



Jack N. Gerard
President and Chief Executive Officer
1220 L Street, NW
Washington, DC 20005-4070
USA
Telephone (202) 682-8500
Fax (202) 682-8110
Email gerardj@api.org
www.api.org

August 12, 2016

Via E-Mail

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

Dear Administrator McCarthy:

The American Petroleum Institute (API) is a national trade association representing more than 650 member companies involved in all aspects of the oil and natural gas industry in the United States. Our members have extensive experience with the drilling and completion techniques used in shale development and in producing America's oil and natural gas resources in a safe and environmentally responsible manner. I am contacting you to express serious concerns with the U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) August 11, 2016 Review of EPA's Draft Report, *Assessment of Potential Impacts of Hydraulic Fracturing for oil and Gas on Drinking Water Resources* (May, 2015 External Review Draft, EPA/600/R-15/047).

From the outset, API has been an active stakeholder engaged with the EPA in its response to the FY2010 House Appropriations Committee Report that urged the Agency to conduct a study to review the potential impacts of hydraulic fracturing on drinking water resources. We have provided input at every possible opportunity, which includes submitting extensive technical comments to the EPA Docket on August 28, 2015 on the June 4, 2015 Draft Assessment Report, participating in all of the public meetings and public teleconference of the SAB's Hydraulic Fracturing Research Advisory Panel (Advisory Panel) as well as the Chartered SAB sessions held on June 8 and June 14, 2016.

As stated in our August 28, 2015 comment package, industry has an unfaltering commitment to provide a sound technical perspective vital to ensuring the scientific merit of EPA's five-year research effort. A combination of API's member company subject matter experts, academics, and consultants reviewed and critiqued the Draft Assessment Report, the supporting published scientific reports, the retrospective case studies, the laboratory studies, and the scenario evaluations in great detail. Our 140-page technical submission included hundreds of factual corrections and suggested improvements offered to the SAB during its peer review process, in order to make the Final Assessment Report more accurate, complete, and readable to a broader audience.

The Honorable Gina McCarthy
August 12, 2016
Page Two

The SAB Final Review Report submitted to you yesterday, calls into question the key top line conclusion reached by your own scientific staff in its June 2015 Draft Assessment Report -- "*We did not find evidence that these mechanisms have led to widespread, systemic impacts on drinking water resources in the United States (ES-6).*" Based on all the technical work as well as "the facts on the ground," the SAB has no basis to question the Draft Assessment Report's main conclusion – it is sound.

While the SAB calls for EPA to do more quantitative analysis to support the main conclusion, the Board offered no contrary evidence to refute the statement. API argues that extensive peer reviewed work to substantiate the statement has already been undertaken and shared with the SAB. In Ramboll ENVIRON's *Hydraulic Fracturing and Water Resources: A Literature and Regulatory Review with Discussion of Key Issues* over 35 unique publications of the published literature on the relationship between hydraulic fracturing and water resource are reviewed from 2008 to 2014. This number does not include reports released in 2015 such as the California Council on Science and Technology (CCST) and Lawrence Berkeley National Laboratory volumes of work; the EPA's Office of Inspector General Report titled "Enhanced EPA Oversight and Action can Further Protect Water Resources from the Potential Impacts of Hydraulic Fracturing" (Report No. 15-P-0204); the study published in the October 2015 Proceedings of the National Academy of Sciences titled, "Elevated Levels of Diesel Range Organic Compounds in Groundwater near Marcellus Gas Operations are Derived from Surface Activities;" and numerous other studies from the US Geological Survey (USGS) researchers, the Susquehanna River Basin Commission, and others finding no impacts on water quality based on data from the Marcellus Shale (including studies from northeastern and southwestern Pennsylvania, West Virginia, and eastern Ohio involving samples from thousands of drinking water wells), the Bakken Shale, and the Denver-Julesburg Basin. Thus, ample work has already been undertaken to support the conclusion that there is no link between hydraulic fracturing and drinking water impacts.

Further, the SAB Review suggests that EPA did not clearly describe the system(s) of interest, the scale of impacts, nor the definitions of widespread and systemic. "Widespread" and "systemic" are not vague terms and frankly, the evidence is overwhelming.¹ There exists no drinking water contamination in the Marcellus, the Utica, the Barnett, the Permian, the Eagle Ford, the Woodford, the Fayetteville, the Haynesville, the Bakken, the Denver-Julesburg, the Piceance, the Raton, or any other shale formation where oil and gas resources are being developed through hydraulic fracturing. There are no examples of systemic operational issues that result in contamination in any of these formations, let alone many examples of widespread contamination in any formation. In fact, according to the U.S. Department of Energy, "More than 4 million oil and gas related wells have been drilled in the United States since development of these energy resources began nearly 150 years ago. At least 2 million of these have been hydraulically fracture-treated, and up to 95 percent of new wells drilled today are hydraulically fractured, accounting for more than 43 percent of total U.S. oil production and 67 percent of natural gas production." (emphasis added.) The industry drills and hydraulically fractures thousands of oil and

¹ As defined by Webster's New Unabridged Dictionary (1996) – 1) "widespread" – *adjective: spread over or open, or occupying a wide space; distributed over a wide region* and 2) "systemic" – *adjective: of or pertaining to a system.*

The Honorable Gina McCarthy
August 12, 2016
Page Three

natural gas wells each year and there is simply no evidence of widespread or systemic contamination. There are reasons no such widespread or systemic contamination exists: namely the widespread and systemic application of proven engineering technologies and industry risk management practices, coupled with a complex web of federal and state regulatory regimes. In fact, in 1999, the Department of Energy identified hydraulic fracturing as an advanced technology that provides environmental benefits in a report entitled *Environmental Benefits of Advanced Oil and Gas Exploration and Production Technology*.

No doubt, API believes it is the powerful combination of continually-improving industry practices, advancing state programs, and federal environmental statutes – all working together to provide an effective structure that allows for the essential development of the nation's oil and natural gas resources while protecting the environment. Your own statement on March 15, 2016, before the House Energy and Commerce Committee, when discussing the EPA study and Draft Report, aligns with this view:

It was clearly a necessary study for us to do. Very often when we put out a science study, people will pick and choose sentences in it. We did say we did not have evidence of widespread systemic impacts on drinking water. We did clearly identify that there are potential mechanisms in the water system where impacts could occur, but also opportunities for offsetting those by taking the right preventative measures (right way to construct a well).and relying on states like Colorado [to provide data to help fill the gaps].

EPA must recognize there is no reason to back away from its original June 2015 top line finding of no widespread or systemic impacts on drinking water from hydraulic fracturing. As stated at the beginning of this research effort in the spring of 2010, API continues to stand ready to assist EPA in whatever way we can to bring this study to a successful conclusion based on sound science.

Regards,

A handwritten signature in black ink, appearing to read "Jack Gerard", with a long horizontal flourish extending to the right.

Jack N. Gerard
President & CEO