AL-12-000-1273

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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
WASHINGTON, DC 20510–6175

January 20, 2011

The Honorable Lisa Jackson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Jackson:

On December 8, 2011, EPA released the draft report on Region 8's two year investigation of groundwater near Pavillion, Wyoming. This draft report contains preliminary findings that have given rise to tremendous controversy as this is the first time a federal agency has inferred that hydraulic fracturing is the likely cause of groundwater contamination.

EPA has indicated that it is prepared to move forward with a peer review of the draft report, despite the many concerns raised regarding the inadequacy of the quantity and quality of data and the delay in developing additional information. We ask that the agency fully address the problems that have been identified by the State of Wyoming and others, including data gaps and the timing and process of all evaluations, reviews, and conclusions prior to initiating the peer review process. Because of the significance of this report, and the potential impacts on regulatory decision making, other EPA assessments, and a large sector of the economy, it is critical that adequate and appropriate samples and data are collected and carefully reviewed before any final reviews or actions are taken. Furthermore, it is imperative that any analysis be based on the complete and best available science.

As EPA proceeds, we ask that this investigation be considered a highly influential scientific assessment and that any related, generated report is subject to the most rigorous, independent, and thorough external peer review process.

OMB's "Final Information Quality Bulletin for Peer Review" states that a scientific assessment is considered "highly influential" if the agency or the OIRA Administrator determines that the dissemination could have a potential impact of more than $500 million in any one year on either the public or private sector or that the dissemination is novel, controversial, or precedent-setting, or has significant interagency interest.[1] The information generated in this investigation satisfies all these requirements.

[1] http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf

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First, the potential economic impact of this investigation is certainly more than the $500 million threshold. Natural gas development is estimated to contribute hundreds of billions of dollars to the United States economy, and hydraulic fracturing is estimated to be used in almost 90% of gas wells drilled today.[2] Any assessment linking hydraulic fracturing with drinking water contamination will have a clear economic impact on the natural gas development industry, natural gas users, and other economic sectors. Additionally, given the extensive media involvement initiated by EPA, it appears that the methods developed in the report could form the basis for national testing and monitoring and result in compliance requirements for virtually every well.

Also, this information is not only novel, but also controversial, as well as precedent setting. The draft report's supposition that the groundwater contamination contains compounds associated with gas production, including hydraulic fracturing, is the first time that a federal agency has posed a connection between hydraulic fracturing and groundwater contamination. In addition, the draft report has generated a tremendous amount of controversy among those in favor of and against natural gas development, and its testing methodologies and the quantity of data collected have been called into question by Wyoming state officials, industry experts, and others.[3] Moreover, as a part of its hydraulic fracturing study, EPA is currently conducting separate investigations of five retroactive sites where complaints of groundwater contamination are believed to be caused by hydraulic fracturing, which we view as precedent setting.

Finally, this investigation will have significant interagency interest. The Department of Energy[4] and the Department of Interior[5] are both engaged in the study and potential regulation of hydraulic fracturing. In addition, agencies like the Centers for Disease Control and Prevention[6] and the U.S. Securities and Exchange Commission[7] have expressed interest in further study of hydraulic fracturing or disclosure.

Any peer review for this investigation, therefore, should be external, independent, rigorous, and thorough. The OMB peer review bulletin applies stringent peer review requirements to highly influential scientific assessments. The Agency "must ensure that the peer review process is transparent by making available to the public the written charge to the peer reviewers, the peer reviewers' names, the peer reviewers' report(s), and the agency's response to the peer reviewers' report(s)...This Bulletin requires agencies to adopt or adapt the committee selection policies employed by the National Academy of Sciences (NAS)."[8] EPA's own peer review policy states that for highly influential scientific assessments, external peer review is the expected procedure, and for influential scientific assessments, external peer review is the approach of choice.[9]

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[2] http://www.prnewswire.com/news-releases/anga-statement-on-the-ihs-shale-gas-economic-study-135202123.html
[3] http://trib.com/news/state-and-regional/epa-report-pavillion-water-samples-improperly-tested/article_99512cf4-6d23-5c9b-9038-c676eedd33c2.html
[4] http://www.shalegas.energy.gov/
[5] http://www.doi.gov/news/doinews/Forum-on-Natural-Gas-Hydraulic-Fracturing-on-Public-Lands.cfm
[6] http://fuelfix.com/blog/2012/01/05/cdc-scientist-tests-needed-on-gas-drilling-impact/
[7] http://online.wsj.com/article/SB10001424053111904009304576528484179638702.html
[8] http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf
[9] http://www.epa.gov/peerreview/pdfs/peer_review_policy_and_memo.pdf

Thank you for your attention to this matter. We look forward to EPA continuing this investigation in close coordination with the State of Wyoming, while using the highest scientific standards, following the OMB memoranda on information quality and peer review, and ensuring that complete data is subject to an external, rigorous, and independent peer review process.

