

**Congress of the United States**  
**Washington, DC 20515**

March 12, 2010

Hon. Henry A. Waxman  
Chairman  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

Hon. Edward J. Markey  
Subcommittee Chairman  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

Dear Chairman Waxman and Subcommittee Chairman Markey:

Last month, you sent a detailed memorandum to members of the Subcommittee on Energy and the Environment identifying several of your concerns related to hydraulic fracturing, an energy technology that has been in use for more than a half-century now, but one that has received additional attention as of late pursuant to its role in unlocking enormous reserves of previously unreachable natural gas from American shale.

In that memorandum, you rightly cite these “unconventional” natural gas resources as an effective means to “reduce disruptions to supply from Gulf Coast hurricanes and limit the nation’s reliance on natural gas imports” – adding further that the use of hydraulic fracturing has “tremendous potential” to “contribute to the nation’s energy independence and reduce carbon emissions.”

It’s a potential that is, in fact, already being realized in many communities across this country, including ones we have the privilege to represent in Congress. Consider that in just the past few years, more than 100,000 high-wage jobs have been created in Oklahoma and Pennsylvania alone, all of them tied to the responsible development of American natural gas, and every bit of that made possible thanks to the safe and steady deployment of fracturing technology.

At a time of unprecedented economic uncertainty, and in a year in which four million Americans lost their jobs, shale gas exploration represents a proven and powerful engine of economic growth – and one this Congress idles at the peril of those it represents.

In reviewing your memo, we were heartened by your forthright embrace of this critical, homegrown energy resource but share some concern with respect to two particular aspects of this effort. First, last year, Congress directed the Environmental Protection Agency (EPA) to conduct another study of the environmental management of hydraulic fracturing. The information you are requesting would seem more appropriate to the development of that analysis. Action by the committee raises questions regarding the purpose of this congressionally directed study.

Similarly, the environmental risks of hydraulic fracturing can neither be diagnosed nor addressed without understanding the full context of their management. As analyses from a number of expert organizations have shown, groundwater protection is provided by creating barriers between the natural gas well and the water outside of it. Again, these and other issues associated with the management of hydraulic fracturing seem to be the purpose of the next EPA study. As co-chairmen of the Congressional Natural Gas Caucus, and as members of the Natural Resources

and Energy and Commerce committees, we want to offer whatever assistance we can to make your effort meaningful, and we stand ready and willing to contribute as your investigation unfolds.

Toward that end, please consider the following response to your February 18th memo, with particular attention paid to several considerations we hope will inform the committee's work in this area in the weeks and months to come.

#### I. EPA's historical involvement with hydraulic fracturing

While a number of the elements contained in your memorandum appear to be sufficiently-researched and adequately-sourced, we were nonetheless disappointed to find in the eleven-page document only a single reference to the landmark 2004 study on hydraulic fracturing done by EPA, a reference that does not even acknowledge the core findings and conclusions of the actual report.

As you may know, that report was the product of nearly five years of intensive research by the agency – a project that included data from nearly 500 state and local government agencies, an examination of 200 peer-reviewed publications, and nearly 100 separate interviews conducted with industry representatives, state and local regulators, and environmental organizations. At the conclusion of that work, a team of EPA scientists and investigators found that hydraulic fracturing “poses little or no threat to underground sources of drinking water.”

These findings, though they may be three congresses old, are consistent with nearly every public pronouncement made by EPA with respect to hydraulic fracturing both before 2004, and since. Last month, EPA's director of drinking water protection testified he was aware of “no information” that would suggest a link between the use of hydraulic fracturing and the contamination of drinking water. And when posed a similar question by the Senate Energy and Natural Resources Committee in December – specifically, whether anyone was aware of even a single instance of drinking water contamination stemming from the use of hydraulic fracturing – top EPA water and compliance officials responded to the members of that panel the exact same way.

In fact, EPA's work in this area reaches much further back than 2004. In a letter dated May 5, 1995, then-EPA administrator Carol Browner, who currently serves as a top advisor to the president on energy and the environment, stated there existed “no evidence” implicating hydraulic fracturing in the corruption of groundwater. Moreover, she stated in the letter that even the “possibility of contamination or endangerment of [underground sources of drinking water]” through the use of fracturing technology “is extremely remote.”

Six years removed from the release of its last comprehensive study focusing on hydraulic fracturing, EPA announced recently that significant resources will be devoted once again to investigating the relationship between the use of this critical technology and the protection of drinking water.

While the agency has yet to formally release details indicating the scope and methodology of that research, it seems likely that much of the information you intend to gather pursuant to your

investigation will also be sought, compiled and analyzed by EPA. It's our hope that your work does not in any way interfere with that process, and our expectation that your course of study meets the same rigorous standards of science, evaluation and peer-review as historically observed by the agency.

## II. Other studies associated with hydraulic fracturing

While EPA continues to be an active participant in the study of and dialogue over hydraulic fracturing, several other entities have also stepped up over the years to devote time, talent and significant resources to examining the relationship between the common deployment of this technology and the historical protection of groundwater.

Among the most active of these organizations has been the Ground Water Protection Council (GWPC), an Oklahoma-based national association of state groundwater and environmental protection agencies whose mission is to "promote the protection and conservation of ground water resources." Unfortunately, like the 2004 EPA study, no mention of GWPC's detailed and careful work in this area is included in the memo you circulated last month.

