

**Statement of
Neil Kornze
Director
Bureau of Land Management, U.S. Department of the Interior
Senate Energy and Natural Resources Committee
Subcommittee on Public Lands, Forests, and Mining**

“Bureau of Land Management’s Final Hydraulic Fracturing Rule”

April 30, 2015

Chairman Barrasso, Ranking Member Wyden, and Members of the Subcommittee, thank you for the opportunity to discuss the Bureau of Land Management’s (BLM) final hydraulic fracturing regulations and their application to Federal, tribal, and Indian trust mineral resources. The BLM oil and gas program’s highest priority is ensuring that the operations it authorizes on public and tribal lands are safe and environmentally responsible. This rule is critical to meeting that responsibility as we continue to offer millions of acres of public land for minerals development each year.

The BLM’s rule establishes a consistent set of requirements designed to prevent problems in these complex hydraulic fracturing operations before they occur. It also will provide as much information as possible to the public about these operations that affect their public lands. The goals of the rule – safe and environmentally responsible operation and resource protection – are goals that we know the BLM shares with industry, states, tribes, and the American public. The expertise brought to these issues by those who participated in the rulemaking process was essential to producing a rule that will achieve these goals, and we are very appreciative of the time and skill invested by all concerned.

Background

The BLM is responsible for protecting the resources and managing the uses of our nation’s public lands, which are located primarily in 12 western states, including Alaska. The BLM administers more land – over 245 million surface acres – than any other Federal agency. The BLM also manages approximately 700 million acres of onshore Federal mineral estate throughout the nation, including the subsurface estate overlain by properties managed by other Federal agencies such as the Department of Defense and the U.S. Forest Service. In addition, the BLM, together with the Bureau of Indian Affairs (BIA), provides permitting and oversight services under the Indian Mineral Leasing Act of 1938 to approximately 56 million acres of land held in trust by the Federal government on behalf of tribes and individual Indian owners. The BLM works closely with surface management agencies, including the BIA and tribal governments, in the management of these subsurface resources. We are also mindful of our agency’s responsibility for stewardship of public land resources and Indian trust assets that generate substantial revenue for the U.S. Treasury, the states, tribal governments, and individual Indian owners.

In support of President Obama’s all-of-the-above energy strategy, the BLM is committed to promoting safe, responsible, and environmentally sustainable domestic oil and gas production in

a manner that will protect consumers, human health, and the environment, and reduce our dependence on foreign oil. Secretary Jewell has made it clear that as we expand and diversify our energy portfolio, the development of conventional energy resources from BLM-managed lands will continue to play a critical role in meeting the nation's energy needs and fueling our economy.

In Fiscal Year (FY) 2014, onshore Federal oil and gas royalties exceeded \$3 billion, approximately half of which were paid directly to the states in which the development occurred. In FY 2014, tribal oil and gas royalties exceeded \$1 billion with all of those revenues paid to the tribes or individual Indian owners of the land on which the development occurred.

The BLM works diligently to fulfill its role in securing America's energy future, coordinating closely with partners across the country to ensure that development of oil and gas resources occurs in the right places and that those projects are managed safely and responsibly. In recent years, the BLM has overseen a significant increase in oil production from public lands, while also supporting continued natural gas production. Oil production from Federal and Indian lands in 2014 rose twelve percent from the previous year and is now up 81 percent since 2008 – 113 million barrels per year in 2008 to 205 million barrels per year today. For comparison, nationwide oil production over the same period increased 73 percent. The BLM is proud to be a leader in this area, and continues to make public lands available for oil and gas development in excess of industry demand. Additionally, today the BLM has responsibility for more than 100,000 existing oil and gas wells.

Hydraulic Fracturing Technology

Hydraulic fracturing involves the injection of fluid under high pressure to create or enlarge fractures in the rocks containing oil and gas so that the fluids can flow more freely into the wellbore and thus increase production. The number of wells on BLM-managed public lands and on Indian lands that are stimulated by hydraulic fracturing techniques has increased steadily in recent years. Of wells currently being drilled, over 90 percent use modern hydraulic fracturing techniques for well completion.

