

Testimony of Amy Mall
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Submitted to the
Committee on Natural Resources
Subcommittee on Energy and Mineral Resources
and
Committee on Agriculture
Subcommittee on Conservation, Energy and Forestry

Hearing On
Challenges facing Domestic Oil and Gas Development: Review of Bureau of Land
Management/U.S. Forest Service Ban on Horizontal Drilling on Federal Lands
1324 Longworth House Office Building
Friday, July 8, 2011
10:00 a.m.

Chairmen and Members of the Committees, thank you for inviting me to testify today. I am Amy Mall, a Senior Policy Analyst with the Natural Resources Defense Council, or NRDC. NRDC is a non-profit organization of scientists, lawyers, and environmental specialists founded in 1970 and dedicated to protecting public health and the environment, supported by more than 1.2 million members and on-line activists.

I want to state up front that NRDC is not opposed to natural gas. Natural gas is cleaner burning than other fossil fuels and can help in a transitional role as our nation shifts to a cleaner energy future. But the nation's use of natural gas must be efficient, and natural gas must be produced by methods that best protect clean water, clean air, land, the climate, human health and sensitive ecosystems. More needs to be done in order to approve oil and gas exploration and production. Cases of contaminated water sources, unhealthy air pollution and scarred landscapes are too common in the rush to develop natural gas resources.

Oil and natural gas exploration and production have been going on in the United States for almost 200 years. Some say that this history means the industry is mature and has sufficient safety and environmental standards in place. But today's oil and gas industry is not your grandfather's oil and gas industry. Wells are deeper, drilling is more intensive, hydraulic fracturing introduces more pressure into wells, a lot more resources are used such as water and chemicals, enormous amounts of toxic waste are generated and must be managed, extensive heavy industrial machinery and equipment generates noise and toxic air pollutants, and there are growing concerns about impacts to wildlife, human health, communities and public lands.

As a resident of Washington, D.C., I have visited the George Washington National Forest many times. So have millions of other people, including many from urban areas seeking fresh air and nature; the national forest hosts more than one million people per year, with more than 9 million people living within 75 miles. It is an extremely popular location for hunting, fishing, hiking, camping, and other outdoor pursuits.

The George Washington National Forest is also home to the headwaters of the Potomac and James Rivers, which help supply drinking water for many communities, including Washington, D.C. and Richmond, Virginia. The U.S. Forest Service has correctly taken a precautionary approach in assessing potential impacts from hydraulic fracturing on water and other natural resources in the George Washington National Forest before moving forward to approve new drilling. The Forest Service has also engaged in a very robust public process for the revision of its management plan, with the first public meeting held in 2007 and six scheduled for this summer. All parties have had an opportunity for input into this plan.

While there is growing understanding of the environmental impacts of oil and gas development, much remains unknown. There has been very little scientific investigation into the wide range of potential environmental impacts from this very complex industry. That is one reason why at least five federal agencies – the U.S. Environmental Protection Agency, the Department of the Interior, the Department of Energy, the U.S. Geological Survey (USGS), and the Forest Service have begun conducting some of their own inquiries into various aspects of oil and natural gas operations. In addition, the scientific resources of the Health and Human Services Department and others should also be brought to bear on these questions.

For example, Forest Service research in West Virginia has found that forests suffer permanent changes from drilling operations, including more than 200 trees cut down or harmed for only one wellpad, ineffective erosion controls, and toxic waste disposal methods that killed vegetation. The researchers found that unexpected impacts could not be carefully controlled, planned for, or mitigated.¹

Duke University researchers recently documented what they describe as “systematic evidence for methane contamination of drinking water associated with shale gas extraction” and called for more data and research.²

The USGS found that the knowledge of how horizontal drilling and hydraulic fracturing might affect water resources “has not kept pace” with the expanded use of these technologies. The USGS has stated that “Agencies that manage and protect water resources could benefit from a better understanding of the impacts that drilling and stimulating Marcellus Shale wells might have on water supplies, and a clearer idea of the options for wastewater disposal.”³

Clearly, many uncertainties remain. Despite these uncertainties, federal agencies have for years proposed oil and gas projects that do not fully comply with our environmental laws, and continue to do so. Many courts have overturned agency oil and gas approvals because of a lack of compliance; these decisions have led to improved projects on the ground, with better protection for valued resources. Drilling on federal lands continued to proceed apace. The Bureau of Land Management (BLM) has been approving permits and there are more than 38 million acres of land onshore leased for oil and gas by the BLM.⁴ It has been determined that price, not policy, is the biggest determining factor for drilling.

