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U.S. Department of the Interior
Acting Director, Bureau of Land Management
Mail Stop 2134 LM, 1849 C St. NW.
Washington, DC 20240

Via Federal eRulemaking Portal: <http://www.regulations.gov>.

Attention: RIN 1004-AE26. Federal Register Notice May 11, 2012,
BLM proposed rule to regulate hydraulic fracturing on public land and Indian land

Dear Mr. Pool:

The American Petroleum Institute ("API") appreciates the opportunity to comment on the Notice published by the Bureau of Land Management (BLM), May 11, 2012, on the subject of the BLM proposed rule to regulate hydraulic fracturing on public land and Indian land (proposed rule).

API is a national trade association representing over 500 member companies involved in all aspects of the oil and natural gas industry. API's members include producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies that support all segments of the industry. API and its members are dedicated to meeting environmental requirements, while economically developing and supplying energy resources for consumers. API members carry out operations for exploration and production of natural gas, crude oil and associated liquids on lands administered by the BLM.

General Comments and Recommendation for Further Study

We believe that the need for the proposed rule has not been supported by technical or scientific information that demonstrate that present federal and state regulations are inadequate to assure that hydraulic fracturing of oil and natural gas wells drilled on federal public lands takes place in a safe and environmentally responsible manner. As we will explain further, API recommends that the proposed rule be withdrawn and that prior to promulgating a new rule, the BLM should undertake a careful analysis of the agency's current regulations, onshore orders and other administrative practices concerning the regulation of drilling, well completion and production operations in collaboration with state agencies with similar regulatory mandates, and organizations such as the Ground Water Protection Council and STRONGER (State Review of Oil and Natural Gas Environmental Regulations) .

The record shows that there have been no incidents of contamination from hydraulic fracturing in over 1.2 million wells drilled over more than sixty years, and no groundwater contamination incidents from

hydraulic fracturing operations that have occurred on federal public lands. Claims concerning the environmental and health impacts of hydraulic fracturing have turned out to be unsubstantiated or have resulted from activities or natural occurrences unrelated to hydraulic fracturing - the application of fluids under pressure for the purpose of initiating or propagating fractures in a target geologic formation in order to enhance production of oil and/or natural gas.

We are concerned that the BLM has yet to show that it has carefully examined the potential effects of the proposed regulation on the costs of drilling operations on federal and tribal lands, and whether such costs might discourage new investment in such drilling operations without significant environmental benefit. More importantly, BLM has not shown that it has carefully examined whether the proposed regulations will increase or decrease production of natural gas and oil resources on federal lands that belong to the American people and provide revenues to the U.S. Treasury. The energy sector represented by API supports 9.2 million jobs and 7.7 percent of America's GDP. Even as the overall economy weakened the past several years, and millions of jobs were lost, the oil and natural gas industry expanded and created more than 86,000 new American jobs since the recession began. The resource basins of the American West are projected to generate 1.3 million barrels of domestic oil and condensate production a day by the year 2020, an amount that exceeds the current daily oil imports from Russia, Iraq and Kuwait combined. These basins likewise hold the potential to produce 6.2 trillion cubic feet (Tcf) of natural gas annually by 2020, an additional one Tcf from 2010 levels. The benefits to the nation and the region in terms of capital investment, jobs and energy security from development of these resource basins, the majority of which underlie multiple use federal public lands, are enormous, especially in this time of economic uncertainty.

