Ohio Department of Natural Resources
Richard Simmers, Chief
Division of Oil and Gas Resources Management
Testimony on
"State Lands vs. Federal Lands Oil and Gas Production:
What State Regulators are doing Right"
April 17, 2013

Chairman Hastings, Ranking Member Markey and members of the House Committee on Natural Resources, thank you for the opportunity to testify today on behalf of the Ohio Department of Natural Resources (ODNR) on a topic that is so critical to public safety, the protection of our natural resources and the future development of energy in a safe and reliable manner.

My name is Rick Simmers and I am the chief of the ODNR Division of Oil and Gas Resources Management (DOGRM). I am a hydrogeologist, with a master's degree in geology from the University of Akron. I have spent my entire professional career (27 years) working within the DOGRM focusing on the protection of human health and safety and the environment. I am a resident of Stark County, which has an extensive history of oil and gas resource development. My family is dependent upon our private water well as our sole source of drinking water. This is also true for most of my field inspectors and enforcement staff who live near Ohio's growing oil and gas industry. We understand the importance of protecting Ohio's natural resources.

If not properly regulated, all energy resource development activities have public safety and environmental risks, and could pose harm. There is no question that the oil and gas exploration industry needs to be regulated. It already is. Ohio's oil and gas regulatory program is among the most comprehensive in the country. I'm here to provide examples of how in Ohio, we are taking extra precautionary measures to permit and regulate the oil and gas industry to ensure the longterm public health and environmental safety of Ohioans. These examples are critical to understanding why it is absolutely imperative that the regulatory authority remains at the state level.

In order to properly regulate the rapidly growing oil and gas industry, a program must have strong regulations and highly technically trained field staff; Ohio has both. Ohio has a long standing successful history in traditional oil and gas drilling, but we are newer to the techniques of horizontal drilling. We have reached out to other states that are experienced in horizontal oil and gas exploration for their guidance in lessons learned, and are able to capitalize on their experiences. What we heard from every level is that in order to properly regulate a sound environmentally safe regulatory program,

you must have strict regulations and the proper number of trained inspectors on the ground each day.

The states realize that even good regulations can be ineffective without the right amount of trained staff to properly enforce the regulations. The DOGRM has hired, and will continue to hire as needed, dedicated and trained inspectors to regulate Ohio's drilling operations. As of April 12, 2013, we have issued 596 permits to drill horizontal wells to the Utica-Point Pleasant, 293 wells have been drilled, and 81 wells have been completed and are producing. We work to provide our regulators the tools needed to effectively enforce Ohio's oil and gas regulations. Currently ODNR has more than 50 field staff and can add more employees as the need increases. Our field staff oversees critical oilfield activities and can quickly respond to an emergency or illegal activity.

Just this January is a perfect example of how critical it is to have field staff on the ground and accessible day and night with the ability to respond quickly if needed. ODNR received an anonymous tip that oilfield waste was being illegally discharged into a storm sewer in the Youngstown area. The day it was brought to my attention, I had two inspectors on scene within hours who were able to witness the illegal action and shut it down. My inspectors documented the illegal activity with photos, water samples and other evidence, and in the coming days we worked diligently with Ohio EPA to initiate efforts to mitigate the spread of waste in the nearby waterway. ODNR worked with the Ohio Attorney General and U.S. Attorney to bring criminal charges against the accused and completely shut down his injection well operations within one week. At a news conference announcing the charges, the US Attorney praised the quick action of DOGRM inspectors in responding to this tip and catching this blatant violation as it occurred. The assistance of the US Attorney's office proves the effective partnership between the states and the federal government in enforcing comprehensive regulations, but also illustrates this type of response is only possible at a state level.

If it was not for the on the ground efforts of ODNR's oil and gas inspectors, this criminal and environmentally threatening illegal activity of dumping oilfield waste directly into the Mahoning River could still be occurring. Only with the proper resources and experienced staff could this type of action have been executed so swiftly. No single local authority or federal program has the resources to carry out an investigation of this kind. This was a statewide effort, which reiterates why the regulatory authority of the oil and gas industry is best fit at the state level.

