

syracuse.com

Commentary: Dr. Michael J. Economides, editor-in-chief of the Energy Tribune, says environmentalists wrong on hydrofracking

Published: Monday, September 13, 2010, 5:00 AM



Readers' Page

By Michael J. Economides

There is a vicious war being waged against the public interest by environmental groups, even if these organizations couch their claims as a war against fossil fuel companies. In particular, attacks on the natural gas production process known as hydraulic fracturing, or "fracking," have recently escalated into a full-scale war.

This week, Binghamton will become the epicenter of this battle as opponents of fracking descend on the city in an attempt to influence the EPA's regional meeting on the topic.

Two notable lies about hydraulic fracturing have been widely spread. The first is that fracking causes natural gas to migrate upwards through geological formations, infiltrating drinking water aquifers. The second is that chemicals mixed with fracturing fluids will contaminate the same drinking water.

I have worked in the field of hydraulic fracturing for more than 25 years, have consulted with energy companies in more than 70 countries and have trained more than 6,000 engineers worldwide. I can say with confidence that these lies are especially deceptive.

The idea that natural gas formations 10,000 feet below ground can somehow contaminate drinking water aquifers that are 9,500 feet higher than the actual fracture height is false. Ironically, in fracture design, engineers go to great lengths to avoid fracture growth of even 100 feet to avoid losing production to another natural gas formation.

If the fracture height cannot connect the gas reservoir with the water aquifer, then contamination is virtually impossible. Even if that were the case, meaning the multiple layers of different rocks between the reservoir and the aquifer were extremely porous, the reservoir would not have existed in the first place. All of the natural gas would have leaked naturally to the earth's surface over millions of years of geologic time.

Regarding the assertion that fracking fluids will contaminate drinking water, one of the chemicals in question is diesel. This chemical's supposed danger was singled out in an Aug. 5 press release distributed by two environmental organizations, the Environmental Working Group and Earthworks.

The release states, "Currently, there is not a system in place to make sure that toxic diesel fuel is not polluting our drinking water sources ... Full regulation of hydraulic fracturing is needed to ensure that our drinking water is protected."

Contrary to these claims, the chemicals deployed during fracking operations are few in number and are not threatening. They are mostly gelling agents used to thicken water, providing for the transportation of particulates during the drilling process.

In fact, these agents are not much different from common kitchen flour.

Over the past 60 years, fracking has been applied to millions of wells worldwide with virtually no incident and without any physical evidence that it can contaminate drinking water.

What is more, the damage to the U.S. supply of affordable and reliable energy is enormous. This war on fracking jeopardizes more than \$200 billion per year in U.S. economic activity, and this is just the incremental value added at the wellhead. The multiplier effect throughout the American economy of foregoing production of these valuable resources would be several times greater.

So, hopefully, citizens attend this week's hearing to tell the government how much their local communities need the jobs America's energy producers can provide.

Dr. Michael J. Economides, editor-in-chief of the Energy Tribune, is a professor at the University of Houston's Cullen College of Engineering.

© 2010 syracuse.com. All rights reserved.