BLM states in the proposed rule's preamble that it has developed the rule in response to "public concerns" related to hydraulic fracturing activities. The preamble states that "[T]he resulting expansion of oil and gas drilling into new parts of the country as a result of the availability of new horizontal drilling technologies has significantly increased public awareness of hydraulic fracturing and the potential impacts that it may have on water quality and water consumption." Nevertheless, the agency has not shown that it has carefully examined whether those concerns are warranted based on the volume of information publicly available related to well stimulation activities that have occurred nationwide for decades. This operating record fails to show that actual instances of hydraulic fracturing operations have adversely affected public health or the environment. A rule of this significance should be based on facts, science, and engineering, not on unsubstantiated concerns that lack empirical demonstration. It has been long established that agencies must provide some factual basis for their policy decisions, and "that those facts have some basis in the record," or they are arbitrary and capricious. *See, e.g., NRDC v. SEC*, 606 F.2d 1031, 1053 (D.C. Cir. 1979). A rote reference to undefined and unsubstantiated "public concerns" cannot provide the record support required to withstand scrutiny under the Administrative Procedure Act.

As API noted in written comments provided to the Office of Management and Budget's Office of Information and Regulatory Affairs June 11, 2012, API believes that the estimate of benefits and costs associated with the BLM's proposed rule as described in the May 11, 2012 notice in the Federal Register is flawed and should be scrutinized and re-determined¹. The benefits of the proposed rule are overstated by unrealistic assumptions of baseline risks of subsurface contamination in the Low Environmental Risk Case and grossly unrealistic in the High Environmental Risk Case. The costs of implementing the proposed rule are understated by the assumption that there will be no additional delays in operations even though the proposed rule describes a number of additional approvals that will be required throughout operations to bring a well to completion, should the proposed rule be implemented. Rules that impose regulatory burdens and delay without net benefit are exactly the type of rules that the Administration has

¹ A copy of API's letter to OMB/OIRA was transmitted to the BLM at the time of submittal. As of the date of this letter to the BLM API continues to await a response from OMB/OIRA.

sought to prevent. *See* Executive Order 13563 (agencies “must” craft regulations “only upon a reasoned determination that [their] benefits justify their costs,” that they “impose the least burden on society,” and “maximize net benefits....”).

In the context of discussing benefits, Table 3 in the May 11, 2012 notice in the Federal Register (“Annualized Value of Net Benefits of the Proposed Regulations and Alternatives”) provides a list of base year assumptions, and identifies as a Low Environmental Risk Case a one percent proportion of wells in which tests would reveal risk of subsurface contamination from hydraulic fracturing, and a one percent actual likelihood of subsurface contamination if subsurface risk should exist. This calculation implies that 1 in 10,000 wells (1% times 1%) on average will produce contamination of the subsurface without the BLM rule. This level of contamination has not been historically demonstrated. In fact, U.S. government sources identify no instances of subsurface contamination attributable to hydraulic fracturing having occurred. Similarly, Table 3’s Base Year Assumptions describe as a High Environmental Risk Case a five percent proportion of wells where tests would reveal subsurface risk and a five percent actual likelihood of subsurface contamination if subsurface risk should exist. This calculation implies that 1 in 400 wells (5% times 5%) on average will lead to subsurface contamination from hydraulic fracturing without the BLM rule, a level of contamination that is grossly unrealistic, even when presented as a High Environmental Risk Case.

More recently, in its study “Future of Natural Gas,” MIT examined the potential risks of hydraulic fracturing to groundwater aquifers and found that “no incidents of direct invasion of shallow water zones by fracture fluids during the fracturing process have been recorded.” MIT based its conclusions on the environmental record of more than 20,000 shale gas wells drilled over a 10 year period. MIT reviewed the results of fracturing operations in the Barnett and Marcellus Shales and found that in all cases the highest growth of the fractures remains separated from the groundwater aquifers by thousands of feet of formation.

In addition, BLM Director Bob Abbey has testified before Congress that BLM “has never seen any evidence of impacts to groundwater from the use of fracking technology on wells that have been approved by” BLM. Director Abbey added that BLM believes “that based upon the track record so far, [hydraulic fracturing] is safe.”² Director Abbey’s testimony on the safety of hydraulic fracturing is in accord with U.S. Environmental Protection Agency (EPA) Administrator Lisa Jackson’s testimony that there is no “proven case where the fracking process itself has affected water.”³ The evidence to date supports the conclusion that hydraulic fracturing poses no risk of subsurface contamination – a conclusion with which BLM and EPA apparently agree.