Not only does Ohio have the experienced inspection staff it needs to execute a regulatory program of this magnitude, Ohio's regulations are among the most comprehensive in the country. Ohio continuously strives to evaluate and improve our regulations in response to new information, technologies and developments in the oil and gas industry. As in other states experiencing shale gas development, our regulatory

framework is adapting to new technologies or advancements in existing technologies as they are deployed. With shale gas development, the challenges are primarily issues of scale, such as larger drilling pads; larger storm water management challenges; multi-staged hydraulic fracturing operations with larger fluid volumes; larger volume freshwater withdrawal and storage needs; management of produced water generated during the flowback and swabbing processes; and expanded truck traffic and roadway maintenance.

When designing an effective and protective regulatory program, states must quickly adapt or modify standards quickly and responsively to best protect human health and safety and the environment. In Ohio, the DOGRM has the flexibility to change state law and to modify rules and regulations to address a variety of local factors including: unique aspects of geology and hydrology, the conservation of other natural resources, drilling practices, petroleum reservoir characteristics, the history of incidents and failures, and the definitions of protected groundwater. All of these factors can vary from state to state and county to county, which makes this a task the federal government simply cannot effectively duplicate.

In advance of anticipated shale gas development, the DOGRM worked with the Ohio General Assembly to pass two major amendments to oil and gas law during the past three years. Senate Bill 165, signed into law in 2010, was a comprehensive update of Ohio oil and gas law. SB 315, which took effect last summer, specifically targeted concerns in the law specific to horizontal shale development. These statutes authorize the chief of the DOGRM to enact regulations that address a wide range of issues, including: hydraulic fracturing, water withdrawal and usage, stray gas, underground injection wells, well integrity and construction, chemical disclosure and Ohio's enforcement authority. SB 315 reinforced Governor John Kasich's overall energy policy; which was to make Ohio a leader among states in writing effective, comprehensive regulations that empower regulators while allowing the appropriate use of our state's abundant resources.

As part of my testimony today, I would also like to illustrate the agility and efficiency of state level regulations using our Underground Injection Control (UIC) and Permitting Program. Ohio received primacy from the U.S. EPA in 1983. Ohio's DOGRM recognizes that a strong UIC Program is essential to ensure the safe management of waters produced by the development of the Utica and Point Pleasant formations. However, federal funding for the program has dropped every year and currently only provides approximately $170,000 annually, which is insufficient funding to properly maintain a regulatory program that is crucial to protecting the water millions of Ohioans drink every day.

During the past three years, inspection and enforcement needs have increased due to the growing volume of out-of-state drilling brine that is entering Ohio due to interstate commerce laws. In 2010, Ohio DOGRM worked proactively with the Ohio oil and gas industry and the Ohio General Assembly to enact new fees including a brine disposal fee. As a result of this state-level ingenuity, Ohio was able to expand the UIC Program. We now have two geologists, a seismologist, four full-time injection well inspectors, and clerical assistance. These four lead inspectors also trained 36 other county inspectors to inspect local injection wells within their areas of jurisdiction.

Ohio DOGRM inspectors conduct unannounced inspections at each of our 181 operating Class II injection wells every 11 to 12 weeks. This is one of the most frequent inspection schedules in the nation. Each inspection includes an evaluation of well mechanical integrity and the condition of surface facilities and pipelines. If responsible for regulating, the federal government would be managed from Chicago, and likely employ a single contracted inspector who would typically conduct a single annual inspection for each well. The U.S. EPA is an important partner in our UIC regulation program, providing oversight and frequent audits to reinforce our comprehensive regulations. Regulators from Ohio and other states are in constant communication with their federal counterparts, and both understand the most effective way to ensure public health and safety, is through local regulation.

Ohio works in conjunction with our federal partners on many levels, such as: ODNR's coal regulatory program, endangered species program, and Ohio EPA's administration of the Clean Water and Clean Air Act. Ohio has received primacy from the U.S. EPA in 1983, which allows us to regulate the federal Class II injection well program because our state regulations meet and in many cases exceed federal regulations. Since then, Ohio DOGRM can proudly say there has not been a single incident of groundwater contamination resulting from a Class II injection well. Ohio is committed to our state's UIC Program, which is evident based on our exemplary track record of environmental protection and history of positive audits by the U.S. EPA. Ohio and other oil and gas states invest more resources in our state-managed UIC Program than ones that would be managed by the U.S. EPA out of Chicago.

