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**Testimony of Mark Squillace
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Before the U.S. House of Representatives Investigations, Oversight, and Regulations
Subcommittee of the Small Business Committee**

The Honorable Mike Coffman, Chair
Investigations, Oversight, and Regulations Subcommittee
Committee on Small Business
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Coffman:

Thank you for the opportunity to appear before the Investigations, Oversight, and Regulations Subcommittee. My name is Mark Squillace and I am a professor of law and the director of the Natural Resources Law Center at the University of Colorado Law School. Among other things, the Center has developed and maintains a searchable, on-line database of best management practices for oil and gas development. This free resource is designed to promote transparency and better management of oil and gas development, particularly in the Intermountain West. See <http://www.oilandgasbmps.org/>.

I appear today in my private capacity to testify about the opportunities for small businesses to participate in the federal oil and gas leasing program. I want to preface my remarks by noting that for the past several years domestic oil and gas production has been rising even while the American people are consuming less. Reduced consumption is an especially important trend, and that trend can be expected to continue over the next decade as new motor vehicles standards that were negotiated between the auto industry and the Obama Administration take effect. The long-term benefits of these new standards for both the economy and our national security cannot be overstated and I encourage the Congress to embrace these standards and strengthen them even further. While global conflicts and global demand make it impossible for our federal government to control oil and gas prices, we can continue to reduce our consumption and thereby limit our long-term dependence on foreign oil.

The focus of this hearing is on oil and gas development on our public lands, which plays an important role in domestic energy production. The Congress is rightly concerned about promoting sound policies in this arena. Generally, I believe that the agencies responsible for the federal leasing program have established good leasing policies that can

help ensure robust development, appropriate levels of environmental protection, and a fair return to the treasury. Unfortunately, while these policies themselves are good, they are not always administered as well as they can or should be. My testimony reflects this mixed success in implementing the federal oil and gas leasing program and emphasizes five points.

- Federal land use planning and leasing processes are critical to sound decision-making and ought not be compromised for any perceived short term benefits to small businesses or oil and gas production.
- The Bureau of Land Management (BLM) is far too protective of existing lessees, who are most often large oil and gas companies, and this protective policy takes opportunities away from smaller companies.
- Small oil and gas operators can help lead the way toward developing and implementing best management practices for oil and gas development.
- Changes in the oil and gas industry, which were made possible by federally funded research, offer great advantages for extracting oil and gas but may make it more difficult and expensive for small companies to compete for oil and gas leases.
- The EPA's forthcoming rules that will further regulate the oil and gas sector are critically needed to protect public health and to conserve our hydrocarbon resources.

Let me briefly explain each point.

I. Federal Land Use Planning and Leasing Processes are Critical to Sound Oil and Gas Development

The Bureau of Land Management administers the oil and gas leasing program on federal lands through several stages. At the first stage the appropriate federal land management agency (generally the BLM or Forest Service) engages in land use planning to decide what uses are appropriate and not appropriate on particular tracts of the planning unit. For lands deemed suitable for oil and gas leasing, the land use planning agency may establish certain stipulations or restrictions that must be followed if oil and gas leasing occurs. Following the land use planning stage, the BLM invites anyone to nominate for lease sale parcels that are open to leasing following land use planning, and that are not currently leased. Where leasing is scheduled to occur in area that has not been subject to much leasing or other activity, and a conflict with other resources may exist, the BLM has

established new procedures to develop “Master Leasing Plans.”¹ The purpose of these Plans is to allow the BLM to make a more holistic assessment of the impacts of leasing in the area, which it can then use to address conflicts proactively. Once planning is completed, the nominated tracts are made available for lease to the highest bidder at a public auction. Auctions are held quarterly by each BLM State office. For the best leasing prospects these auctions can yield substantial bonus bids in the amount of millions of dollars.