Moreover, the relationship between hydraulic fracturing and drinking water resources is already the subject of a multi-year multi-million dollar research study currently being undertaken by the EPA. This

² Challenges Facing Domestic Oil and Gas Development: Review of Bureau of Land Management/U.S. Forest Service Ban on Horizontal Drilling on Federal Lands: Hearing before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources and the Subcomm. on Conservation, Energy and Forestry of the H. Comm. on Agriculture, 112th Cong. (July 8, 2011).

³ Pain at the Pump: Policies that Suppress Domestic Production of Oil and Gas: Hearing Before the H. Comm. on Oversight & Gov’t Reform, 112th Cong. (May 24, 2011). Administrator Jackson reiterated this belief in an April 27, 2012 interview, stating “in no case have we made a definitive determination that the fracking process has caused chemical contamination of groundwater.” *Available at*, http://www.youtube.com/watch?v=tBUTHB_7Cs&feature=youtu.be (last visited Aug. 17, 2012).

national study includes a review of published literature, analysis of existing data, scenario evaluation and modeling, laboratory studies, and retrospective and prospective case studies. EPA plans to release initial study results in a 2012 report and an additional report at the end of 2014.

API believes that the case has not been made for a federal, one-size-fits-all approach. Oil and gas exploration and production is currently regulated by comprehensive state, local and federal laws. These include laws regulating well design, water use, waste management and disposal, air emissions, surface impacts, health, safety, location, spacing, and operation. State regulation of oil and gas activities pre-dated federal regulation, and is particularly important because it allows laws to be tailored to local geology and hydrology. Organizations like STRONGER are available to help assess the overall framework of environmental regulations supporting oil and gas operations in a particular state, and could likewise be a resource for the BLM. States also exchange information on regulatory experiences and practices through periodic meetings of interstate organizations such as the Interstate Oil and Gas Compact Commission (IOGCC) and the Groundwater Protection Council (GWPC). Governors Matt Mead (Wyoming), Susana Martinez (New Mexico), Gary Herbert (Utah), Jack Dalrymple (North Dakota), Brian Schweitzer (Montana) and Robert McDonnell (Virginia), as well as Attorney General Scott Pruitt (Oklahoma) have provided written statements that testify to the strong and efficient track record of states to regulate oil and natural gas production.

In addition safe and environmentally responsible drilling and production operations are assisted by API's standards program, which is accredited by the American National Standards Institute (ANSI). Hundreds of API's standards are referenced directly in state oil and gas regulations thousands of times. Three API guidance documents pertain specifically to hydraulic fracturing issues (*HF1: Well Construction and Integrity*, *HF2: Water Management*, *HF3: Practices for Mitigating Surface Impacts Associated with Hydraulic Fracturing*). An additional two documents, *RP 51R: Environmental Protection for Onshore Oil and Gas Production Operations and Leases* and *Standard 65-2: Isolating Potential Flow Zones During Well Construction* are also important for drilling and production of oil and natural gas resources (copies of these documents have previously been furnished to the BLM). Although regional differences in state geology make a single set of regulations impractical, these documents provide a roadmap for responsible operations from the point of permitting to land reclamation after well closure, and Good Neighbor guidance on cooperating with landowners, host communities and other stakeholders. Given the extensive regulatory activity governing oil and gas operations on federal lands today, API recommends that prior to promulgating a new rule, the BLM should undertake a gap analysis of the agency's current regulations, onshore orders and other guidance, documentation or current administrative practices that seek to achieve coordinated approaches to regulation of drilling, well completion and production operations with states, and other related regulatory mechanisms. API would also encourage consultation between BLM and the GWPC, IOGCC and STRONGER in the course of this gap analysis. A thorough review of current practices and an analysis of gaps and possible areas of overlap would provide information to BLM to ensure that this proposed rule is the best pathway to creating a more effective system that promotes best practices and reduces environmental risk from drilling and hydraulic fracturing operations on public lands.

