



**EARTHWORKS**

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**Testimony before the U.S. House Committee on Natural Resources, Subcommittee on Energy and Mineral Resources oversight hearing on "Federal Regulation: Economic, job and security implications of federal hydraulic fracturing regulation"**

Thank you Chairman Lamborn and Members of the Subcommittee for the opportunity to speak to you today about possible federal hydraulic fracturing regulation. Earthworks has been working for many years on issues related to the regulation of hydraulic fracturing at the local, state and federal levels.

Earthworks is a non-profit organization dedicated to protecting communities and the environment from the impacts of mineral and energy development. We work with a broad coalition of local governments, ranchers, citizen groups and other conservation organizations to improve the policies governing oil and gas development.

Summary: We see a need for coordinated regulation of hydraulic fracturing at all levels – federal, state and local. Based upon our experience, no single level of government can adequately regulate in a way that protects human health and our public lands, while allowing for responsible development of the resource. In times of constrained budgets, relatively low agency pay scales and a lack of trained personnel, careful and appropriate attention by all levels of government is necessary.

**Levels of state regulation vary, and are sometimes inadequate; therefore, there is a need for federal standards as floor.**

At least 14 states are discussing how to address hydraulic fracturing, either through rulemakings, legislation, guidelines, or proposed standards: Arkansas, California, Colorado, Idaho, Louisiana, Montana, New Mexico, New York, North Dakota, Oklahoma, Pennsylvania, Texas, West Virginia and Wyoming. In two additional states, Maryland and North Carolina, discussions of how to address issues related to hydraulic fracturing are at an earlier stage.

The differences between states can be significant. For example, if you live in New Mexico, only the fracturing chemicals listed on Material Safety Data Sheets (MSDS) must be disclosed. In Texas, those chemicals without MSDS' are disclosed in a different manner from those with MSDS. In Colorado, all fracking chemicals are disclosed, regardless of whether they have a MSDS or not.

In Wyoming, the chemicals are disclosed to the state agency; in Colorado, they will be disclosed to the state agency, but posted on the FracFocus website; in Texas, they are posted straight to the FracFocus website.

With regard to well casing, Colorado does not require that the well casing be extended all the way through fresh groundwater. However, Colorado does require that operators monitor and record bradenhead annulus pressure during hydraulic fracturing, with reporting required if the pressure varies by more than 200 psi. Wyoming, on the other hand, requires casing to be extended through groundwater and requires bradenhead pressure monitoring during well stimulations. However, Wyoming does not require an operator to report changes in pressure of less than 500 psi.

States also address the need for groundwater monitoring differently. In Colorado, for most gas and oil wells, the only groundwater monitoring is a voluntary program initiated by the Colorado Oil and Gas Association. In Wyoming, monitoring is mainly associated with waste pits and not with the drilling of oil or gas wells. By way of comparison, Pennsylvania has a statutory presumption that contamination of water wells relatively near to a gas or oil well was caused by that oil or gas well, unless the operator has had baseline groundwater testing carried out by an independent lab prior to drilling to prove otherwise.

Illustrative of these differences between states is the fact that the STRONGER board has decided to reconvene its Hydraulic Fracturing work group to consider additional issues related to hydraulic fracturing. Although the hydraulic fracturing guidelines were developed fairly recently, several issues have been raised during the seven state hydraulic fracturing reviews completed so far; issues that were not considered by the initial work group. These include criteria for groundwater protection through proper well construction (cementing and casing), groundwater monitoring and monitoring of Bradenhead annular pressures during hydraulic fracturing operations.

**Adequate state regulation related to air emissions from oil and gas production sites is generally lacking.**

Upstream crude oil and natural gas activities are a significant source of air pollution. Activities in the natural gas exploration and production, storage, processing, transmission and distribution sectors and in the oil E&P sectors emit substantial amounts of volatile organic compounds, oxides of nitrogen, methane and hazardous air pollutants. These airborne contaminants contribute to pollution associated with serious human health effects and adverse environmental consequences including ground-level ozone or “smog”, particulate pollution, toxic air pollution, climate-disrupting pollution, and the haze that obscures scenic vistas in national parks and wilderness areas.