Sincerely,

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 13 2012

OFFICE OF
RESEARCH AND DEVELOPMENT

The Honorable Marco Rubio
United States Senate
Washington, DC 20510

Dear Senator Rubio:

Thank you for your letter of January 20, 2012, to Lisa P. Jackson, Administrator of the U.S. Environmental Protection Agency, concerning the Agency's investigation of ground water contamination in Pavillion, Wyoming. Specifically, you raised concerns about the data used as a basis for the conclusions in the draft report, and asked that the investigation be considered a Highly Influential Scientific Assessment (HISA). Your letter was referred to me because of the Office of Research and Development's role in conducting the investigation with EPA Region 8 and in arranging the peer review.

Data quantity and quality issues. You expressed concerns about the quantity and quality of data, and suggested that additional data should be collected and reviewed before any final reviews or actions are taken. The EPA stands behind the quality and reliability of our data. Extensive data have been collected and analyzed since the investigation began in 2009. Much of this information was shared with the State of Wyoming, the Tribes, Encana, and other interested parties before the draft report was released, and all of the laboratory and field data are publicly available on the EPA website.[1]

The Agency agrees that it would be beneficial to conduct additional sampling of the wells along with other studies to fill data gaps. On March 8, 2012, Wyoming Governor Mead, the Northern Arapaho and Eastern Shoshone Tribes, and EPA Administrator Jackson issued a joint statement indicating that the Agency will partner with the State and the U.S. Geological Survey (USGS), in collaboration with the Tribes, to conduct another round of sampling of the EPA's deep monitoring wells in the Pavillion area. The EPA also plans to resample the domestic wells in closest proximity to the monitoring wells. To ensure that the results of the additional testing are available for the peer review process, the EPA is delaying the meeting of the peer review panel until the new data from USGS and the EPA are publicly available. In addition, the EPA is extending the public comment period on the draft report through October 2012.

Peer review and classification of the draft report. Regarding the peer review and the classification of this investigation, the EPA has been clear from the outset that the peer review of the draft report will be conducted in a scientifically rigorous manner by an independent group of experts. The EPA has classified the draft report as "Influential Scientific Information" (ISI). According to the Office of Management and Budget (OMB), ISI is defined as "scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private

[1] http://www.epa.gov/region8/superfund/wy/pavillion/

sector decisions." The EPA Peer Review Handbook describes ISI as having characteristics such as establishing a significant precedent, addressing a significant controversial issue, focusing on significant emerging issues, or having significant interagency implications. The draft EPA report clearly meets these and other ISI criteria. The EPA has determined that because the Pavillion investigation is a single study with the characteristics of ISI, rather than a broader assessment that involves an evaluation of a body of scientific or technical knowledge (as defined by OMB), it is best characterized as ISI.

However, in recognition of the high profile of this investigation, the Agency is treating the draft report as if it is a HISA for the purpose of peer review. The Agency will convene a balanced and independent panel of reviewers with the appropriate disciplinary expertise. Candidate reviewers will be carefully screened to avoid the selection of individuals with a real or perceived conflict of interest. In the spirit of transparency, the public has been invited to nominate reviewers and submit written comments on the draft report. The public will also be able to attend a public meeting where oral presentations on scientific issues can be made to the peer reviewers. By providing an opportunity for the public to offer comments on the draft charge to the reviewers, the EPA has gone one step beyond the HISA requirement of simply making the final peer review charge publicly available.

In closing, I would like to emphasize that the EPA has used a scientifically sound investigative approach in responding to the concerns expressed by homeowners in the Pavillion area about possible contamination of their wells. We have taken great care in analyzing the data and reaching the conclusions presented in the draft report. Transparency has been a hallmark of our efforts since the earliest stages of the investigation, and we will continue to operate in a transparent manner through the peer review and in any additional work that may be undertaken in Pavillion. Finally, we fully recognize the value of a rigorous and independent peer review, and we are implementing such a process. The EPA is committed to upholding the public trust by ensuring that the final report meets the expected standards of the scientific and technical community.

