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U.S. ENVIRONMENTAL PROTECTION AGENCY BEFORE THE

SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY, INTERGOVERNMENTAL RELATIONS AND PROCUREMENT REFORM COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM UNITED STATES HOUSE OF REPRESENTATIVES

May 31, 2012

Good Afternoon, Chairman Lankford, Ranking Member Connolly, and Members of the Subcommittee. I am Nancy Stoner, Acting Assistant Administrator for Water at the U.S. Environmental Protection Agency. Thank you for inviting me to testify before you today. I would like to share with you the ways in which the EPA is helping to ensure that oil and natural gas extraction and production activities can continue to be conducted in ways that contribute effectively to the Nation's energy economic recovery and security while protecting public health and water quality.

The EPA and this Administration recognize that natural gas represents an important energy resource for our country. Increased reliance on gas has the potential to create jobs, promote energy security, lower energy prices, and reduce harmful emissions to air and water. At the same time, the Administration is committed to ensuring that production proceeds in a safe and responsible manner. We firmly believe that we can protect the health of American families and communities while enjoying the benefits of expanded national energy reserves.

While States are the primary regulators of onshore oil and gas activities, the Federal Government has an important role to play by regulating oil and gas activities on public and Indian trust lands, research and development aimed at improving the safety of natural gas development and transportation activities, and setting sensible, cost-effective public health and environmental standards to implement Federal law and augment State safeguards.

Part of EPA's role is oversight responsibilities when states and tribes are implementing federal laws and, in some cases, direct implementation responsibility under federal statutes such as the Safe Drinking Water Act (SDWA), the Clean Water Act (CWA), and the Clean Air Act (CAA). As the senior policy manager for the EPA's national water program, I would like to highlight a few of the EPA's recent actions under SDWA and the CWA intended to assure that natural gas production can occur in ways that protect human health and the environment while sustaining the benefits that natural gas production activities provide.

Hydraulic Fracturing and SDWA's Underground Injection Control Program

The Safe Drinking Water Act provides a role for the EPA in regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage and disposal. The EPA's Underground Injection Control program and state programs with primary enforcement responsibility (primacy) are responsible for overseeing these injection activities. However, the Energy Policy Act of 2005 excludes hydraulic fracturing from regulation under the EPA's Underground Injection Control (UIC) program except when diesel fuels are used in fluids or propping agents.

Diesel fuels in hydraulic fracturing fluids are a concern because they often contain benzene, toluene, ethylbenzene, and xylene compounds (BTEX). BTEX compounds are highly mobile in ground water and are regulated under national primary drinking water regulations because of the risks they pose to human health. People who consume drinking water containing any of these compounds in excess of the EPA's drinking water standard over many years may experience health complications such as increased cancer risk, anemia, and problems with the nervous system, kidneys, or liver.

In the last several years, publicly available data and Congressional reports have made the Agency aware that diesel fuels are being used as components of fracturing fluids.

In light of this information, and in light of the increasing pace of natural gas production nationwide, the Agency heard concerns from industry and the public that it has not been clear regarding the applicability of the permitting requirement for hydraulic fracturing activities using diesel fuels, or how such permits should be written. In response to this uncertainty and the significant increase in natural gas production activities in the United States, the EPA determined that guidance was appropriate to clarify requirements under the SDWA, as modified by the Energy Policy Act of 2005.

On May 4, 2012, the EPA released draft UIC Program guidance to provide greater regulatory clarity for permitting the underground injection of diesel fuels associated with hydraulic fracturing. While we recognize that any definitive determinations regarding the permit obligations for particular operations under existing law will be made by the permitting authority

on a case-by-case basis the draft guidance is intended to assist the regulated community, permitting authorities, and other interested members of the public, by providing EPA's current view on how the existing requirements of the SDWA and its implementing regulations apply to UIC permitting of oil and gas hydraulic fracturing operations using diesel fuels as a fracturing fluid or as a component of a fracturing fluid. Specifically, the draft guidance is intended to provide the public with a clear statement of EPA's present understanding of existing statutory and regulatory requirements for diesel fuels used in hydraulic fracturing wells, as well as technical recommendations for permitting those wells, tailoring UIC Class II permitting requirements to the unique characteristics of the hydraulic fracturing process. The goal of the recommendations in the guidance is to prevent migration of diesel fuels into USDWs and to protect human health. The EPA developed this draft guidance with input from a variety of groups, including industry, states and tribes, other federal departments and agencies, environmental organizations, and attendees of a public webinar. The EPA decided to seek public input on the draft guidance because of its importance to our Federal, state and tribal partners, to the regulated community, and to the public, and will fully consider those comments when developing the final guidance.

