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A Fracking Mess

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Efforts to expand natural gas production through “hydraulic fracturing” or “hydrofracking” are raising tensions across the country. Fracking releases natural gas trapped in underground shale formations by injecting water, chemicals and sand to fracture the rock and release the gas.

Twenty years ago, unconventional gas produced from shales, coal-bed methane and similar formations made up 10 percent of total U.S. gas production. Today it is around 40 percent and growing rapidly — along with controversy over possible environmental impacts of hydrofracking. Pundits and fracking proponents argue that stronger regulations are unnecessary to protect the public or that opposition to uncontrolled fracking represents a “politicized agenda to stymie U.S. energy production.” This is ideological nonsense.

There is no dispute that natural gas is cleaner than coal or oil when burned, or that the nation would be better off if we reduced our dependence on foreign oil. But there is also no dispute that there are serious risks associated with hydrofracking, especially to the nation’s water resources. Two such threats are contaminating groundwater with the proprietary, often secret, mixes of industrial chemicals injected to fracture the formations, and the vast quantities of “produced water” that come up with natural gas and can contain fracking chemicals, radioactive elements and other contaminants.

Produced water from gas operations is often even more toxic than water produced from petroleum production, and can contain high concentrations of salts, acids, benzene, toluene, ethylbenzene, xylene, radioactive materials and other nasty chemicals. Sometimes this produced water is sent to public wastewater plants ill-equipped to treat it; sometimes it is dumped into local waterways; sometimes regulators have no idea how much wastewater is produced or where the contaminated water goes because producers don’t tell them. As unconventional gas production has grown, drinking water wells have been contaminated; toxic wastewater, fracking fluids and diesel fuel have spilled into local watersheds; residents have been exposed to poisonous chemicals; and people have ignited gases coming out of their faucets with their water. Additionally, methane leaks from wellheads may worsen greenhouse gas emissions.

This isn’t right and it isn’t necessary. These environmental costs should be paid by industry, not dumped on the public.

Why do we have to expand domestic energy production the wrong way? Why the rush to bypass or prevent proper regulatory oversight? Expanding domestic energy production is important and reducing our use of more carbon-intensive oil and coal is critical, but natural gas is not our only option — the nation has vast renewable energy sources including solar, wind, biomass and

geothermal to add to the mix. And protecting our groundwater, drinking water, and rivers is equally critical.

Current regulations are a complicated mix of federal rules, state rules and no rules at all. Efforts by Congress to provide shortcuts, subsidies and loopholes for gas producers make things worse. For example, Congress exempted produced water from regulation under the hazardous waste requirements of the Resource Conservation and Recovery Act. Regulations under other federal and state pollution laws are inconsistently applied and weakly enforced.

Failures to protect water quality will lead to more and unnecessary impacts on community health and the environment. Existing regulations need better enforcement and new regulations must be put in place. Monitoring water contamination from fracking and proper disposal of produced water needs to be greatly expanded. Some states, including California, are moving forward with improved legislation, but national action is needed.

We want safe and clean energy options, but we also want safe and clean water. There is no need to sacrifice one for the other.

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