



Everything Jersey

Halt gas drilling until water safety is assured

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By **Star-Ledger Editorial Board**

The Delaware River Basin is downstream from planned drillings for natural gas. Pennsylvania Gov. Tom Corbett has instructed his economic development officer to fast-track permits for drilling. About 10,000 wells are expected to be green-lighted, creating jobs, producing clean fuel and lessening our dependence on foreign oil for several decades.

But there's a dark side: The process of drilling, known as hydraulic fracturing — or "fracking" — has the potential to contaminate the Delaware, which provides drinking water for 15 million people, including 3 million in New Jersey. The federal Environmental Protection Agency is investigating the threat, but won't be done until next year. Pennsylvania should not be allowed to proceed until we know it's safe.

New York already has a moratorium and New Jersey should follow suit. Two bills before the state Assembly tomorrow recognize the urgency of the situation: One would put the brakes on drilling until the feds complete their study, and the other asks Congress to no longer exempt fracking from safe water regulations, as it has since 2005, and to require drilling companies to reveal all chemicals used in fracking. "We're asking for transparency," said Assemblywoman Connie Wagner (D-Bergen), the bills' sponsor. Both bills are key to protecting our water supply.

Fracking shatters rock formations to release the gas through high-powered drilling using sand, chemicals and billions of gallons of water. Along with the gas, the chemically contaminated water also is released. The earth's naturally occurring radioactive radium also is disturbed by fracking. Wastewater treatment plants can't scrub



Tony Kurdzuk/The Star-Ledger

A jogger in January enjoyed solitude along the Delaware River in Hopewell. Natural gas drilling in Pennsylvania has raised concerns about contamination of the Delaware River Basin.

clean all the pollutants in Pennsylvania's drilling waste water which, by one account, totaled more than a billion gallons in the past three years.

Preliminary reports by EPA consultants and regulators found it highly likely that toxic water unleashed in Pennsylvania would endanger the Delaware River, and evidence exists that the drilling wastewater also corrodes treatment plants, undermining their ability to break down regular sewage.

The Delaware River Basin Commission, which represents the watershed interests of New Jersey, Pennsylvania, New York and Delaware, is proposing its own regulations for fracking. But the commission should take the advice of 39 New Jersey state legislators, who have asked it to wait until the federal study is complete. Jeff Tittel, of the Sierra Club's New Jersey chapter, says the commission's proposals are deficient because they don't explore the vast clear-cutting of forests and construction of roads that accompany fracking.

The Delaware River has become a precious economic and recreational resource, vital to the economies of towns that thrive along its banks. It's beyond question that the need for clean-energy sources is a pressing national need, but fracking shouldn't proceed unless the safety of our water is guaranteed.

FACTS ABOUT FRACKING

- **Hydraulic fracturing is used to recover natural gas from sources such as coal beds and shale gas formations. Shale is sedimentary rock formed by layers of clay. Fracking is prominent in the Marcellus Shale, which spreads across most of Pennsylvania.**
- **Fluids, commonly made up of water and chemical additives, are pumped into a geologic formation at high pressure. When the pressure exceeds the rock strength, the fluids open or enlarge fractures that can extend several hundred feet from the well, releasing gas.**
- **In 2009, shale gas production comprised 14 percent of the total U.S. gas supply. It is projected to be more than 20 percent by 2020, and 45 percent in 2035.**
- **Approximately 35,000 wells are fractured each year across the country. The annual water requirement**

may range from 70 billion to 140 billion gallons. This is equivalent to the total amount of water used each year in roughly 40 to 80 cities with a population of 50,000, or about one or two cities of 2.5 million people.

- **With the expansion of fracking, there have been increasing concerns about its potential impacts on drinking water resources, public health and the environment in the vicinity of these facilities.**

Sources: U.S. Environmental Protection Agency, N.J. Department of Environmental Protection

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