STATEN ISLAND DEMOCRATIC ASSOCIATION POSITION PAPER ON OPPOSING THE USE OF HYDRAULIC FRACTURING

ADOPTED 4/20/10

Hydraulic Fracturing Threatens New York City's Water with Contamination

New York City's water system, one of three in the country exempt from filtration because of our pristine water and NYC's maintenance, will be contaminated from the proposed drilling by hydraulic fracturing (hydro fracking) for natural gas in the Marcellus Shale, a geological formation in New York State. The Marcellus Shale includes the New York City watershed and spans three other states. The 1997 NYC Watershed Memorandum of Agreement recognizes the need for clean water for the state, but particularly for the NYC watershed.

What is hydraulic fracturing? And why is it dangerous?

Hydraulic fracturing is an unconventional vertical and horizontal drilling process in which toxic chemical mixes are forced thousands of feet into the shale to release natural gas. Chemicals travel to ground water, streams and reservoirs. There is no way to treat the potential billions of gallons of wastewater per year, a by-product of drilling. The federal Energy Act of 2005 exempted the fluid used in this process from the Safe Drinking Water Act (SDWA). Therefore, fracking fluid is unregulated under the SDWA and supersedes any state and local attempt to regulate these fluids.

The Marcellus Shale has a high naturally-occurring radioactive material content (NORM): radium-226, a derivative of uranium, which gives off radon, has been discovered in wastewater from drilling, and is 267 times higher than the safe limit for release into the environment and thousands of times higher than the safe limit for drinking (Abraham Lustgarten for Propublica, timesunion.com, November 9, 2009).

In addition to using, per well drilled, millions of gallons of ground water, a precious commodity, fracking fluids are "proprietary": the producers are not required to disclose the chemicals nor the chemical formulations. Currently, in the U.S. Congress, bills H. R. 2776 and S. 1215, in committee, would remove the exemption of fracking fluids from the SDWA and mandate that the chemical contents be made known to the public. Some of the chemicals presently used in fracking have been found to be "endocrine disruptors" which cause learning disabilities and testicular and breast cancer. The Public Service Commission (PSC), which regulates natural gas transmission, has done no evaluation of the environmental impacts of the amount of transmission lines and infrastructure that will be needed to bring the gas to market. The PSC has not evaluated the impact on water, wildlife habitat nor air quality.

The NYC Department of Health's concerns for disposal of radioactive wastewater from drilling has been brought to the attention of the NYS Department of Environmental Conservation (DEC), which has not addressed this problem. Currently, there are no wastewater treatment facilities which can process radioactive waste in New York. Treated by municipal plants, the wastewater is discharged back into public waterways. Filtering only leaves sludge with higher concentrations of radioactive materials, and sludge accumulates in pipes and waste pits at drilling sites. Contaminated drilling equipment emits higher levels of radiation than wastewater.

Governmental Studies and Actions

All governmental studies of this drilling process agree on its many negative impacts. The U.S. Environmental Protection Agency (EPA) said that it had serious reservations about whether gas drilling in the NYC watershed is consistent with the vision of long-term maintenance of a high-quality, unfiltered water supply and will now conduct a scientific study, likely to include New York State (Propublica March 18, 2010).

The NYC Department of Environmental Protection's (DEP) December 2009 release reports that fracking poses unacceptable risks to the 9 million people drinking NYC's unfiltered water, and calls for the prohibition of drilling in the NYC watershed. According to the final Impact Assessment Report prepared for the DEP, drilling causes

industrialization of rural and agricultural areas and a risk of chemical contamination. The DEP calls upon the NYS Department of Environmental Conservation (DEC) to rescind their draft Supplemental Generic Environmental Impact Statement (dSGEIS) as it "does not met the requirements of the NYS Environmental Conservation Law." It is also inadequate in its assessment of the risks to public health and air quality, and does not account for the cumulative impact of as many as 6,000 wells which will require thousands of acres of land clearing and millions of truck trips, as well as other infrastructure requirements of fracking. NYC's water tunnels could be penetrated and contaminated as fracture systems transmit fluid and pressure along the same geological formation as our drinking water.

In September 2009, the NYC Council, recognizing the detrimental effects of hydraulic on humans and the environment, called upon the NYS Legislature, the NYS DEC and Governor Paterson to "prohibit hydraulic fracturing combined with horizontal drilling for the extraction of natural gas within the boundaries of NYS."
Only the oil and gas industry is allowed by the U.S. EPA to inject known, unchecked hazardous material near or into drinking water supplies. The 2004 EPA study, conducted with industry, concluded that hydro fracking poses no threat to drinking water. The EPA ignored, however, among other things, that benzene – a known component of fracking fluids – migrates deeper than believed and is carried by groundwater. In 2007, the U.S. House of Representative's Oversight and Government Reform Committee began hearings, and found that scientists found toluene, xylene, and benzene – known carcinogens – had entered the drinking water where fracking was conducted, and "identified 245 different chemicals, 92% of which have adverse health effects" (Propublica, January 2010).

Rep. Henry A. Waxman, D-CA, announced that the House Committee on Energy and Commerce which he chairs is launching an investigation into potential environmental impacts from hydraulic fracturing" (February 19, 2010).