During 2012, the Ohio DOGRM concluded that a series of seismic events, including a magnitude 4.0 event on December 31, 2011, in the Youngstown area may have been induced by injection of brine at a Class II injection well. If that is true, this would be Ohio's first incident of induced seismicity caused by injection at a Class II well since Ohio received primacy from the U.S. EPA 30 years ago. In addition to immediately issuing a moratorium to suspend injection operations in the surrounding area, the DOGRM researched and proposed enhancements to our regulatory system to prevent further events of this kind. In 2012, Governor John Kasich signed an executive order to immediately adopt new public health and safety rules for Ohio's UIC Program. As a

result, Ohio is one of the first states in the country to: prohibit the drilling of injection wells into specific geologic units; require operators to run geological tests before drilling any new injection wells; and to install pressure monitoring technologies to ensure public safety. These new standards allow ODNR to better monitor new wells, and if the pressure of a well exceeds our guidelines, the system automatically shuts down. States are best suited to regulate this industry because, if an unexpected incident occurs, we have the appropriate staff on the ground to respond in a timely manner.

ODNR's DOGRM also has a very efficient and effective program for evaluating drilling permit applications. When an oil and gas operator applies for a permit to drill a new horizontal well, assuming application completeness, a permit is issued within 21 days in non-urban areas or within 30 days in urban areas. In comparison, if an operator petitions the federal government to lease and obtain permits to drill on federally managed land, the process typically takes years before a permit is issued.

But, efficient review and approval of a permit in Ohio does not come at the expense of the environment or Ohio's citizens. The review of every permit application to drill horizontal shale well includes:

1) An onsite review of site conditions to evaluate factors that may influence location-specific design and layout of the drilling pad and the associated access road, including erosion control measures and storm water management practices;
2) Identification and delineation of wetlands to minimize effects by drilling operations;
3) A review of conditions that could affect stability including the presence of underground mine voids, slump-prone soils or reclaimed mine spoil;
4) Identification of domestic or public water supplies with 1,500 feet of a proposed well location, including the collection of groundwater samples for baseline assessment;
5) Identification of the depth of unconsolidated or glacial deposits to guide the minimum depth of conductor casing, the first and largest diameter pipe that will be set while constructing the wellbore;
6) Identification of the deepest underground source of drinking water and its site-specific depth to ensure that cemented surface casing effectively isolates all currently used or treatable groundwater;
7) Cultural features including roads, inhabited or uninhabited structures to ensure compliance with setback standards for public safety; and
8) A review of the well construction plan in light of geologic conditions that are evaluated through layers of information available through our GIS system developed cooperatively with our state's Division of Geological Survey and Division of Soil and Water Resources.

Our permitting process is designed to ensure public safety and environmental protection while streamlining processes to enable efficient development of Ohio's oil and gas resources. Our program is tough but fair, and has incorporated lessons learned from other states around the country, as well as our best management practices, making Ohio one of the most comprehensive and effective regulatory programs in the nation.

Finally, I must point out that states already work together to make sure resources across our country are protected, no matter the border. Ohio's DOGRM actively participates in two state associations, the Groundwater Protection Council and the Interstate Oil and Gas Compact Commission. These associations provide forums for state officials to keep up-to-date of regulatory reforms and developments in other states that may serve as models. Through this constructive exchange of information, states are able to advance regulatory enhancements based upon state-specific priorities. These associations also help to develop tools such as the Frac Focus national chemical registry. This database discloses chemical additives in hydraulic fracturing fluids and promotes consistency by encouraging similar program requirements. Recently, these groups initiated a State Oil and Gas Regulatory Exchange aimed at helping oil and gas states to meet emerging regulatory challenges by sharing regulatory innovations developed and tested by others states.

Ohio's regulatory program is effective, our people on the ground are knowledgeable and dedicated, and we are committed to continuous improvement. That's why, based on nearly 30 years of experience with regulators at the federal, state and local level, I unequivocally believe the regulation of an industry like oil and gas exploration should be administered at the most effective, efficient and economical level, which based on our regulations and highly trained staff, would be at the state level. Mr. Chairman and members of the committee, thank you for the opportunity to testify. I would be happy to answer any questions you have at this time.