These new well completions are typically significantly more complex than the wells drilled in the past. Modern hydraulic fracturing operations are often considerably deeper and coupled with relatively new horizontal drilling techniques, unlike those that occurred in the past which were used on a relatively small scale to complete or to re-complete wells. The increasingly common combination of long lateral well bores with hydraulic fracturing today has facilitated larger-scale operations that allow greater access to shale oil and gas resources across the country, sometimes in areas that have not previously or only recently experienced significant oil and gas development.

Hydraulic Fracturing Rulemaking Considerations

The Mineral Leasing Act of 1920 (MLA), as amended, directs the Secretary of the Interior to lease Federal oil and gas resources, and authorizes her to regulate the resulting oil and gas operations on those leases. The BLM has used this authority to develop regulations governing all aspects of oil and gas operations, including requirements related to surface-disturbing activities, production measurement, and well construction. The Indian Mineral Leasing Act

extends this regulatory authority and the resultant rules to Indian oil and gas leases on trust lands (except those lands specifically excluded by statute). Finally, the Federal Land Policy and Management Act of 1976 (FLPMA) directs the BLM to manage the public lands using the principles of multiple use and sustained yield and to take any action necessary to prevent unnecessary or undue degradation. In fulfilling these objectives, FLPMA requires the BLM to manage public lands in a manner that protects the quality of their resources, including ecological, environmental, and water resources. On net, this statutory regime requires the BLM to balance responsible development with protection of the environment and public safety. The BLM works hard to ensure the appropriate balance is struck and that the applicable regulations and requirements are applied and enforced fairly and consistently across all the lands where the BLM has oversight responsibilities.

Prior to the issuance of the hydraulic fracturing rule, the BLM's rules on oil and gas operations were last updated over 30 years ago, and had not kept pace with the significant technological advances in hydraulic fracturing techniques and the tremendous increase in its use. The new rule is the culmination of four years of work by the BLM that began in November 2010 when it held its first public forum on this topic. Since that time, the BLM has published two proposed rules and held numerous meetings with the public and state officials, as well as many tribal consultations and meetings. The public comment period was open for a cumulative period of more than 210 days, during which time the BLM received and analyzed comments from more than 1.5 million individuals and groups. During this period, the BLM also studied state and tribal regulations, and consulted with state and tribal agencies, industry, and the public, including communities affected by oil and gas operations.

Hydraulic Fracturing Rule Requirements

Informed by the experience of its experts and the technical expertise and concerns of state regulators, tribes, industry, and the public, the BLM's hydraulic fracturing rule strengthens its existing oversight procedures and provides all stakeholders with additional assurance that operations are being carried out safely and responsibly.

Key components of the rule include provisions for ensuring the protection of groundwater supplies through requirements related to wellbore integrity. These include the placement of strong cement barriers between the wellbore and any potentially usable water zones through which the wellbore passes, which protects groundwater both from hydraulic fracturing fluids during drilling and from hydrocarbon contamination during production. The rule requires the interim storage of recovered waste fluids from the hydraulic fracturing operation in tanks in order to minimize the potential for produced water spills that put air, water, and wildlife at risk. Additional measures requiring companies to submit more detailed information on the geology, depth, and location of preexisting wells prior to drilling will lower the risk of cross-well contamination, which has become more prevalent as the prevalence of horizontal drilling has increased. To increase transparency, as much of this information as possible will be made available to the public. Finally, the rule requires companies to publicly disclose information about the chemicals used in their hydraulic fracturing processes on public lands within 30 days of completing the operations.

These requirements were developed based on BLM's experience and technical expertise and work done by states, tribal authorities, and industry. During the four years the BLM spent preparing the rule, it benefited from the expertise of state and tribal regulators, and many provisions of the final rule reflect existing state standards. None of these requirements impose undue delays, costs, or procedures on operators.

Work with States & Tribes

The BLM has established and maintained regulations governing oil and gas operations on public lands for decades, and has worked successfully with operators, tribes and state governments to avoid duplication and delay in the enforcement and monitoring of these regulations. The implementation of the recently issued hydraulic fracturing rule will continue this longstanding practice while also ensuring the BLM satisfies its obligations to ensure federal standards are met. As explained above, the rule builds upon and updates the BLM's existing regulations to address an evolving technology, in order to provide consistent parameters for the conduct of hydraulic fracturing operations on BLM-managed public lands nationwide and Indian trust lands.

