

EPA's 'widespread, systemic' conclusion needs backup – advisers

Pamela King, Environment & Energy Publishing, 6-15-16

ALEXANDRIA, Va. -- Advisers to U.S. EPA on its assessment of drinking water impacts from hydraulic fracturing took issue with the agency's finding of no "widespread, systemic" effects from fracking but ultimately recommended keeping the controversial language, with modifications.

EPA's draft report, released last year, said cases of pollution related to the fracking life cycle -- which includes water acquisition, injection and waste management -- were small compared with the number of wells (*Greenwire*, June 4, 2015).

But the agency did not go far enough to emphasize the preliminary nature of its top-line conclusion, said David Dzombak, chairman of the Science Advisory Board's (SAB) Hydraulic Fracturing Research Advisory Panel. The agency could more clearly link the statement to the findings in the body of the report, which acknowledges the limitations of the available science, he said during a public meeting here yesterday.

Reactions to EPA's findings have been wide-ranging. Some have said the conclusion is factually true, especially considering the caveats offered in EPA's report. Others say the terms "widespread" and "systemic" are vague and poorly defined, so it's difficult to know what EPA is actually finding.

A third perspective is that gaps in the fracking data are large enough to preclude a definitive statement on impacts from the extraction process. A final question is whether "widespread, systemic" should serve as the standard, when drinking water problems are often regional and sporadic.

Gina Solomon, deputy secretary for science and health within the California EPA and a lead reviewer of the EPA report, said she agrees with all of the above perspectives. She likened EPA's findings to an M.C. Escher painting, which changes depending on how the viewer squints at it.

"That in and of itself is the problem with the statement," she said. "You can read it in so many different ways that it's not as useful as it could be as a top-line conclusion."

Industry commenters backed EPA's original language.

If there were widespread, systemic impacts from fracking, "it certainly would be readily evident by now," even without scientific investigation, said Jim Zernell, vice president of completions for Newfield Exploration Co.

Environmental groups and residents personally affected by oil and gas activity said EPA and industry are ignoring impacts that fall outside the strict definition of fracturing, which refers only to the process of pumping water, sand and chemicals into shale to release trapped hydrocarbons. Other factors, such as surface spills and well casing deficiencies, have been linked to contamination.

There are plenty of communities that have had their water affected by energy development, said Aaron Mintzes, policy advocate for Earthworks. He named those localities in his statement.

"Pavillion [in Wyoming], Texas, Pennsylvania," he said. "That's widespread."

As it stands, EPA's report can be interpreted as a value judgment, said Charles Werth, another lead reviewer and a professor at the University of Texas, Austin.

"I think it needs numbers," he said.

SAB could likely agree on a way to better quantify its high-level conclusion, Dzombak said.

"We're clearly going to be working on this for a long time into the future," he said.

Dzombak will work with the panel's lead reviewers to make the recommended revisions. SAB Chairman Peter Thorne will assess the changes and send the board's report to EPA.