# U.S. Weighs Disclosure Rules for Natural Gas Drillers

**Marianne Lavelle, National Geographic News, 12-1-10**

The Obama administration, while weighing new chemical disclosure requirements for the natural gas industry when it operates on public lands, signaled support for the drilling boom that technological advance has spurred in the United States.

“From our point of view, there is a bright future for natural gas,” said Department of Interior Secretary Ken Salazar on Tuesday, at a forum he convened to address the environmental questions around hydraulic fracturing, or “fracking”—the use of a high-pressure water and chemical mix to force natural gas from underground shale and tight sand formations.

Salazar said his department is considering a policy that would require companies to disclose the content of their frack fluids when they operate on public lands—the vast federal acreage, primarily in the West, overseen by Interior’s Bureau of Land Management (BLM). Salazar acknowledged that some companies in the industry oppose disclosure requirements, saying that they want to protect proprietary information. “We have not yet settled on how, exactly, we are going to move forward on that issue,” he said.

But Salazar said increased natural gas production makes sense in light of the Obama administration’s energy agenda. “First, natural gas is, in fact, an abundant resource that we control here in the United States of America,” he said. “This president is also concerned about what we do on climate change, and when you compare the emissions caused by natural gas to other forms of energy you know that it is a cleaner fuel.”

## The Water Issue

When it is burned to generate electricity, natural gas produces half the carbon dioxide emissions of coal. But as natural gas drilling has accelerated across the United States in the past six years due to the success of high-volume hydraulic fracturing, questions have been raised over both the use of water resources and potential for water pollution.

Fracking is taking place around the country—in big shale rock formations in Texas, Louisiana, Arkansas, and Pennsylvania, where the industry largely is making deals with private landowners for access to acreage. Concerns have been raised about drilling in federal and state parkland, but most are due to drilling on private land nearby or in cases where the mineral rights are in private hands.

But in the West—in Colorado, Wyoming, and Utah—it is largely public land that holds the vast shale and tight sandstone formations that could yield enormous stores of gas with hydraulic fracturing. And the BLM’s job is to manage the land for a mix of preservation and use by industry and ranching.

The U.S. Environmental Protection Agency is in the midst of a scientific study of hydraulic fracturing, for which it has gathered information on chemicals from several gas service companies. Some companies have voluntarily disclosed the chemicals they use. But the Interior Department is considering making disclosure a requirement for any company that fracks on BLM lands.

BLM lands hold an estimated 11 percent of the natural gas reserves of the United States, Salazar said. The BLM currently has leased 12 million acres (4.8 million hectares) of its 250 million acres (101.2 million hectares) for

oil and gas drilling. About 12,000 of the 48,000 leases issued by BLM are currently producing natural gas, the vast majority of the wells drilled with hydraulic fracturing.

Hydraulic fracturing technology "has single-handedly turned the United States from a nation of declining natural gas reserves to one of natural gas abundance," said Jim Kleckner, vice president of operations for the oil and gas company Anadarko at the Interior Department forum. One of Anadarko's largest operations is Greater Natural Buttes in northeastern Utah, which Kleckner described in his slide presentation as a "world-class" natural gas resource.

The BLM is in the process of finalizing an environmental impact statement on Anadarko's plans to expand drilling in Greater Natural Buttes. Under its draft environmental analysis released earlier this year, more than 3,600 new gas wells would be drilled in the area over the next 10 years, with 760 miles of new roads, 820 miles of buried pipelines, 587 miles of surface pipelines and seven miles of electric power lines. The BLM estimates 12,658 acres (5,100 hectares) of the 162,911 acres (66,000 hectares) would be disturbed under Anadarko's plan.

Kleckner said his company takes numerous steps to protect water, including the cemented steel casings in its wells. But Peter Lehner, executive director of the Natural Resources Defense Council, an environmental group, said at the forum that the industry's assurances were not sufficient, and nationwide standards were needed.

"I think there's a tremendous opportunity to come together and take advantage of the promise of natural gas, but only if we get past what is now unfortunately a growing level of distrust," Lehner said. He said disclosure of the chemicals used in the fracking process was of great importance, on this score. "If something's going on and someone's adamant about not telling you about it, you expect the worst," he said. "When the fluids are not disclosed, you assume that something poisonous is in there." And the industry's assurance that its frack fluid was 97 percent water and sand was "not comforting," Lehner said. "If that were my mother's house, would I be comfortable with that?" he asked. "Or would we want any individual to have the burden of fighting a big sophisticated company to ensure their water is clean?"

## Trade Secrets

But Fred Toney, vice president for U.S. pressure pumping for the oil and gas field services company Baker Hughes, said that although his company supports disclosing chemical use to authorities, the company also has to protect the investment it has made in research. Baker Hughes, for example, has a system of chemicals called SmartCare that is meant to be low in environmental impact, and has developed a product called VaporFrac that reduces water use and the number of additives needed in hydraulic fracturing, he said. "We have to be responsible to protect [intellectual property]," Toney said. "It took time to develop those formulas. It's not poisons in there. We have 150 Ph.D.'s in [our research] facility and they are constantly developing these SmartCare products."

He and other industry officials said they were working with the American Petroleum Institute and others to establish a set of best practices for the hydraulic fracturing industry.

Sherri Stuewer, vice president of environmental policy for Exxon Mobil, was questioned about a 13,000-gallon (49,200-liter) frack fluid spill last week in Pennsylvania at a site operated by its subsidiary, XTO. The Pennsylvania Department of Environmental Protection said that an open valve on a tank caused the fluid to pollute a small waterway and a spring in the north-central part of the state. Stuewer said the investigation on the spill had not yet been completed. "Spill performance is a priority for our corporation," she said. "Every spill in our corporation is stewarded all the way up to the board."

Salazar said the Interior Department would be working with industry and other federal agencies to ensure natural gas development “happens in the right way and in the right places.”

White House climate and energy czar Carol Browner added that the administration believes it can build common purpose on the issue with Republicans who will take over leadership of the House of Representatives in January. “We believe that natural gas is one of those areas where there is broad support for increased domestic production and we should be able to achieve that goal by working in a bipartisan manner,” she said.