Not only is there limited scientific knowledge about the impacts of oil and natural gas production, but current regulations, as well as enforcement capabilities, are insufficient. Federal environmental laws, including the Clean Air Act, Safe Drinking Water Act, and Clean Water Act, have gaping loopholes for the oil and gas industry that need to be closed. For example, the Clean Water Act definition of “pollutant” excludes hydraulic fracturing fluids under certain circumstances.⁵ Hydraulic fracturing is also exempt from the Safe Drinking Water Act,⁶ emissions of toxic air pollutants by certain oil and gas operations are exempt from National

¹ Adams, Mary Beth *et al*, “Effects of development of a natural gas well and associated pipeline on the natural and scientific resources of the Fernow Experimental Forest,” Gen. Tech. Rep. NRS-76. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 2011; and Adams, Mary Beth *et al*, “Effects of natural gas development on forest ecosystems,” Gen. Tech. Rep. NRS-P-78. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 2010.

² Osborn, Stephen G. *et al*, “Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing,” *Proceedings of the National Academy of Sciences*, May 17, 2011, vol. 108, no. 20, 8172–8176.

³ Soeder, Daniel J. and William M. Kappel, “Water Resources and Natural Gas Production from the Marcellus Shale,” U.S. Geological Survey, Fact Sheet 2009–3032, May 2009.

⁴ Oil and Gas Lease Utilization – Onshore and Offshore: Report to the President, U.S. Department of the Interior. March, 2011.

⁵ 33USC1362(6)(B)

⁶ Energy Policy Act of 2005, Section 322

Emission Standards for Hazardous Air Pollutants,⁷ and toxic oil and gas waste is exempt from federal hazardous waste provisions.⁸

While the Department of the Interior has announced new procedures to improve review of parcels proposed for leasing, something that NRDC strongly supports, the agency has not put strong rules in place to require new practices to best minimize environmental impacts. State rules are also woefully inadequate. For example, the Secretary of West Virginia's Department of Environmental Protection (DEP) was recently quoted in a news article as stating that "...the DEP regulatory process for Marcellus gas wells is inadequate." He also stated that West Virginia's regulatory structure "isn't prepared" and that the DEP hasn't fully considered drilling's aggregate effects on water, air, roads, public health and safety.⁹

This fact is not a partisan issue. A Republican candidate for Governor in West Virginia was recently quoted as stating that West Virginia needs new regulations to protect communities, state roads and the environment.¹⁰ Virginia has not seen any significant updating of its rules in more than a decade. Inadequate state rules are a concern in other states across the country.

States and federal agencies are also not staffed to fully enforce current laws on the books. It has been reported that Virginia had less than 10 enforcement staff in 2008 to oversee approximately 6,000 wells,¹¹ and that West Virginia has only 12 inspectors for 59,000 wells.¹² And in February of this year, the GAO reported the Department of the Interior (DOI) "continues to experience problems in hiring, training, and retaining sufficient staff to provide oversight and management of oil and gas operations on federal lands and waters."¹³

In conclusion, we need more science and research, stronger rules, and better enforcement to protect the public's health and our natural resources from the risks of oil and natural gas development. We urge the Committees to work with others in Congress and make sufficient funds available federal agencies to ensure they have the resources needed for these essential activities.

⁷ 42USC7412(n)(4)

⁸ 42USC6921(b)(2)

⁹ Beard, David, "DEP: System 'isn't prepared'," *The Dominion Post*, June 3, 2011.

¹⁰ Rivard, Ry, "Republican Bill Maloney urges Marcellus shale regulations," *Charleston Daily Mail*, July 4, 2011.

¹¹ *ProPublica*, "How Big is the Gas Drilling Regulatory Staff in Your State?" Available at: <http://projects.propublica.org/gas-drilling-regulatory-staffing/>

¹² Junkins, Casey, "Drilling Fees Would Increase," *The Intelligencer/Wheeling News Register*, February 1, 2011.

¹³ U.S. Government Accountability Office, "High-Risk Series: An Update," February, 2011. GAO-11-278.