Once lands are leased, development may not occur until the BLM approves applications for permits to drill (APDs). Historically, APDs required preparation of appropriate environmental analyses under the National Environmental Policy Act and these typically resulted in additional restrictions designed to protect a variety of public land resources. Environmental analyses are still performed for about three-fourths of all APDs, but the Energy Policy Act of 2005 changed the historic practice of requiring such analyses for all APDs by establishing a “rebuttable presumption” that five categories of activities should be “categorically excluded” from NEPA compliance. Well over 90% of the activities thus far excluded fall into the first three categories,² which include:

- (1) Individual surface disturbances of less than 5 acres, so long as total disturbance on the leased land is less than 150 acres.
- (2) Drilling an oil and gas well at a location or well pad site at which drilling has occurred within 5 years from the date the new well penetrates the surface; and
- (3) Drilling an oil and gas well in a developed field where a land use plan was approved within 5 years of the date the new well penetrates the surface.³

According to the GAO, 6,100 APDs, or 28% of the total APDs issued between 2006 and 2008 were subject to these categorical exclusions. While concerns have been raised about the scope of these exclusions generally, one of the biggest problems appears to be the BLM’s administration of them. In 2009, the General Accounting Office issued a report detailing numerous violations of §390 of the Energy Policy Act of 2005 by many BLM offices. These violations resulted in excluding many activities from NEPA compliance that were outside the scope of the §390 exclusions.⁴ Perhaps more importantly, the BLM had failed to issue guidance to agency officials about how to administer the §390 exclusions, or how a party might rebut the presumption that the categorical exclusion applies.

¹ *BLM Energy Reforms: Questions and Answers* (May 17, 2010), available at, http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE_PROTECTION/energy/leasing_reform.Par.11912.File.dat/BLM_Energy_Reforms_Q_A.pdf

² See *Energy Policy Act of 2005: Greater Clarity Needed to Address Concerns with Categorical Exclusion for Oil and Gas Development under Section 390 of the Act*, General Accounting Office, September, 2009. (Hereafter, *GAO 390 Report*)

³ Pub. L. No. 109-58, §390, codified at, 42 U.S.C. 15942/ The statute uses the term “spudding” to describe the drill bit penetrating the surface.

⁴ See *GAO 309 Report*, *supra* n. 1 at 23-29.

The GAO recommended that the BLM “issue detailed and explicit guidance” on the use of the §390 exclusions, “provide standardized templates or checklists” for each category, and, develop a means for overseeing compliance with §390.⁵ The GAO also recommended that Congress consider amending §390 to clarify what is meant by a “rebuttable presumption,” and whether the §390 exclusions should apply even in “extraordinary circumstances.”⁶

In May, 2010, the BLM issued Instruction Memorandum 2010-118, which was designed both to provide the guidance that the GAO had found lacking, and to require the BLM to screen actions for “extraordinary circumstances.” This latter requirement implemented a settlement agreement reached in a Utah case titled *Nine Mile Canyon Coalition v. Stiewig*.⁷ The BLM was also working on the templates and checklists recommended by the GAO when the federal district court for Wyoming struck down IM 2010-118 because the BLM had failed to follow notice and comment rulemaking procedures.⁸ This decision appears to have put the brakes on the BLM’s efforts to implement the GAO recommendations and it is not clear at this time how the BLM intends to proceed to address the confusion that was documented by the GAO.⁹

Unfortunately, this lack of clarity matters. One example of an extraordinary circumstance that should probably trigger an environmental analysis even where a categorical exclusion might otherwise apply is where an APD would intrude on greater sage grouse habitat. The U.S. Fish and Wildlife Service has determined that the listing of the greater sage grouse under the Endangered Species Act is “warranted but precluded” by other listing priorities.¹⁰ If the sage grouse is ultimately listed it could have a significant adverse impact on oil and gas leasing as well as a wide range of other activities near sage grouse habitat. It is in everyone’s interest to ensure that appropriate protections for the sage grouse and its habitat are put in place so that the sage grouse is able to recover before a listing decision is allowed to go forward. Careful advance planning through the NEPA process could help ensure the survival of the sage grouse and other at-risk species, and

⁵ *Id.* at 53.

⁶ *Id.* The Council on Environmental Quality rules, which establish standards for categorical exclusions generally, specifically require agencies “to provide for extraordinary circumstances in which a normally excluded action” would be subject to environmental impact analysis. 40 C.F.R. §1508.4.

⁷ Civ. No. 08-586, filed August 6, 2008, (D. Utah)

⁸ *Western Energy Alliance v. Salazar*, ___ F. Supp. 2d ___, 2011 WL 3738240 (D. Wyo. 2011). While the law surrounding rules that require notice and comment is murky, it seems doubtful that notice and comment should apply in this case since the guidance did not legally impact any third parties. Rather, it merely directed agency officials to proceed with NEPA compliance under particular guidance, which the agency arguably has the authority to do in any case. See *e.g.*, *American Hospital Ass’n v. Bowen*. 834 F.2d 1037 (D.C. Cir. 1987).

