

Feds haven't made case for oversight of fracking

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Most people are familiar with the iconic Texas image of the “gusher” — a derrick spewing oil because the reservoir pressure pushes it up the well. Oil and gas are harder to extract from “tight” rock formations that do not allow either to pass through and gush up a well like in the old movies. Such formations, often shale or coal, may be filled with gas or oil but allow them to flow only along pre-existing cracks — “fractures.”

Hydraulic fracturing — sometimes called “fracking,” “fracking” or “fracing” — is a process in which fluid is injected into a well at very high pressures in order to either widen and deepen existing cracks or create new fractures in the tight formation. Generally, increased fracturing will allow more oil or gas to be produced from a well previously thought dry or in decline. Petroleum companies vary the type of fluid used for fracking depending on the rock type, depth or other factors. The fluids used can include water, water mixed with solvents, or drilling mud. Inside the fluid is mixed with the “proppant,” which is typically sand, aluminum pellets or some other small granular material that is carried into the fractures and is left to prop the crack open, thereby allowing the oil or gas to flow.

In June 2004, the EPA released the results of a study that found no confirmed instances of contamination of drinking-water wells by fracking fluids. This led the federal government to exclude hydraulic fracturing and the associated fracking fluids from coverage under the Safe Drinking Water Act. Environmentalists and some regulators attacked the findings of the study, saying it was limited to coal-bed methane (“CBM”) wells. Industry figures answered by pointing out that the type of well and formation commonly stimulated by fracking does not impact the basic finding of the EPA study — that injection of fracking fluids posed minimal threat to drinking water.

Environmentalists and some legislators have expressed concern that oil and gas producers are hiding the exact components of their fracking fluid from public scrutiny, and that federal regulation is necessary to enforce disclosure. Although concerned about the proprietary nature of their operations, executives in companies such as XTO Energy Corp. and ExxonMobil have expressed a willingness to disclose the ingredients of the fracking fluids used in their operations. In addition, petroleum engineers have noted that fracking fluids are primarily water and are not introduced to the aquifers containing drinking-water supplies. Instead, the fracking fluid is pumped through a concrete-lined borehole to formations hundreds — sometimes thousands — of feet lower than the drinking water, further minimizing the contamination threat.

Despite the EPA's findings, some in Congress still want to expand regulation. In June 2009, two identical bills named the FRAC Act were introduced to both houses of Congress. Sponsors of the bills have asserted that chemicals used in the fracturing process could adversely affect drinking-water supplies. The proposed legislation would remove the exemption of hydraulic fracturing operations from the Safe Drinking Water Act. These bills, if adopted, would increase the possibility of litigation and give the EPA power to regulate all hydraulic fracturing that occurs in the United States.

In addition to nudging aside the states' own laws on the issue, this new federal oversight would likely lead to operational delays or increased production costs because of the additional layer of regulatory burdens. This would, in turn, dampen domestic production in some instances, particularly for natural gas, and contribute to our dependence on foreign oil.

Study of the effect of fracking on drinking water is not complete and will continue. However, on such a limited and disputed body of data stand the calls for dramatically heightened federal regulation. Proponents of these laws need to show that existing or contemplated state laws governing fracking and water management are or will be ineffective. In addition, clear evidence must also prove that fracking poses a danger of contamination to surface or underground water supplies. Neither of these things has been shown. These bills should be tabled until they are.