A 2009 Southern Methodist University study found that summertime emissions of smog-forming pollutants from the oil and gas sector in the Dallas-Fort Worth area exceed emissions from motor vehicles. A 2008 analysis by the Colorado Department of Public Health and Environment (CDPHE) concluded that the smog-forming emissions from Colorado's oil and gas operations exceed vehicle emissions for the entire state. In 2009, for the first time in its state's history, Wyoming failed to meet federal health-based standards for air pollution primarily due to the emissions from the state's oil and gas sector. In northeastern Utah, unprecedented ozone levels in the Uintah Basin were recorded last year; the Bureau of Land Management (BLM) has identified the multitude of oil and gas wells in the region as the primary cause of the ozone pollution.

What is striking about these studies is that two of the states – Wyoming and Colorado – are generally considered to have some of the stronger air regulations for upstream oil and gas. Yet, they are still facing air quality issues.

The recent EPA New Source rules can be seen as a response to those continuing air quality issues. The rules would cut smog-forming VOC emissions by nearly one-fourth across the oil and gas industry, including a nearly 95 percent reduction in VOCs emitted from new and modified hydraulically fractured gas wells. In addition, the reductions would yield a significant environmental co-benefit by reducing methane emissions from new and modified wells.

### **State enforcement of oil and gas regulations is inadequate.**

If states are to continue as the primary regulator of oil and gas, they must show through on-the-ground results that they can adequately enforce their own regulations. Otherwise, they forfeit their claim to primacy and reinforce the growing perception that either local government or the federal agencies should be the primary regulators of oil and gas development.

At Earthworks, we continue to receive many calls from both citizens and local governments asking for assistance in either developing or strengthening local regulations. We have gotten these calls usually because the state regulators are stretched too thin in their responsibilities or because of the perception that the state agency is 'too close' to the industry it is supposed to regulate.

In the larger debates over hydraulic fracturing, the argument is often made that states are the most effective regulators, due to their understanding of local geology and technical expertise. For many years, Earthworks has participated in various rulemaking processes and as part of governor's task forces, so we have had a chance to look carefully at the question of what makes an effective regulation. Part of the answer lies in the clear, consistent and functional statement of standards; however, part of the answer also depends upon the effectiveness with which the rules are enforced.

We were recently asked to evaluate six states from an enforcement perspective, looking at staffing, inspection numbers, violations, sanctions and penalties and tracking of, and response to, citizen complaints. We looked at Colorado, New Mexico, Texas, Ohio, New York and Pennsylvania.

Some of our findings are that:

- In all states, the number of wells that do not get inspected is immense. For example, in 2010 Pennsylvania inspectors were unable to monitor approximately 81,000 active wells (89% of the state's active wells), Ohio failed to inspect more than 58,000 wells (91% of active wells), and Texas inspectors did not make it to approximately 161,000 wells (57% of active wells).
- Enforcement actions do not appear to be consistently applied in most states. New Mexico was particularly notable in the discretion afforded to inspectors to decide whether or not to issue a Letter of Violation. As a result, operators may receive different treatment simply because their site was visited by inspector X instead of inspector Y, or their well was located in one district rather than another.
- In most states, we did not find that increased inspection levels resulted in less contamination. For example, in Colorado, there has been a large increase in the number of oil and gas related spills over the past seven years. In fiscal year (FY) 2011, 133 of the 513 reported spills (or 26%) contaminated either ground or surface water.

### **Public lands belong to all citizens of the US; therefore, minimum federal standards are both appropriate and necessary.**

National public lands need national standards that are not subject to the vagaries of state politics, budgets and varying levels of expertise. As the largest manager of oil and gas resources in the United States, the

BLM can—and should—be a model for all oil and gas operations. The BLM has an opportunity to join with the more responsible states in moving toward a future where the oil and gas production industry develops these resources in ways that reduce threats to public health and the environment and that respect the quality of life in local communities. Improved regulation of hydraulic fracturing can reduce the risks presented by oil and gas development to clean air, clean water, wildlife habitat, and communities. Some in industry have moved to increasingly use such practices as full chemical disclosure, notice to landowners, green completions, wastewater recycling, closed-loop waste management systems, and the like, and have found that many of these approaches are economical to adopt.

## **Conclusion**

We see a need for coordinated regulation of hydraulic fracturing at all levels – federal, state and local. Based upon our experience, no single level of government can adequately regulate in a way that protects human health and our public lands, while allowing for responsible development of the resource. In times of constrained budgets, relatively low agency pay scales and a lack of trained personnel, careful and appropriate attention by all levels of government is necessary.

Thank you for the opportunity to present the views of Earthworks on this important topic. We appreciate the Committee's consideration of this issue and we look forward to working with you in the future to address the issue of necessary and appropriate regulation of hydraulic fracturing.