September 15, 2011

The Honorable Andrew M. Cuomo
Governor of New York State
NYS State Capitol Building
Albany, NY 12224

Dear Governor Cuomo:

We the undersigned scientists write to you regarding the ability of municipal drinking water filtration systems to adequately remove contaminants of the sort found in return fluids from hydraulic fracturing, should they somehow enter the water system. The State has proposed that hydraulic fracturing not be allowed in the watersheds of the New York City and Syracuse water systems (where no filtration occurs), but be allowed in watersheds where drinking water is filtered before use. The presumption appears to be that municipal water filtration plants provide protection from potential contaminants. The best available scientific information does not support this presumption.

Most municipal water filtration systems are designed to remove potentially dangerous microorganisms from water, which they do efficiently. The typical filtration system would also remove some hazardous substances. However, there simply is not an adequate knowledge base to conclude that filtering would remove all, or even most, of the hazardous substances found in flow-back fluids from hydraulic fracturing. Potential contaminants of concern known to be in some flow-back fluids include benzene and other volatile aromatic hydrocarbons, surfactants and organic biocides, barium and other toxic metals, and soluble radioactive compounds containing thorium, radium, and uranium. Municipal filtration systems were not designed with such hazards in mind, and the ability of the filtration systems to remove such hazardous substances has received little, if any, study. We believe, however, the best available science suggests that some of these substances would pass through the typical municipal filtration system.

We urge the State to reconsider its position that existing water filtration systems provide adequate protection against the risk of hydraulic fracturing, should materials from flow-back fluids migrate to lakes, reservoirs, or groundwaters used for municipal water supplies.

Each signatory of this letter has significant professional experience with water treatment systems, with aquatic chemistry or biogeochemistry, and/or with the movement and fate of toxic or radioactive materials. We write as individuals and our professional affiliations are listed for your information. You should not infer any endorsement of our viewpoint by our affiliated institutions.

Sincerely,

Robert Howarth, Ph.D.
the David R. Atkinson Professor of Ecology
at Cornell University
Founding Editor, Biogeochemistry
Member of the Board of Directors, PSE

And 58 other scientists, listed alphabetically below.

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