⁹ See *Statement of Mark Gaffigan*, Managing Director, Natural Resources and Environment, Government Accountability Office (September 9, 2011).

¹⁰ 75 Fed. Reg. 13910 (March 23, 2010).

provide the public with greater confidence that oil and gas development will take place in a manner that anticipates and avoids conflicts before they occur. It seems odd to suggest, as the Wyoming court has done, that the BLM is precluded from engaging in a careful, pre-decisional analysis when it receives an APD that might disturb greater sage grouse habitat. Surely, the BLM retains the discretion to consider any relevant information before deciding whether to issue a lease.¹¹

II. Small Companies Would Find More Opportunities if the BLM Offered Better Oversight of Existing Leases

The Mineral Leasing Act of 1920 (MLA) as amended by the Federal Onshore Oil and Gas Leasing Act of 1987 sets standards for federal onshore oil and gas leasing. Among other things, the MLA was designed to discourage speculation and monopolization of federal mineral resources by large companies, and to assure a fair return to the government for these resources. Among the provisions designed to discourage speculation is a limit on the primary lease term to ten years.¹² Leases may extend beyond the primary term, however, if active drilling is occurring on the lease at the end of the primary term, in which case the lease term is extended for two years, or if the lease is producing oil or gas in paying quantities. *Id.* Leases that are not producing in paying quantities and that do not have active drilling generally expire at the end of the ten year primary term unless they are part of a unit where drilling or production is occurring, in which case all of the leases in the unit are treated as one for purposes of extending the lease for drilling or oil and gas production.

The Mineral Leasing Act discourages monopolies by limiting the amount of lease holdings by a single entity to 246,080 acres in any single State.¹³ Leases that are part of units, however, do not count toward these acreage limits.

Unitization of oil and gas properties has historically been carried out to conserve oil and gas resources and provide for more orderly and efficient development of the resource. With the advent of horizontal drilling unitization becomes even more important since deposits that are spread out over a large geographic area can be developed from a single well pad. But unitization *on public lands* carries special risks because it can be used to unfairly extend lease terms or circumvent the acreage limitations set out in the MLA. This appears to be what is happening on some federal leases. Some small companies have complained that the BLM has allowed certain leases to be included in units for the purpose of avoiding termination even when these leases are not needed for orderly development of the resource. To the extent this practice is occurring it undermines virtually every

¹¹ In *Udall v. Tallman*, 380 U.S. 1 (1965), the Supreme Court held that if a lease is issued on a tract made available for sale it must be issued to the first qualified applicant, but even in this circumstance, the Secretary retained “the discretion to refuse to issue an lease at all in a given tract.”

¹² 30 U.S.C. §226(e).

¹³ 30 U.S.C. §184(d)(1). In Alaska a single entity can lease up to 300,000 acres in each of two regions. *Id.*

important policy of the MLA. It encourages speculation by allowing companies to hold leases for more than 10 years even where there is no serious plan for development, it allows companies to avoid the acreage limitation, thereby giving larger companies the opportunity to monopolize resources in particular basins and States, and it denies the public a fair return for its resources because these leases should have been allowed to expire and made available for resale at a later auction. This latter problem especially harms small operators, because it denies them the chance to bid on new oil and gas leases that are not currently being developed.

The BLM should address this problem by adopting strict rules for unitization designed to ensure that leases are added to units only where the lessee demonstrates to the BLM with clear evidence that adding a lease to the unit is necessary for the fair and efficient development of the oil and gas resources.

III. Small Operators Offer a Clearer Path To Adopting Best Management Practices

The phrase “best management practices” or BMPs, is often used to describe good operating procedures for oil and gas development. BMPs are sometimes required by regulatory agencies but even where they are not required that are sometimes negotiated between oil and gas companies and their host communities, especially when the companies are committed to developing good relations with the host community. While it might seem counterintuitive to expect smaller operators to lead the way on best management practices, smaller operators are arguably more focused on ways to save money. In the oil and gas business, best management practices often equate with more efficient operations and better environmental results. Several examples illustrate how BMPs can save operators money and why small operators might be more likely to adopt these practices in developing oil and gas resources

