CITY OF NEW YORK



MANHATTAN COMMUNITY BOARD FOUR

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COREY JOHNSON Chair

ROBERT J. BENFATTO, JR., ESQ. District Manager

December 9, 2011

Hon Andrew Cuomo Governor of the State of New York Executive Chamber Albany, New York 12224 Hon Joe Martens Commissioner New York State Department of Environmental Conservation 625 Broadway Albany, NY 12233-0001

Re: Hydraulic fracturing gas drilling in the watershed area

Dear Governor Cuomo and Commissioner Martens:

As you are well aware, the issues and concerns regarding the process of extracting natural gas through hydraulic fracturing are well documented. These include potential contamination of water with injected chemicals, increased wear on roadways, air pollution from trucks as well as evaporating ponds, and many other side effects. There is no need to go into detail about the potential harms of hydraulic fracturing in this letter, but documented cases of aquifer contamination, such as in Dimock, Pennsylvania, as well as instances of increased seismic activity in areas with large amounts of gas wells using hydraulic fracturing are enough to demonstrate that the risk of those harms is real. Hydraulic fracturing gas drilling has even been deemed hazardous enough to be banned, either whole or in part, in other locales and countries of the world such as France, Switzerland, and South Africa.

Manhattan Community Board No 4's (MCB4) primary concern about hydraulic fracturing is with the water supply for our district and, indeed, the entire City of New York. Currently, 90% of our clean water comes unfiltered from the Catskill and Delaware watersheds in upstate New York. If the purity of those watersheds were compromised by drilling, a filtration system would be necessary at an installation cost of multiple billions of dollars, as well as operating costs of several hundred million dollars per year. Given the detrimental effects on all New Yorkers that the installation and operation of such a system would have, we applaud your position, as outlined in the Revised Draft Supplemental Generic Environmental Impact Statement (rdSGEIS2011), that hydraulic fracturing should not be permitted in these areas.

Nonetheless, we are extremely concerned that the rdSGEIS2011 may permit wells to be placed too close to aquifers and surface waterbodies – including the New York City watershed – to ensure that these supplies do not become contaminated. The rdSGEIS2011 stipulates various buffer zones around water resources where surface well pads cannot be placed, ranging from 4,000 to as low as 500 feet. However, a feature of nearly all of the proposed fracturing wells is that a single well pad will be at the center of a

"star" of deep horizontal wells that can extend for over a mile. Simple logic tells us that such a well could easily extend <u>under</u> an aquifer or waterbody, even if the well pad is outside the buffer. While a 4,000 foot buffer is proposed for the New York City watershed, this buffer is still well short of distance needed to ensure that drilling does not occur under the watershed, thus risking contamination. Any buffer zone adopted by the Department must protect this precious resource, and therefore must be sufficient to prevent all drilling in the watershed, even in subsurface layers.

We are also very concerned about the fragile nature of the aging system of aqueducts that serves New York City which could be compromised by fracturing activities. These tunnels, the building of which commenced back in the 1940's, are already in a dilapidated state. The Delaware Aqueduct – which transports about 50% of the water from the west-of-Hudson watershed to the City – has been leaking 30 million gallons of water per day for more than two decades, which DEP is currently undertaking a \$2.1 billion project to address.

These structures may be damaged by the hydraulic fracturing process which produces vibrations that have been called miniature earthquakes. Indeed, some areas with traditionally low levels of seismic activity, such as Oklahoma, where hydraulic fracturing is now commonplace, have experienced a new wave of low magnitude earthquakes. While effects of low level seismic activity may be small and hardly noticeable to the average person, the potential to damage to already stressed and aged aqueducts is a very real concern. Recognizing this danger in 2009, as well as the danger of naturally occurring underground fractures up to a mile in length that could provide pathways for fracturing fluids to contaminate leaking aqueducts, the New York City Department of Environmental Protection called for a seven mile buffer from its drinking water infrastructure. Currently, under the rdSGEIS2011 the proposed buffer is a mere and completely unacceptable 500 feet.

MCB4 understands the environmental benefits of the use of natural gas for energy needs, as opposed to burning oil or coal. We also understand the need for New York State to be able to benefit from the revenues from the production of natural gas, especially in these difficult economic times. However, we strongly believe that the potential for serious harm to public health – especially to the drinking water supply that serves over nine million people with no additional and costly filtration – must be studied thoroughly, and the dangers better understood, before any further hydraulic fracturing drilling is allowed in New York State.

One suggestion might be to permit a very limited test area well away from any aquifer (or farmland for that matter) to see exactly what measures need to be put in place to ensure the safety of this process, if, indeed, it can ever be made safe.

Sincerely,

Corey Johnson Chair

cc: Westside electeds