The guidance is directly intended for use by EPA permit writers under the UIC program. As described in the document, it is applicable where the EPA directly implements the UIC Class II program. The EPA is the permitting authority for UIC Class II programs in Arizona, Florida, Hawaii, Iowa, Kentucky, Michigan, Minnesota, New York, Pennsylvania, Tennessee, Virginia, Washington, DC, American Samoa, the Virgin Islands, and almost all parts of Indian country. The remaining states have primacy, which means they have received approval from the EPA to

implement their own UIC programs. Primacy programs are encouraged to review and consider the information and recommendations in the guidance.

As we developed the draft guidance, a key issue raised by stakeholders was how the Agency should describe "diesel fuels" for purposes of its guidance, because hydraulic fracturing wells that do not use diesel fuel are not subject to SDWA permitting requirements. The draft guidance provides a description of diesel fuels using six chemical abstract services registry numbers that contain the term "diesel fuel" in their primary descriptor or common synonyms, which we believe is a straightforward approach for companies to use when determining whether or not a particular hydraulic fracturing operation uses diesel fuels and is thus subject to SDWA permitting requirements. EPA welcomes public comments on this important issue to ensure that our guidance is as clear as possible and EPA will fully consider those comments in determining whether or not any changes to the draft guidance are warranted.

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I would like to emphasize that, as guidance, the draft guidance does not impose any new requirements nor does it bind the regulated community, State permitting authorities, or EPA itself. Instead, it simply reflects the EPA's present understanding of existing requirements of SDWA and its implementing regulations, as they are applied to hydraulic fracturing operations using diesel fuels. The EPA's goal is to provide greater regulatory clarity, which will help EPA permit writers and well owners and operators more consistently comply with existing SDWA requirements while strengthening environmental protections under existing law.

Our draft guidance is currently open for public comment until July 9. We encourage comment on the draft guidance so that when final, the guidance provides maximum clarity and reflects the

best ideas for how to tailor the UIC Class II requirements to hydraulic fracturing activities using

diesel fuels. We hope the guidance is useful to regulated industry, states, tribes, and the public

regarding the existing legal requirements that apply to hydraulic fracturing activities using diesel

fuels.

Additional EPA Activities for Protection of Water Quality

Additional activities being conducted by the EPA to ensure protection of surface water resources

include actions by the Office of Water under the Clean Water Act to provide regulatory clarity

and protection against known risks, and research being conducted by the EPA's Office of

Research and Development to better understand the potential impacts of hydraulic fracturing on

water resources:

Clean Water Act: Effluent Guidelines

In October 2011, as part of the CWA section 304(m) planning process, the Agency announced a

schedule to develop standards for wastewater discharges produced by natural gas extraction from

underground coalbed and shale formations. To ensure that these wastewaters receive proper

treatment and can be properly handled by treatment plants, we will gather data, consult with

industry and other stakeholders, and solicit public comment on a proposed rule for coalbed

methane in 2013 and a proposed rule for shale gas in 2014.

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In March 2011, the EPA issued a Frequently Asked Questions (FAQ) document that provides state and federal permitting authorities in the Marcellus Shale region with guidance on permitting treatment and disposal of wastewater from shale gas extraction. The FAQs discuss the wastewater issues and pollutants associated with shale gas extraction and how they can be addressed under existing regulations. The EPA is currently developing additional, more detailed information on water quality permitting and pretreatment to supplement these FAQs. This information will provide assistance on how to permit Publicly Owned Treatment Works (POTWs) and Centralized Waste Treatment facilities by clarifying existing CWA authorities and obligations. Like the draft hydraulic fracturing guidance described above, we hope this information will help provide additional clarity to industry and the public regarding the existing legal requirements that apply to such operations.

Office of Research and Development: Study of Hydraulic Fracturing and Water Resources

The EPA is conducting a congressionally-directed study to better understand the potential impacts of hydraulic fracturing on drinking water and ground water. The scope of the research includes the full lifespan of water in hydraulic fracturing, from acquisition of the water, through the mixing of chemicals and actual fracturing, to the post-fracturing stage, including the management of flowback and produced water and its ultimate treatment and disposal.

Conclusion

The EPA's activities relating to hydraulic fracturing are intended to ensure that public health and water quality remain protected as natural gas helps to promote our Nation's economic recovery and security. Our work, along with that of our Federal and state partners, will help the nation promote the safe and responsible development of domestic energy resources while managing environmental impacts and addressing public concerns, thus ensuring that natural gas production can and will proceed in a safe and responsible manner. Thank you for the opportunity to testify before you today, and I am happy to take any questions you may have at this time.