stimulation.
  - i. The reporting threshold shall be based on the cumulative maximum amount of a Chemical Product present at the well site during the quarterly reporting period. Entities maintaining Chemical Inventories under this

---

<sup>1</sup> [http://www4.law.cornell.edu/uscode/42/usc\\_sec\\_42\\_00011023---000-.html](http://www4.law.cornell.edu/uscode/42/usc_sec_42_00011023---000-.html)

<sup>2</sup> Material safety data sheets: Are they reliable in identifying human hazards? **The Journal of Allergy and Clinical Immunology.** [Volume 110, Issue 1](#), Pages 35-38, July 2002. [Jonathan A. Bernstein](#), MD. <http://www.jacionline.org/article/S0091-6749%2802%2900037-4/fulltext#section2>

<sup>3</sup> Assessment of the Accuracy of Material Safety Data Sheets, **American Industrial Hygiene Association Journal**, Volume 56, Issue 2, 1995, Pages 178-183, Paul W. Kolp; Phillip L. Williams; Rupert C. Burtan <http://www.informaworld.com/smpp/content~db=all~content=a727071985~frm=abslink>

section shall update these inventories quarterly throughout the life of the well site. These records must be maintained in a readily retrievable format at the operator's local field office. In addition, these records shall be made available to the public, by the State (or Administrator), including through posting of the information on an appropriate publicly accessible agency-maintained Internet website.

ii. **CHEMICAL INVENTORY** shall mean a list of the Chemical Products (including Material Safety Data Sheets) brought to a well site for use downhole during drilling, completion, and workover operations, including fracture stimulations, and the maximum capacity of fuel stored on the oil and gas location during those operations. The Chemical Inventory shall include how much of the Chemical Product was used, how it was used, and when it was used.

iii. **CHEMICAL PRODUCT** shall mean any substance consisting of one or more constituent chemicals that is marketed or sold as a commodity. Chemical Products shall not include substances that are known to be entirely benign, innocuous, or otherwise harmless, such as sand, walnut shells, and similar natural substances.

## 7. Encourage the use of baseline water testing by Independent Certified Laboratories

We urge the subcommittee to follow the lead of Pennsylvania and recommend adoption of a presumption that pollution of water supplies within 1500 feet of a natural gas well is the responsibility of the operator unless the operator has predrilling baseline testing showing existing pollution. Currently, after-the-fact water testing leaves the issue of responsibility unresolved, places an undue burden on homeowners – and leads to costly and time-consuming administrative and legal proceedings, rather than efficient clean-up of valuable water supplies. Many operators are already familiar with the concept of a “zone of presumption,” for example as contained in provisions of the Pennsylvania Oil and Gas Act<sup>4</sup> and the North Dakota Century Code<sup>5</sup>. We therefore urge that this approach to baseline testing be extended to all areas where natural gas is being developed through the use of hydraulic fracturing.

## 8. Link Third Party Certification of best management practices to permit processing incentives.

We urge the subcommittee to consider tying third party certification of the use of best management practices (BMP's) to permit processing incentives that do not compromise a comprehensive environmental and public review of all permit applications. Historically, the weakness of best management practices has been their voluntary, and therefore uneven and insufficient, adoption. We suggest that linking certification by an independent multi-stakeholder group, such as the State Review of Oil & Natural Gas Environmental Regulations (STRONGER), of the use of BMP's by operators to some

---

<sup>4</sup> <http://www.dep.state.pa.us/dep/deputate/minres/oilgas/act223.htm>, §601.208. Protection of water supplies.

<sup>5</sup> <http://www.legis.nd.gov/cencode/t38c11-1.pdf>, §38-11.1-06. Protection of surface and ground water – Other responsibilities of mineral developer.

form of permit processing incentives might result in a significant increase in the actual implementation of BMP's, with attendant decreases in environmental impacts.

#### 9. Require periodic regulatory review

We suggest that the subcommittee should consider recommending that EPA require regulatory review by a multi-stakeholder group, such as STRONGER, for each oil and natural gas state at least once every five years. This would help to maintain the minimum regulatory framework needed to address the hazardous wastes associated with natural gas development.

#### 10. Cumulative Impact Analysis at the regional or watershed scale

We urge the subcommittee to recommend a cumulative impact analysis for each of the major natural gas regions/plays identified in the Department of Energy's Shale gas report.<sup>6</sup> For many of these regions, no single state has either the resources or the geographic extent to undertake such analysis and none have attempted to do so, instead permitting development on a "well-by-well" basis—to the detriment of the ability to prevent or mitigate significant impacts to health and the environment should gas operations expand. Some regional entities, such as the eastern river basin commissions, may come closest to matching jurisdictional boundaries with the underlying natural gas formations. However, the variety of regions "in play" argues for national level support and coordination of these analyses. Therefore, we believe this subcommittee should recommend that federal agencies initiate discussions of how best to carry out this needed analysis of broad-scale impacts of natural gas development over time.

Respectfully submitted,

Sarah Eckel  
Legislative & Policy Director  
Citizens Campaign for the Environment - NY & CT

Susan Kramer  
Citizens United for Responsible Energy Development (CURED)

Natalie Roy  
Executive Director  
Clean Water Network

Tracy Carluccio  
Deputy Director  
Delaware Riverkeeper Network

---

<sup>6</sup> [http://www.netl.doe.gov/publications/press/2009/09024-Shale\\_Gas\\_Primer\\_Released.html](http://www.netl.doe.gov/publications/press/2009/09024-Shale_Gas_Primer_Released.html)

Gwen Lachelt  
Director  
Earthworks' Oil and Gas Accountability Project

Patricia McPherson  
President  
Grassroots Coalition

Chris Csikszentmihalyi  
MIT Center for Future Civic Media

Kari Matsko  
Director  
Network for Oil and Gas Accountability and Protection - Ohio

Tracy Dahl  
President  
North Fork Ranch Landowner's Association

Kevin F. Lind  
Director  
Powder River Basin Resource Council

Kate Hudson, Esq  
Watershed Program Director  
Riverkeeper, Inc.

Dan Randolph  
Acting Executive Director  
San Juan Citizens Alliance

Linda F. Baker  
Executive Director  
Upper Green River Alliance

Donald Nelson  
Oil and Gas Campaign Team Chair  
Western Organization of Resource Councils