



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

SEP 9 2010

THE ADMINISTRATOR

Deborah L. Swackhamer, Ph.D.  
Chairwoman  
Science Advisory Board  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Dear Dr. Swackhamer:

Thank you for providing me with the Science Advisory Board's advisory report on the U.S. Environmental Protection Agency's hydraulic-fracturing research scoping document. I appreciate the time and effort that both the augmented SAB Environmental Engineering Committee and the chartered SAB invested in reviewing the document and preparing the board's report.

We value your recommendations and are considering them as we develop our draft hydraulic fracturing study plan. Particularly helpful are your specific comments on the scope of the research study, proposed research categories and topic areas, and the design of a stakeholder process.

Regarding the scope of the study, we recognize the value of focusing our short-term research on the sources and pathways of potential impacts of hydraulic fracturing on water resources, especially drinking water sources. As recommended, we are conducting a thorough review of data and information from the peer-reviewed literature as well as from a variety of other sources, such as the public, industry, government agencies. We were pleased to see the SAB's support for our proposed use of case studies and a lifecycle framework to guide our study. We agree that regional variability in hydraulic fracturing sites needs to be taken into consideration when planning our case studies and that the number of studies needs to be sufficient to permit an evaluation of this variability. However, we may have to limit the number of case studies that we perform because of timing and resource constraints. Now and in the future, we will seek opportunities to work with appropriate stakeholders so that we can increase the number of case studies conducted.

We appreciate your recommendations for the research categories and topic areas. We agree that more information is needed on occurrence, volume, composition, treatability and/or disposal of hydraulic-fracturing source fluids, flowback water and produced water as well as sources of constituents throughout the different phases of the hydraulic-fracturing lifecycle. The

study will be designed to take these research needs into account. Efforts are under way to gather available information from federal and state government agencies, and a process is being developed to collect, compile and report information from stakeholders. These steps will enable us to identify data and information gaps so we can concentrate our study on the most important research needs.

We have developed an extensive approach to ensure stakeholder involvement in the process of designing and implementing our hydraulic fracturing study plan. This process includes sector-specific meetings, public meetings and technical workshops. Sector-specific meetings were held during May and June 2010, with state and federal partners, industry and environmental groups. Public meetings also were held in EPA Regions 2, 3, 6 and 8 during July and August 2010, and meetings with Indian nations were held in August 2010. Technical workshops with stakeholders will be held during autumn this year. These meetings allow us to communicate clearly our objectives for the study, obtain feedback and information from a variety of groups representing a broad range of interests and perspectives and inform stakeholders about opportunities to engage with the research.

As we develop our draft study plan, we will consider your recommendations along with the comments we receive from stakeholders. The EPA has asked the SAB to form a new advisory panel to review this plan, and we look forward to sharing it with the SAB in the coming months.

Once again, thank you very much for assisting us with this important effort.

Sincerely,



Lisa P. Jackson