



LEAGUE OF WOMEN VOTERS®
OF NEW JERSEY

Energy Versus Water Supply --‘Hydrofracking’ in PA & NY could affect NJ !

The following report, the second in a series of three, has been prepared by the LWVNJ Natural Resources Committee and is aimed at informing League members.

Natural gas has been presented as a cheaper and a cleaner alternative fuel, but what is the real trade off?

In the 1990’s Halliburton developed a new “hydrofracking” process that allowed for extraction of hard to reach gas trapped deep in shale and rock formations. Drilling can now be done horizontally, through a formation, for a mile or so -- even under towns, cities, aquifers, and lakes—and 9 to 12 wells can be drilled from one site.

Releasing gas from the shale involves injecting and blasting it with millions of gallons of water, sand, and a cocktail of chemicals, including highly toxic ones (toluene, benzene, formaldehyde etc.). The gas released is collected through holes drilled along the shaft and joins with 15%– 25% of the injected water as ‘flow back’ to the surface. The rest of the water remains in the earth, no longer available for drinking or any future use.

The highly toxic ‘flow back’ water is loaded with salts, radon and other deep earth elements including heavy metals (arsenic, barium, chromium, lead and others) and should be treated as highly toxic industrial waste. There are not, however, enough industrial sewage treatment sites to handle the waste currently being produced.

The new method of fracking uses an average of 4 ½ - 5 ½ million gallons of water per well. Where will all this water come from? What damage might withdrawing it from rivers and aquifers cause? These questions have not been addressed, nor have those of how to protect the public from: air pollution, well casing failures, unintended fractures of other rock formations, migration of methane which can cause well and aquifer pollution, or accidental spills and leaks of toxic wastes into soils and surface water. Budget cutting has left states like NY and PA without even adequate regulatory staff to oversee this process.

The construction of well pads and access roads in areas we rely upon to protect drinking water means forested areas are clear-cut, stormwater runoff increases, and the recharge of aquifers is reduced. The landscape is industrialized with a grid of well pads to provide optimum access to the gas deposits. Gas companies so far have been reluctant to accept the responsibility for road repairs or the pollution of drinking water supplies.

This process has spread to 34 states. After the Bush Cheney Energy Act of 2005 excluded ‘hydrofracking’ from having to comply with the Clean Water Act, Clean Air Act, Safe Drinking Water Act, and Superfund Act, a virtual “Gas Rush” ensued. Companies are aggressively pushing to obtain mineral rights and drilling permits to begin extraction in the northeast and, increasingly, foreign countries like Russia & China are major investors.

The watershed of the Delaware River in PA and NY is targeted for 32,500 to 54,000 new wells.* A project to extend and expand a pipeline across 'protected land' areas of northern NJ is under way to pipe Marcellus gas across NJ. Some gas companies still want to build liquefied natural gas facilities off the New Jersey shore.

According to "American Rivers" 2010 Report, the Delaware River is the most endangered river in the U.S., due to the threat of impacts from natural gas extraction on it, and thus on the drinking water of 15 million residents in DE, NY, PA, and NJ (where one-third of our residents depend on this source for drinking water).

There is currently a moratorium in place, but the Delaware River Basin Commission (established to protect the quality and quantity of the water and of the Wild and Scenic Delaware) is considering adopting Rules to allow this process soon. The LWVNJ opposes these Rules as the DRBC did not wait for scientific and cumulative impact studies to be completed first. Also, the gas industry has yet to find a safe way to deal with the wastes that are produced. Officials need to understand that the NJ Water Supply Master Plan makes no provision for supplying water to the one-third of NJ residents relying on the Delaware if it is compromised. Once humans ingest, or are exposed to toxins and endocrine disruptors, the damage is done. This is a public health issue.

In Congress the Fracturing Responsibility and Awareness of Chemicals (FRAC) Act has been re-introduced and would bring the hydrofracking industry back under the purview of the EPA. It is clear that there is a need for more study and regulation of this industry before this can be considered a safe way to obtain natural gas.

*National Park Service projection
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For More Information

Google "Gasland" to obtain the video "Gasland".

See www.ProPublica.org for investigative reporting on this topic.

See www.thetimes-tribune.com/news/gas-drilling for a 6 month series of articles on this topic.

See the NYTimes for its series called "Drilling Down" at
http://topics.nytimes.com/top/news/us/series/drilling_down/index.html

To learn more and take action visit <http://www.delawareriverkeeper.org/act-now/index.asp>