Of the 32 states with the potential for oil and gas development on federally managed mineral resources, slightly more than half have rules in place that address hydraulic fracturing, and those rules vary widely from state to state. Recognizing the expertise and experience that state and tribal authorities possess and consistent with its standard practice of ensuring the efficient implementation of its rules, the BLM will work with states and tribes that have standards in place for hydraulic fracturing that meet or exceed those set by the BLM's rule to establish variances from those aspects of the BLM rule. Following BLM approval of a variance, the BLM and the state or tribe will enforce the more protective requirement. In addition, the BLM will continue its coordination with states and tribes to establish or review and strengthen existing agreements related to oil and gas regulation and operations.

The BLM's overall intent for these coordination efforts is to minimize duplication and maximize efficiency, while also ensuring the applicable federal standards are met. As this rule is implemented, the BLM will continuously work with states, tribes, and operators to maximize coordination and efficiency.

Implementing the Rule

The final hydraulic fracturing rule will be effective on June 24, 2015. Implementation of the rule is expected to cost industry about \$11,400 per hydraulic fracturing operation. On average, this expense equates to no more than one-quarter of one percent of the cost of drilling a well. This is a modest cost, especially in light of public interest in ensuring that these operations are conducted in an environmentally sound and safe manner. The BLM is aware that industry, states, tribes, and the public share the same goal of safeguarding local communities, water quality, wildlife, and other resources from potential harm. For this reason, the BLM rule not only incorporates requirements from existing state and tribal rules, but industry best practices as well. In many cases operators have voluntarily undertaken the best practices reflected in the BLM's rule. The rule ensures that those practices are maintained and adopted by all. As result, the rule achieves a cost-effective path towards consistent permitting requirements and disclosure protocols for hydraulic fracturing operations.

The BLM has taken a number of steps both internally and externally to prepare for the implementation of the rule in advance of its effective date. Internally, recognizing the central role wellbore integrity plays in maintaining safe operations, the BLM partnered with the Society of Petroleum Engineers to add more technical training for the BLM's engineers that emphasizes cementing and other critical aspects of hydraulic fracturing operations. As the BLM implements the rule, it will continue to offer, develop and refine these technical training modules. Guidance will also be issued to State and Field Offices through formal Instruction Memorandum to ensure the rule is implemented in the most efficient and consistent way possible.

Externally, the BLM has undertaken outreach efforts to states, operators, trade associations, and other interested stakeholders. The BLM State Offices are in the process of meeting with their state counterparts, undertaking state-by-state comparisons of regulatory requirements in order to identify opportunities for variances, and to establish Memorandums of Understanding (MOUs) that will realize efficiencies and allow for successful implementation of the rule. To date, the BLM has scheduled or is scheduling meetings with: the North Dakota Industrial Commission; the Wyoming Oil and Gas Commission; and the states of Alaska, California, Colorado, New Mexico, Nevada, and Utah. The BLM will be presenting the rule at the Interstate Oil and Gas Compact Commission's next meeting.

Similarly, communication with industry is also ongoing. Our offices are reaching out to local or regional industry organizations and local operators to address their questions related to the implementation process. On April 7, 2015, BLM Washington hosted a general industry outreach session that over 200 people participated in to explain the rule and answer questions about its implementation. Similar sessions have been set up or will be set up at the local level. The BLM's Carlsbad NM Field Office provided a presentation to the local working group for the SE NM New Mexico Oil and Gas Association on April 9, 2015. BLM State and Field Offices are working to coordinate similar opportunities with associations representing producers in Wyoming, Utah, Colorado, Montana, and North Dakota. Finally, we are also working closely with the Ground Water Protection Council (GWPC) to finalize a MOU that will ensure that the chemical disclosures provided by industry can be easily searched and downloaded from the GWPC's publicly available hydraulic fracturing database, FracFocus.

Conclusion

The BLM's hydraulic fracturing rule provides a much needed update to the BLM's existing regulations. It establishes commonsense standards governing modern hydraulic fracturing operations that reflect the technological advancement of the process over time. These new regulations are essential to our efforts to protect the environment and local communities, while also ensuring the continued conscientious development of our federal oil and gas resources. Thank you for the opportunity to present this testimony. I will be pleased to answer any questions you may have.