In 2009, the GWPC, working with and partially funded by the U.S. Department of Energy (DOE), published two significant studies focused on hydraulic fracturing. The first report, released in April, finds that technologies such as hydraulic fracturing enable us to "produce more natural gas from the shale formations ... [with] less disturbance of surface environments" while "protecting and conserving water resources." The second report, issued in June, takes a more focused look at how states are regulating the practice, finding the process "is managed best at the state level where regional and local conditions are understood."

The bottom line, according to GWPC: "Based on over sixty years of practical application and a lack of evidence to the contrary, there is nothing to indicate that when coupled with appropriate well construction, the practice of hydraulic fracturing in deep formations endangers ground water." GWPC itself has been studying this phenomenon for nearly 20 years, having conducted its first survey of state regulators' experience with hydraulic fracturing in the 1990s. And although the intervening years have seen significant changes – in technology, in markets, in personnel – the results came back exactly the same.

These views offered by state regulators and compiled by GWPC are corroborated in full by our nation's governors. In 2002, the Interstate Oil and Gas Compact Commission, an organization of 37 states and territories that "works to ensure our nation's oil and natural gas resources are conserved and maximized while protecting health, safety and the environment," released its own survey on the topic which, like GWPC, found that hydraulic fracturing posed no discernable risk to drinking water supplies. In 2009, the organization's members, including states like California, New York and Florida, passed a resolution citing hydraulic fracturing as "a common operation" used "in all the member states ... without groundwater damage."

## III. Current issues

Subsequent to the public release of your memo this month, some observers were quick to characterize the committee's engagement on this issue as an act of "fear-mongering" and a

“torpedo in the water” directed at America’s oil and natural gas producers. As mentioned, that’s not a point of view to which we subscribe. While we are concerned about the potential conflicts this effort may create with respect to the EPA study, we view this investigation as an effort that, done right, can gather critical information – and one that we especially hope will inform our colleagues who have sought to legislate in this area without a full appreciation for the facts and science that underlie it.

Perhaps the most noteworthy of these efforts in the current Congress is H.R. 2766, known informally as the “FRAC Act.” Characterized by those who support it as a way of closing a “loophole” in the current law and establishing a means for EPA to promote public disclosure of “secret chemicals,” in reality the bill seeks nothing less than a wholesale re-write and re-interpretation of a 36-year-old statute which will mandate the EPA to exercise authority over a process it has never before been charged with regulating.

Although your memo does not cite the FRAC Act by name, it does state as fact several of the key assertions upon which the legislation is premised. In particular, the document suggests that “[f]ederal regulators currently do not have access to a full accounting of the ... chemicals used in hydraulic fracturing fluids” before conceding that “some states require disclosure.”

But certainly you must know that federal law mandates that Material Safety Data Sheets (MSDS) be kept on-hand at every wellsite in America when chemicals are present, and further, that those sheets include an accounting of the identities of those chemicals with identified risks used in the fracturing process. Indeed, the vast majority of these information sheets can be found readily and easily on the Internet. As you indicate, a number of states today post this information in full view of the public online.

Although its authors continue to insist their legislation will promote additional transparency as part of the fracturing process, its real-world implications suggest a much more complicated and potentially troublesome outcome for this country. Although not specific to the FRAC Act, the U.S. Department of Energy has on two separate occasions studied the potential impact that the over-regulation of hydraulic fracturing could have on America’s energy and economic security. The first of these research projects, published in June 2001, suggests that “cost increases associated with added regulation will drive up the wellhead cost of gas” and force consumers “to pay more for energy.”

A second DOE report, issued in 2009, took that work one step further, providing a quantitative impact assessment assuming the imposition of a series of regulatory changes which, although not limited to circumstances envisioned under the FRAC Act, includes that scenario as part of its review. That study, published jointly with Advanced Resources International, Inc., reaches the startling conclusion that under a “stringent” scenario of future regulation more than 35 percent of all onshore natural gas wells in America would shut down with exploration work associated with shale gas dropping off by as much as 50 percent.

Unfortunately, those who support the FRAC Act appear to believe the mere existence of small amounts of chemical additives in the fracturing solution represents a circumstance sufficient for public drinking water supplies to become contaminated.

The reality, however, is that these materials are well known to those who regulate the process and are managed in a way that eliminates virtually any risk of those components coming into contact with shallow reservoirs bearing potable water. Wells drilled today incorporate thousands of feet (and many layers) of steel casing, and thousands of pounds of cement – every bit of that installed using a time-tested engineering process and precise instrumentation to ensure what’s happening inside the wellbore remains in complete isolation from what naturally exists outside of it.

#### IV. Conclusion

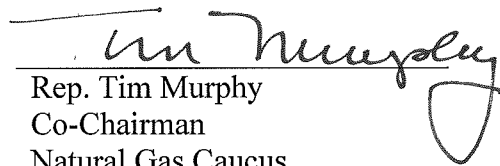
Although we may approach this issue from different perspectives, both the tone and substance of your February 18th memo make clear that the areas in which we agree are substantial relative to the issues on which we might not. Like you, we believe that homegrown natural gas produced through the deployment of fracturing technology can “enhance the stability and environmental sustainability of U.S. energy use” and create thousands of high-paying jobs while we’re at it. Both the history of its use and the science that underlies it indicate this work is being done safely and responsibly today, and to great effect is quite literally redefining what is possible for the many communities in which it takes place.

As your investigation takes shape over the coming weeks, we hope you will invite us to share more of these perspectives with you and your colleagues. Until then, we submit for your review the preceding document, and reiterate our sincere hope to have the opportunity to work with you on these critical issues moving forward.

Sincerely,



Rep. Dan Boren  
Co-Chairman  
Natural Gas Caucus



Rep. Tim Murphy  
Co-Chairman  
Natural Gas Caucus