

From: Sue Heavenrich  
To: Edward Hanlon/DC/USEPA/US@EPA  
Date: 02/27/2011 06:08 PM  
Subject: COMMENTS on the EPA Hydro-fracturing Study Draft Plan

I'm taking Dr. Hanlon at his word that he will accept comments emailed to this address.

Feb 27 2011

Dear Dr. Hanlon and Science Advisory Board,

While the study plan identifies key issues, there are three things that I notice are given short shrift:

1. Re-fracturing wells – both during the initial drilling and, years later, to re-stimulate a producing well. The horizontal bores in shale wells are long – a couple thousand feet – and getting longer as the technology is developed. I've heard industry folk say they can go a couple miles.

Because the horizontal bores are fractured in 500-foot lengths, that means that a single well might be fracked ten times (or even more) before initial production begins. Each time a well is pressurized for fracturing, stress is placed on steel and cement casings. EPA must include a study of how well cement withstands multiple frackings, and what the failure rate is for horizontal wells. Using vertical well data will not be sufficient.

2. The proximity of wellbores to each other during fracturing – both vertical and horizontal. As companies try to maximize the amount of gas extracted they will put more wells on each well pad. I have heard industry spokesmen mention numbers ranging from 8 to 16 wells coming off a single pad, with the vertical bores spaced as close as 20 feet.

Data from British Columbia (Canada) show that wells being fracked can cause cracks/fractures in neighboring gas wells as close as 350 feet away.

3. Ground level ozone, particulates and Green House Gases. EPA clearly stated in the hearing and in the draft study plan that it does not intend to include air quality as part of the hydro-fracking study. How can you separate it? How will the massive quantities of water be transported to the well pads? What impact will the fine fracturing sand have on local air quality – especially with regard to asthma and other health issues? What about the health impacts of ground level ozone – and the impacts on agriculture? And what about the escaping methane and other green house gas emissions from the well, the gathering pipelines, the compressors and transport pipelines?

How can EPA eliminate air quality from this study when, for the past month, I have received numerous notices about GHG and clean air regulations? Given that rural upstate NY already

receives many air quality (ozone) alerts during hot summer months – and we have very little drilling – AND that rural Wyoming is seeing more “bad air quality” days than Los Angeles, I strongly urge EPA to reconsider and make air quality part of the hydraulic fracturing study.

Thank you,  
Sue Heavenrich, biologist and environmental journalist  
Candor NY 13743