- A. *Recycling Fracking Fluids.*** Fracking requires a lot of water, and about half of that water returns to the surface as flow back. Historically, oil and gas companies have trucked in the water they needed for fracking and then trucked out the flow back water for treatment. These tanker trucks can be a real nuisance to local communities because of noise and air pollution, the damage they cause to local roads, and the most of all, the traffic congestion they cause. Best management practices for fracking would probably require that frack fluids be recycled on site so they can be reused in later fracks. Recycling frack fluids can also reduce costs by more than half. Less water must be purchased, the flow back fluids need not be treated, and truck traffic is drastically reduced, thereby minimizing road damage, air pollution, and traffic congestion.
- B. *Green Completions.*** Oil and gas development often results in hydrocarbons escaping into the atmosphere. These hydrocarbons are valuable and can be sold if captured but larger companies often prefer to let them escape, on the assumption that capturing these gases is not cost-effective. In fact, however, capturing and reducing hydrocarbon emissions can be very cost-effective, by

increasing the production of hydrocarbons that can be sold by the operator. The term “green completions” generally describes an oil and gas operation that is designed to capture and use (or flare) the largest percentage of hydrocarbons possible. Green completions are becoming more common and may soon be required by the new EPA regulations, but they also make good economic sense for large and small operators alike.

- C. *Pitless Drilling.*** At a conventional well site, fluids are circulated through the well bore, and deposited in a pit adjacent to the well. These pits contain many toxic constituents, including hydrocarbons and heavy metals, and they can leach into the ground and contaminate soils, as well as ground and surface water resources. These pits also pose risks to wildlife, and especially migratory waterfowl. With pitless drilling, the drilled solids are separated from the mud and other liquids during the drilling process, and the fluids are pumped into storage tanks where they are available for reuse. Pitless drilling eliminates pits, reduces water consumption by more than half, and also reduces truck traffic that would otherwise be needed to transport water and drilling wastes. Best of all from the operator’s perspective, pitless drilling is generally much cheaper than conventional drilling with pits.

IV. Modern Technologies Have Greatly Improved Oil and Gas Development Prospects but Present Special Challenges for Small Operators

Significant changes in the oil and gas industry, largely made possible by federally funded research, offer great advantages for extracting oil and gas. But some of these technologies, especially fracking and horizontal drilling can significantly increase the capital costs for oil and gas companies and make it more challenging for smaller companies to compete for leases. We should encourage robust competition in the oil and gas industry, including participation by small operators, since this will help promote both lower production costs and better management practices. But we ought not lose sight of the fact that companies that are undercapitalized pose a significantly higher risk of failure, which can harm local communities and lead to greater environmental damage. So while the BLM should welcome the participation of small operators in the federal oil and gas leasing program they should also be vigilant in ensuring that any party operating on the public lands has the financial means to address any and all contingencies that might arise.

V. The EPA’s Proposed Regulations Are an Important Step Toward Protecting Local Communities Facing Oil and Gas Development

Oil and gas production and the facilities associated with that development release both conventional and toxic air pollutants. One of the biggest concerns is winter-time ozone levels, which result from release of volatile organic compounds and nitrous oxides in bright sunlight. Oil and gas facilities, including vehicles used for developing and producing oil and gas, are the primary source of these pollutants in many rural regions. Last year, winter-time ozone levels in the small rural community of Pinedale, Wyoming

violated national ambient air quality standards for ozone, even exceeding the worst ozone levels recorded in the City of Los Angeles.

On August 23, 2011, the Environmental Protection Agency (EPA) took an important step toward addressing this problem by proposing new rules to strengthen existing standards and expand the types of sources covered by the EPA's new source performance standards (NSPS) and hazardous air pollution standards (HAPs) for sources of air emissions in the oil and natural gas sector. EPA is facing a court deadline to finalize these rules by April 3, 2012. While the final EPA rules will most likely change to reflect the many public comments that were received, we can all hope that these new rules will go a long way to addressing the air quality issues facing communities like Pinedale, Wyoming. Among other things, the final rules seem likely to establish new standards for hydraulic fracturing, compressors, pneumatic controllers, storage vessels, and for green completions of wells.

The proposed rules illustrate that the EPA is very much focused on promulgating rules that are cost-effective for the industry even while assuring that the public's health is protected. The balancing act facing the EPA is difficult and the Congress should give the agency sufficient latitude to apply its expertise to addressing this serious problem.

Thanks again for the opportunity to appear before the Subcommittee to share my views on the federal oil and gas leasing program. I hope that these proceedings will lead to better management of these resources well into the future and I welcome the opportunity to answer your questions and share my perspective on these important issues.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark Squillace", with a long horizontal flourish extending to the right.

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