

**EPA Science Advisory Board
Hydraulic Fracturing Research Advisory Panel
Public Teleconference March 7, 2016
Oral Statement of Jackie Stewart**

From: Stewart, Jackie

Sent: Monday, March 07, 2016 1:13 PM

To: Hanlon, Edward <Hanlon.Edward@epa.gov>

Subject: RE: SAB teleconference

Hi Mr. Hanlon:

Thank you again for the opportunity to speak today. Please find my comments below as well.

Also, for the SAB's consideration, the report I am speaking to, the UC GRO report, the full findings can be found here:

http://carrollconcernedcitizens.org/uploads/Univ_Cinn_Groundwater_Methane_Study_-_Botner_2015.pdf

My name is Jackie Stewart and I am a state director for Energy in Depth, which is a research and education program of the Independent Petroleum Association of American (IPAA).

EPA's conclusion of "no widespread systemic impacts" to groundwater resources is sound and is in line with an overwhelming number of studies that have come to the same conclusion. One of these is a new, groundbreaking study that was recently completed by the University of Cincinnati (UC), which found no instances of groundwater contamination from hydraulic fracturing in Ohio.

The UC study included state of the art stable isotope analyses and was conducted over 28-months. It analyzed 194 samples from private drinking water wells in five Ohio counties, ranging from 35 to 115 meters in depth. One of the most important aspects of the study is that it included baseline samples before shale development occurred. The researchers also evaluated samples during and after drilling occurred.

The study also analyzed the relationship of methane concentrations as they relate to the distance of the nearest active gas well to determine if there had been trends or changes that had emerged over the life-cycle of shale gas activity. In other words, the 28-month

study allowed for a broad and ongoing analysis of oil and natural gas development as well as hydraulic fracturing impacts on groundwater. It included scientific testing that established the DNA of methane concentrations to confirm the root-source of methane found in groundwater.

Dr. Amy Townsend-Small, the lead researcher of the study recently announced the findings of the study at a community meeting in Carroll County, the most developed shale county in the state of Ohio and where the majority of sampling took place. I'd like to read out a few of the key statements she made about the results:

- “All the samples fell within the clean water range and they did not find any changes over time either in any of our homes during the time series of fracking.”
- “We never saw a significant increase in methane concentration after fracking well was drilled.”
- Samples that were collected that were high in methane “clearly did not have a natural gas source.”
- “Some of our highest observed methane concentrations were not near a fracking well at all.”
- “There was no significant change in methane concentration over time, even as more and more natural gas wells were drilled in the area.”

This new study only adds to the enormous body of scientific literature finding of “no widespread, systemic impacts” to groundwater resources, which is what EPA rightly concluded in its landmark draft report.

Thank you for the opportunity to speak today.

Thank you!

Jackie Stewart, Ohio State Director, Energy In Depth