

**To: EPA SAB Research Advisory Panel**

Re: Docket # EPA-HQ-OA 2015-0245

**“Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources” (External Review Draft)**

I am Elizabeth Tatham, 79 Old Mill Lane, Holland, Pennsylvania. I am speaking as a resident of Pennsylvania and also as a stakeholder in the EPA Study which I have been since testifying on the design of the Study in Binghamton, NY in 2010.

People in the U.S. and around the world have been waiting to get definitive scientific findings from this EPA Study, now called “Assessment.” Unfortunately, the results are disappointing. The study has been limited by lack of actual water and other physical testing, lack of quantifying how many water contaminations were investigated with results given, number and severity of earthquakes, lack of information on well explosions that have had catastrophic results (Pennsylvania has had at least three), and depending on FracFocus as the main data source, thus basing many conclusions on self-reported data by companies.

The EPA Assessment does not include data on health related impacts of fracking. I will read from the introduction to the third edition of the “Compendium” on Health Harms and Risks of Fracking, published October 14 by Health Professionals of NY with Physicians for Social Responsibility:

<http://concernedhealthny.org/wp-content/uploads/2012/11/PSR-CHPNY-Compendium-3.0.pdf>

“As this unconventional extraction method (collectively known as “fracking”) has pushed into more densely populated areas of the United States, as fracking operations have increased in frequency and intensity, and, as the transport of extracted materials has expanded, a significant body of evidence has emerged to demonstrate that these activities are dangerous to people and their communities in ways that are difficult—and may prove impossible—to mitigate. Risks include earthquakes and adverse impacts on water, air, agriculture, public health and safety, property values, climate stability, and economic vitality.”

It is therefore critical that the three studies EPA had in progress in 2012 in Dimock, Pennsylvania, Pavillion, Wyoming, and Parker County, Texas be re-opened and continued to completion. The investigations in Wyoming and Texas were turned over to the drilling companies by EPA and the Dimock study was just suddenly stopped.

**Dimock** – in April 2010 Pennsylvania DEP fined the gas company and ordered it to shut down 3 gas wells for contaminating 18 water wells. Later studies there by EPA, scientists from Duke University, the National Resources Defense Council, and others were discounted, even though they showed extensive methane in water wells, arsenic, etc. EPA had planned to test 62 wells before the study was stopped in 2012 and affected families had to start paying for their own clean water. Most signed non-disclosure agreements to get the company to provide it.

In **Pavillion** EPA's Superfund agency showed aquifer and well water contamination that was later verified by US Geological Survey. The November 11, 2011 ProPublica article, titled, "EPA Finds Compound Used in Fracking in Wyoming Aquifer" describes EPA water test results released the previous day "that were consistent with water samples the EPA collected from at least 42 homes in the area since 2008 when ProPublica began reporting on foul water and health concerns in Pavillion."

The EPA Study in Parker County Texas also needs to be resumed and expanded since numerous well owners near the Lipsky well have reported contaminated water to regulators since 2012. The Associated Press article, "New tests find more methane in North Texas water," published by Bloomberg in January, 2014 states, "Texas' oil and gas regulator has opened a new investigation into allegations that methane is contaminating North Texas water after residents complained that independent sampling by university researchers revealed high levels of the explosive gas in their residential wells, the state agency and scientists said."

<http://www.businessweek.com/ap/2014-01-17/new-tests-find-more-methane-in-north-texas-water>

The December 20, 2013 EPA Inspector General's response to a Congressional Inquiry about the Parker County site states, "Laws and guidance do not address withdrawing Section 1431 emergency orders and the EPA used its discretion in withdrawing the emergency order. The EPA reached an agreement whereby (blank company) agreed to test 20 water wells every 3 months for a year to provide information about the presence of more widespread contamination. According to the EPA, the sampling that (blank company) has completed indicates no widespread methane contamination of concern in the wells that were sampled in Parker County. However, the EPA lacks quality assurance information for the (blank company's) sampling program, and questions remain about the contamination."

Re-starting these former EPA study sites is critical for the credibility of EPA and the trust the American people must have in our nation's Environmental Protection Agency.