CLEAN WATER ACTION

Science Advisory Board Panel Review of the Draft *Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*
Submitted on March 4, 2016

I appreciate the opportunity to submit comments on behalf of Clean Water Action as the National Oil & Gas Campaign Coordinator. Once again the SAB Panel deserves considerable praise for the way it has conducted the review of this "highly influential" document over these past several months. I respect the oil and gas industry's perspective and believe that dissenting opinions are part of a fully transparent and comprehensive review process.

On Mr. Hufford's Dissent

Mr. Hufford agrees that EPA could have "articulated the Agency's statistical assessment more clearly" in the main conclusion, but he also agrees that it is "clear, concise, unambiguous". Even the dissenting commenter, in a quest to "carefully consider the structure of our responses to EPA" cannot square the out of place, out of context comment. In the initial review of the document one Panelist aptly summed it up:

"Put another way, there are about 700 pages (24,000 lines) presenting the potential impacts of hydraulic fracturing on water resources and human health but only 2 lines concluding that it is not a universal problem. Talk about a surprise ending!"

Regardless of an outlier opinion the fact remains the same: EPA cannot say with any certainty how widespread or systemic the impacts of hydraulic fracturing are due to the lack of available data and due to the fact that EPA did not perform a statistical analysis of the number of cases of drinking water impacted by fracturing activities versus the number of fracturing activities.

Omitting the "widespread, systemic" conclusion removes some of the ambiguity in our opinion.

Gaps in Chemical Mixing and Disclosures are Major Findings

Public concerns about the chemicals used in fracking are discounted without warrant in the dissenting opinion. Mr. Hufford feels that understanding the difference between "public access" and "regulatory access" should assuage any concerns the public has over chemical disclosure. As such these disclosure and transparency failures should not be characterized as a "major finding." This perception appears misguided.

Lest we forget, with data available, 1075 chemicals were identified in fracking fluids, most popular being petroleum distillates, and hydrochloric acid. The majority of chemicals used in hydraulic fracturing fluids do not have exposure limits or other necessary information, "representing a significant data gap for

hazard identification." [ES-12] Further, 70% of disclosures have at least 1 chemical withheld as a trade secret.

The public's quest for transparency and accountability should not hinge on insider interpretations of what is considered chemical disclosure or motivated reasoning on thresholds to achieve "major finding" status.

If Data Falls in the Woods, Does it Exist?

Mr. Hufford's attempt to blame the inherent uncertainty involved with assessing impacts to drinking water from fracking on the usability of state databases is puzzling. The lack of baseline surface water testing, groundwater quality data, hazard information on chemicals used is not an "accessibility issue" – it appears to barely exist. It absolutely does not exist at the level of certainty necessary to make firm conclusions in the major findings sections.

It is important that the Panel recommend EPA outlines the gaps in the science and data and provide next steps for research to fill those gaps. Along with these comments I have submitted a non-comprehensive collection of excerpts from the Assessment citing lack of available information and data limitations. It would be helpful to see how improved usability of state databases could resolve all this instances.

I do agree, and it appears Mr. Hufford does as well, that it's an "accessibility issue" in certain cases – particularly when to referring data tied up in non-disclosure agreements with industry or labeled confidential business information. See below and page 6-53:

> "There are other cases in which production wells associated with hydraulic fracturing are alleged to have caused drinking water contamination. **Data limitations** in most of those cases (including the unavailability of information in litigation settlements resulting in sealed documents) **make it impossible to definitively assess whether or not hydraulic fracturing was a cause of the contamination in these cases."**
>
> **"The lack of information** regarding the composition of chemical additives and fracturing fluids, containment and mitigation measures in use, and the fate and transport of spilled fluids greatly limits our ability to assess potential impacts to drinking water resources." *(p. 5-73)*

Assessment of Potential Impacts ≠ Best Management Practices

Industry best practices are of course important but they are not what this Assessment is designed to articulate. EPA was directed by Congress to look at potential impacts of fracking activities on drinking water. This does not include EPA's assessment or recounting of industry best practices. The point of the research was to look for where impacts have happened and where they can persist in the future.

Including Ongoing EPA Investigations Makes Sense

While it appears Mr. Hufford still wants to keep ongoing investigations out of the body of the report, I am relieved to see that the industry accepts the fact that the case for omitting the investigations in Parker County, TX, Dimock, PA and Pavilion, WY is finally eroding. There is no rational reason for limiting the public's understanding of what happened in these three cases.