Again, thank you for your letter. If you have any further questions, please contact me or your staff may contact Pamela Janifer in the EPA's Office of Congressional and Intergovernmental Relations at 202-564-6969.

Sincerely,

Lek Kadeli
Acting Assistant Administrator

AL-11-000-2630

United States Senate

WASHINGTON, DC 20510

February 15, 2011

The Honorable Lisa Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator Jackson:

As the 112th United States Congress commences, we write to share with you our continuing concern with the potential regulation of farm and rural dusts through your review of the National Ambient Air Quality Standards (NAAQS) for coarse particulate matter (PM10), or "dust." Proposals to lower the standard may not be significantly burdensome in urban areas, but will likely have significant effects on businesses and families in rural areas, many of which have a tough time meeting current standards.

Naturally occurring dust is a fact of life in rural America, and the creation of dust is unavoidable for the agriculture industry. Indeed, with the need to further increase food production to meet world food demands, regulations that will stifle the U.S. agriculture industry could result in the loss of productivity, an increase in food prices, and further stress our nation's rural economy.

Tilling soil, even through reduced tillage practices, often creates dust as farmers work to seed our nation's roughly 400 million acres of cropland. Likewise, harvesting crops with various farm equipment and preparing them for storage also creates dust.

Due to financial and other considerations, many roads in rural America are not paved, and dust is created when they are traversed by cars, trucks, tractors, and other vehicles. To potentially require local and county governments to pave or treat these roads to prevent dust creation could be tremendously burdensome for already cash-strapped budgets.

While we strongly support efforts to safeguard the wellbeing of Americans, most Americans would agree that common sense dictates that the federal government should not regulate dust creation in farm fields and on rural roads. Additionally, the scientific and technical evidence seems to agree. Given the ubiquitous nature of dust in agricultural settings and many rural environments, and the near impossible task of mitigating dust in most settings, we are hopeful that the EPA will give special consideration to the realities of farm and rural environments, including retaining the current standard.

Thank you for your consideration of this important matter.

Sincerely,

Dick Lugar

Jim Bunning

Kent Conrad

Mike Johanns

Michael B. Enzi

Jeff Sessions

Jim Inhofe

Thomas Carper

John Ensign

John Boozman

Jerry Moran

John Thune

Dan Coats

Mark Pryor

Rob Portman

John Hoeven

Mark Royce

Mike Crapo

Jon Tester

Jim Johnson

Amy Klobuchar

Ron Johnson

Alan Kim

Roger Winter

Ted Benjamin Gelman

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 14 2011

OFFICE OF
AIR AND RADIATION

The Honorable Marco Rubio
United States Senate
Washington, D.C. 20510

Dear Senator Rubio:

Thank you for your letter of February 15, 2011, co-signed by 32 of your colleagues, expressing your concerns over the ongoing review of the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM). The Administrator asked that I respond to your letter.

I appreciate the importance of NAAQS decisions to state and local governments, in particular to areas with agricultural communities, and I respect your perspectives and opinions. I also recognize the work that states have undertaken to improve air quality across the country. The NAAQS are set to protect public health from outdoor air pollution, and are not focused on any specific category of sources or any particular activity (including activities related to agriculture or rural roads). The NAAQS are based on consideration of the scientific evidence and technical information regarding health and welfare effects of the pollutants for which they are set.

No final decisions have been made on revising the PM NAAQS. In fact, we have not yet released a formal proposal. Currently, we continue to develop options, including the option of retaining the current 24-hour coarse PM standard. To facilitate a better understanding of the potential impacts of PM NAAQS standards on agricultural and rural communities, EPA recently held six roundtable discussions around the country. This is all part of the open and transparent rulemaking process that provides Americans with many opportunities to offer their comments and thoughts. Your comments will be fully considered as we proceed with our deliberations.

Under the Clean Air Act, decisions regarding the NAAQS must be based solely on an evaluation of the scientific evidence as it pertains to health and environmental effects. Thus, the Agency is prohibited from considering costs in setting the NAAQS. But cost can be - and is - considered in developing the control strategies to meet the standards (i.e., during the implementation phase). Furthermore, I want to assure you that EPA does appreciate the importance of the decisions on the PM NAAQS to agricultural communities. We remain committed to common sense approaches to improving air quality across the country without placing undue burden on agricultural and rural communities.

Again, the Administrator and I thank you for your letter. If you have further questions, please contact me or your staff may contact Josh Lewis in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-2095.

Sincerely,

Gina McCarthy
Assistant Administrator