

## An Integrated Approach of Openness and Scientific Rigor

The Environmental Protection Agency is committed to openness, transparency, and a sound scientific process. As part of this commitment, EPA has taken a number of additional steps to make certain that an integrated approach of openness and scientific rigor is the defining hallmark of the Agency's hydraulic fracturing research. This includes:

- Public meetings and webinars for all stakeholders;
- Technical roundtables and workshops to make certain the most current science and practices are being considered; and
- Forming a Science Advisory Board (SAB) Panel, reflecting a broad range of expertise and experience, which will peer review the draft final report for the agency's study on the potential impacts of hydraulic fracturing on drinking water resources.

In March 2010, Congress requested that EPA study the potential impacts of hydraulic fracturing on water resources. From the beginning, the general public and interested stakeholders have had opportunities to participate in the study process through public meetings and webinars that began in May 2010, two months after the Agency announced the study. The Agency's study plan then underwent peer review from a panel of the EPA Scientific Advisory Board (SAB) which, after taking into account public comments, published its report in November 2011.

In June 2012, EPA further enhanced the stakeholder process to ensure that experts in key areas, including cutting-edge technical advances of industry practice were engaged to provide input for EPA's research. Five technical roundtables focused on each stage of the water cycle outlined in the study occurred in November 2012. EPA plans to reconvene these roundtables in summer 2013. Technical workshops on analytical chemical methods, well construction and operation and subsurface modeling, wastewater treatment and related modeling, water acquisition modeling, and hydraulic fracturing case studies began in February 2013 and are scheduled through June 2013. Information from these roundtables and workshops are being made widely available to the public through webinars and the hydraulic fracturing study website ([www.epa.gov/hfstudy](http://www.epa.gov/hfstudy)).

The SAB Panel includes a wide range of highly qualified experts, including several with relevant industry experience, and will provide an additional source of scientific feedback on the EPA study. In May 2013, the SAB Panel convened a meeting provide feedback from individual panel members, or what the SAB calls consultation, regarding the progress report on the study issued by EPA in late 2012. The public had the opportunity to provide comments for the Panel's consideration. Comments from individual panel members will be considered for EPA's draft assessment which will be released for public comment and peer review.

The SAB panel sought input from science practitioners in the field on new and emerging industry technologies and practices. Together with public comment opportunities, roundtables and technical workshops, this will further assure that EPA's entire research process is informed by and incorporate the most up to date science.

In addition to SAB review, EPA research projects supporting the report of results will be peer reviewed upon completion before integration into the report of results.

In sum, this integrated approach of openness and scientific rigor will ensure that the EPA study provides policymakers with the best science and the most up-to-date understanding of the industry.