Consideration of Certain Major Development Projects to Illustrate the Potential Consequence of Regulatory Delays

API is concerned about the addition of new BLM regulation-driven requirements where a need has not been demonstrated because delays in the issuance of permits to operators of oil and gas leases on BLM lands have the potential to result in costs that can accumulate into the tens of millions of dollars or more. A 2011 report by SWCA Environmental Consultants of Broomfield, Colorado, examined the consequences in accumulating costs and deferred return on capital for six crude oil and natural gas development projects proposed on BLM lands managed by five different field offices, all in the one state

of Wyoming. On average the planning process for each EIS was originally estimated to take two to three years. However, due to a range of issues that have arisen with each project, the Records of Decision for these projects have been delayed an additional one to five years. The report “Economic Impacts of Oil and Gas Development on BLM Lands in Wyoming” explains that the average time required for completion of Environmental Impact Statements for oil and natural gas development projects on BLM lands in the Rocky Mountain Region (Colorado, Utah, and Wyoming) has increased from 38 months between 1994 and 2005 to 43 months as of March 2011. Because the majority of these projects have not released a Draft Environmental Impact Statement the time required for completion of a Record of Decision will increase as the NEPA process continues.

While a comparison of the consequences of administrative and regulatory process delays for different projects cannot be expected to yield certainty, it can and should be used to show that such delays have consequences – consequences that API believes have not adequately been examined in the analysis included in the May 11, 2012 notice. Delaying a federal decision on projects like the six considered in the 2011 SWCA Environmental Consultants report delays oil and gas companies from beginning the approved development and production phases of these large-scale projects. Delays in a BLM decision result in deferral of project development, and in the employment and government revenues that can result from such projects.

SWCA Environmental Consultants calculate that assuming an average total economic impact of \$3.7 million per well, \$4.3 billion dollars would be spent annually in Wyoming as a result of drilling 1,166 wells per year spread among the six projects studied. This spending would generate direct, indirect, and induced employment. Based on the assumptions that 26.3 jobs and \$2.3 million in labor earnings are created with the development of each well, approximately 30,666 average job equivalents (AJEs) and \$2.6 billion in earnings would not be realized annually within the state of Wyoming. That is to say that, each year that the six oil and gas projects are postponed, the state of Wyoming does not receive the benefit of over 30,666 AJEs and over \$2.6 billion in employment earnings resulting from drilling 1,166 wells annually. As the delays continue, the jobs and employment earnings are not realized until project initiation.

The industry’s present experience with significant delays in the approvals required from BLM for exploration drilling and field development projects (particularly when compared with regulatory agencies of the different states) amplifies the concerns described above. These are further complicated with additional uncertainty regarding the level of NEPA review to be required should the proposed rule be promulgated. As is discussed in further detail in the attachment to this letter, the process described in the proposed rule indicates that the BLM authorized officer may be regarded as reviewing and approving more than one permit action. If this is the case, it is not clear (and nowhere discussed) whether each such action is to be treated as distinct for the purposes of NEPA, or whether a NEPA review carried out prior to the initial BLM permit action may suffice for the entirety of the project that includes hydraulic fracturing operations. If the proposed rule is finalized, API believes that it is imperative for the BLM to clarify the process for NEPA review and the development of NEPA documents for the regulated community and the public.

Consideration of Trends in Increased Regulatory Delay and Complexity for Operations on BLM Managed Lands

API understands that a comparison of delays in the completion of Records of Decision required for certain larger-scale field development projects does not calculate with precision the costs to be incurred by operators for drilling and development projects over a broad range of types if the proposed rule is implemented. Nevertheless it is important to consider that the proposed rule has been released in a context of increasing regulatory complexity and policy initiatives that are combining to diminish industry capital

investment in exploring for and developing natural gas and crude oil resources on multiple use public lands the BLM manages for the benefit of the American people.

