

March 14, 2018

Thank you for commenting on the DRBC's proposed rules on fracking rules!

We HIGHLY encourage you to personalize your comments, so if you've got a few minutes and are interested in additional information and crafting your own comment, read on. There's also a sample letter below to get you started.

To that end, below is more info on this week's topics - fracking, climate change, and water. Climate change should be justification enough to stop all fracking activities, but the DRBC's focus is on the water resources of the basin, so please be sure to discuss climate in that context.

Thank you again!

To the Delaware River Basin Commissioners -

More than 15 million people rely on the Delaware River for their drinking water. Because of relatively pristine environment of the upper Delaware and thanks to strong protections like the Special Water Protections, the river has some of the cleanest water in the East.

Threatening water quality and people's health by allowing wastewater to be imported, stored, or transported into the Basin is irresponsible. I'm writing to urge you to ban fracking wastewater and produced water storage, importation, and transportation in the Delaware River Basin.

On March 13, leading scientists and physicians released the [Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking, 5th Edition](#) documenting fracking's harm to public health. Please read all of the study's findings. Their conclusion, and mine, is that the only way to truly protect public health is to prohibit fracking and all its associated activities (waste hauling, treatment, disposal). I urge you to ban all of these activities in your final regulations.

As stated in the Compendium, growing evidence shows that regulations are simply not capable of preventing harm (pg 17). Further, cases of drinking water sources contaminated by drilling and fracking activities, or by associated waste disposal, are now proven. EPA's assessment of fracking's impacts on drinking water resources confirmed specific instances of water contamination caused by drilling and fracking related activities and identified the various pathways by which this contamination has occurred: spills; discharge of fracking waste into rivers and streams; and underground migration of chemicals, including gas, into drinking water wells (pg18).

And lest you think this applies to fracking and not wastewater treatment and disposal, the Compendium's authors cite a 2017 study which found that "fracking wastewater discharged into rivers and streams through treatment plants created dozens of brominated and iodinated disinfection byproducts that are particularly toxic and "raise concerns regarding human health" (pg 18).

The DRBC has authority and the responsibility to protect the Delaware river and its environs throughout the four states of the basin. The DRBC also has a responsibility to the American people to protect one of the most important watersheds in our country.

From the compendium, “We close with an observation by Maryland physician Judy Stone, MD, whose recent essay in Forbes speaks for all who have contributed to this Compendium: Fracking profits go to private industry but the public—families and communities—bear the costs of the many health complications from the drilling.

There is growing evidence of a variety of health problems being associated with fracking. Common sense dictates that drinking and breathing cancer-causing agents will take their toll. The correlation is too strong to ignore, especially when we have other, cleaner energy options. For our safety and that of future generations, we should not allow the new administration to sell off public lands, nor allow drilling on our land, and should ban fracking completely.”

Fracking should not be permitted in the Basin and neither should wastewater treatment and disposal. The doctors and scientists have spoken. The DRBC should heed their warnings and ban all of fracking’s activities.

Sincerely,

Additional key points/studies from the Compendium to include in your comments:

“Fracking is part of a complicated extraction process with a spider web of infrastructure that extends many miles from the well pad. At virtually every turn, the process contains public health hazards.”

“Although the industry calls it “brine” or “produced water,” this material contains carcinogenic chemicals, can be flammable and, in much of the country, also contains radioactive elements from deep below the surface.”

“December 14, 2016 – To better understand the impact of fracking fluid spills on aquatic animals, scientists at the University of Alberta exposed rainbow trout in laboratory tanks to various dilutions of fracking fluids. Even at very low exposures, the fish experienced adverse effects, including alterations in liver functioning and disruption of hormonal pathways. [This study was partially funded by industry.]”155

“October 14, 2016 – One of the first studies to investigate the impacts of fracking on the ecology of streams found that fracking “has the potential to alter aquatic biodiversity and methyl mercury concentrations at the base of food webs.” The researchers sampled 27 remote streams in the Marcellus Shale basin of Pennsylvania where drilling and fracking is taking place. They showed that methyl mercury levels in stream sites where fracking occurs were driven upwards by higher acidity and lower numbers of macroinvertebrates. In streams with the highest numbers of fracking fluid spills, “fish diversity was nil,” and in some cases, there were no fish at all, including in streams previously classified as high quality brook trout habitat. “Fracking and flow back fluids can contain various highly acidic agents, organic and inorganic compounds, and even Hg [mercury]. The flow back fluids can reach nearby streams through leaking wastewater hoses, impoundments, and lateral seepage and blowouts, as well as by backflow into the wellhead. Flow back water reaching streams can . . . decrease aquatic biodiversity. . . . Lowered stream pH increases Hg solubility, leading to increased bioaccumulation in food webs.”165

“December 13, 2016 – The final version of the EPA’s six-year, \$29 million study on the impacts of hydraulic fracturing on the nation’s drinking water confirmed that fracking activities have caused contamination of water resources in the United States, and it traced the various routes by which drinking water can be impacted by fracking.

“Summing up the report, then-EPA Deputy Administrator Tom Burke said in a statement to American Public Media, “We found scientific evidence of impacts to drinking water resources at each stage of the hydraulic fracturing cycle.”¹⁶¹

According to a review paper that examines the potential environmental impacts of oil and gas wastewater, about 5 percent of fracking waste is accidentally or illegally spilled.”

The health compendium speaks to the simple fact that you cannot completely protect people from fracking operations. We cannot prevent accidents from happening. As documented many times handling wastewater in the Delaware basin will cause impacts and contamination. It is not a question of if but when and where.

This is a risk we cannot afford. After every spill, waste treatment mishap or agency blunder it sets the stage for a potential travesty for a human life. When you look at the compendium and see the documentation, the numbers, and the toxins involved they are not just statistics they are real people who will bear the brunt of an industry that does not. We have an opportunity in the Delaware Basin to ban fracking and to ban water withdrawals and wastewater containment facilities and waste water treatment and release.