Presidential Pipeline

A Message From Clean Water America Alliance President Ben Grumbles

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Drill, Maybe, Drill!

The friction over “fracking” (specifically hydraulic fracturing for natural gas) underscores the growing need for energy security and environmental sustainability to be in balance rather than in battle and to keep water in mind through it all.

Most agree natural gas has a bright future as a "bridge" fuel to cleaner, renewable energy. It makes sense to develop home-grown energy, such as natural gas, particularly when it has a smaller carbon footprint than imported oil or coal (although debated by some) and it's in large supplies under our feet, although sometimes 5,000 to 9,000 feet under our feet.

But the "Shale Rush," prompted by technology breakthroughs in horizontal drilling and hydraulic fracturing over the last decade or so, can raise significant questions about the drilling boom's large footprint on the landscape and the cumulative impact of operations on air, water, wildlife, and public health. Water is a particular concern since as much as 5 million gallons may be used at each site to fracture the organic-rich, tightly-compacted shale to recover valuable natural gas. Large amounts of water, mixed with sand and chemicals, and injected under intense pressure (10,000 psi), can mean potential issues down under, downstream, or downwind.

The Marcellus Shale, the Saudia Arabia of natural gas to some, exists under much of southern New York, Pennsylvania, West Virginia, eastern Ohio, western Maryland, and even a portion of western and southwestern Virginia. USGS estimates the shale rock could include as much as 500 trillion cubic feet of natural gas. A recent Pennsylvania State University study reports the Marcellus gas industry generated $3.9 billion in total value added revenue, more than 44,000 jobs, and $389 million in state and local taxes. For 2011, the estimated potential is more than $10 billion in total value added revenue, 100,000 jobs, and nearly $1 billion in state and local tax revenues in Pennsylvania.

EPA is no stranger to fracking and its legal and environmental issues. A 1997 court in Alabama ruled for the first time that EPA should be regulating coal bed methane fracking under the Safe Drinking Water Act's Underground Injection Control program. This created legal uncertainty. EPA then sought to reduce scientific uncertainty, overseeing a study on potential risks of fracking to ground water. A commission of experts, including several from industry, reviewed existing literature and concluded in the final 2004 report that fracking presented “little or no risk” to underground drinking water. As EPA’s Assistant Administrator for Water at the time, I signed off on the report and testified to Congress about the findings. EPA, however, never intended for the report to be interpreted as a perpetual clean bill of health for fracking or to justify a broad statutory exemption from any future regulation under the Safe Drinking Water Act.

In 2005, Congress cited the report in justifying a fairly broad statutory exemption from the Safe Drinking Water Act's underground injection control regulatory program. The exemption does not include a sunset or "recapture clause" . It does, however, stipulate that diesel fluids not be used in the process. This has prompted a lively debate over exactly what type of chemicals and propping agents go into the fracking fluids and what are the proper boundaries and differences between a community's right to know and a competitor's right to know the special ingredients of a fracking company's product.

A lot has happened since 2005 and, in my view, it makes sense to review the Safe Drinking Water Act landscape as well as the relevance of Clean Water Act programs. Political and legal battles have been growing in state and federal courts and agencies, with particular attention to fracking for shale gas, which is different from fracking for coal bed methane, the primary subject of EPA's 2004 report.

EPA is now developing a more complete, up-to-date study on fracking risks to ground water and seeking upfront input from its Science Advisory Board. An expanded, scientific review is important as much more information exists, including complaints about methane migration and contaminated water supplies. The Agency is also reviewing surface water impacts, such as from total dissolved solids (salts and minerals) and naturally occurring radioactive materials. EPA is probing current and potential new Clean Water Act requirements for onsite pre-treatment and permitting responsibilities at publicly owned treatment works and centralized waste treatment facilities, including the testing and handling of biosolids from facilities treating frack water.

States and interstate organizations in Shale Gas regions are also stepping up efforts to study, regulate, and monitor the impacts of natural gas drilling and fracking and the management of "flowback" fracking fluids. Salts, bromides, radionuclides, and biosolids seem to be getting some of the greatest attention, in addition to the "federalism" question of whether EPA regulations are needed if state agencies are acting to oversee the industry and protect the public.

It's hard to know where all of this is going, as the debate intensifies and the Administration and Congressional committees take differing sides on environmental, energy, and economic impacts. Nonetheless, here are some easy predictions to make: more disclosure to the public and/or regulators of previously undisclosed chemicals in fracking fluids (e.g. www.fracfocus.org), increased onsite recycling of the frack water by industry, and more detailed monitoring by drinking water and wastewater officials of frack water and biosolids, especially radioactive constituents. These are all good steps in my view.

The Clean Water America Alliance doesn't have a pro-frack or anti-frack view or official position and nothing I write in this column should be construed as such. We are, however, well-positioned to bring facts and policy choices to the table and use collaboration to keep watersheds and communities healthy into the future.

In my view, "drill, maybe, drill" means more review along a more thoughtful path, one that can include fracking, even in large amounts, but in the right place, at the right time, with the right amount of government oversight, and with water running through the policymaking from beginning to end.