According to information from the study: “Employment, Government Revenue, and Energy Security Impacts of Current Federal Lands Policy in the Western U.S.”, prepared for API by EIS Solutions of Grand Junction, Colorado, January 2012, which relies upon an examination of BLM Oil and Gas Statistics compiled in 2010 and 2011 (the EIS Solutions report):

- According to BLM data, the number of new federal oil and gas leases issued by the BLM is down 44% from an average of 1,874 leases in 2007/2008 to 1,053 in 2009/2010.
- The number of new permits to drill issued by the BLM is down 39%, from an average of 6,444 permits to an average of 3,962.
- The number of new wells drilled on federal land has declined, 39%, from an average of 4,890 wells to 2,973.
- The economic downturn starting in 2007 is recognized as a factor contributing to these results. However, if market factors were the sole driver of the federal lands permitting slowdown, it would be reasonable to assume that non-federal drilling permits would generally track the trends occurring with their federal counterpart. But this is not the case.
 - The number of new permits to drill on federal lands in the West is down by a significantly greater amount (-39%) than new permits to drill on non-federal lands (-20%) over the last 2 years.
 - In 2010 alone, non-federal permits across the West actually increased by 31%, even as federal drilling permits dropped 13%.
 - The Report shows that non-federal oil and gas production has increased in 2009/2010, even as federal oil production has plateaued and federal natural gas production has declined in the same time frame.
 - While federal leasing numbers have gone up and down due to a range of economic and regulatory considerations through the years, at no time in the last 25 years has the number of new onshore federal oil and gas leases been lower than the number of new leases issued in 2009 and 2010 (BLM Oil & Gas Statistics, 2010).

Since almost all western oil and natural gas development requires hydraulic fracturing, API is concerned that the implementation of the proposed rule could, by increasing permitting time periods and regulatory uncertainty, delay or prevent expanded production in the West.

The attachment to this letter addresses in detail, and with reference to the text of the proposed rule as published, particular operational and legal concerns API and its members have concerning it.

Summary

The potential benefits of increased exploration for and development of natural gas and oil resources on BLM managed lands in the Intermountain West are significant. An increase in regulatory complexity and burden should the proposed rule be implemented in its present form is likely to increase project costs, create opportunities for additional administrative delay and uncertainty, and provide further disincentives to operators to develop these resources that the agency manages for the American people. This will disproportionately harm Tribes and states with significant federal lands, as operators will choose production opportunities where returns on investment are not delayed or put at risk by additional regulatory burdens.

API urges BLM to re-examine the economic and cost assumptions described in the May 11, 2012 notice and to undertake a fresh and focused inquiry into the economic consequences of the proposed rule. API also urges BLM to undertake a careful analysis of current regulatory practices, both the agency's own and

those coordinated with or undertaken by the states in which federal public lands are located, before proceeding with promulgation of the proposed rule.

Should you have any questions, please contact the undersigned at 202.682.8057, or via e-mail at ranger@api.org.

Thank you for considering these comments.

Very truly yours,

A handwritten signature in dark ink, reading "Richard L. Ranger". The signature is written in a cursive style with a large, looped "R" and a long, sweeping underline.

Richard L. Ranger
Senior Policy Advisor

Att:

References:

The Future of Natural Gas: An Interdisciplinary MIT Study. MIT Energy Initiative, Cambridge, Massachusetts. June 2011.

Wyoming Oil and Gas Economic Contribution Study. Wyoming Heritage Foundation, Casper, Wyoming. August 2008.

Economic Impacts of Oil and Gas Development on BLM Lands in Wyoming. SWCA Environmental Consultants, Broomfield, Colorado, 2011.

Employment, Government Revenue, and Energy Security Impacts of Current Federal Lands Policy in the Western U.S.”, EIS Solutions, Grand Junction, Colorado, January 2012

The Blueprint for Western Energy Prosperity. Prepared for Western Energy Alliance by EIS Solutions (Data Projections by ICF International), Grand Junction, Colorado, July 2011.