



**NEW YORK CITY COUNCIL TOWN HALL MEETING
SUBJECT: HYDRAULIC DRILLING IN NEW YORK STATE
TESTIMONY BY ARDEN DOWN
ENVIRONMENT & INFRASTRUCTURE CHAIR
WOMEN'S CITY CLUB OF NY
BOROUGH OF MANHATTAN COMMUNITY COLLEGE
AUGUST 24, 2010**

NYC Council Speaker Quinn and Council Member Gennaro:

My name is Arden Down, and I am Chair of the Environment & Infrastructure Committee of the Women's City Club of New York, a nonprofit, nonpartisan, multi-issue organization founded in 1915. Our mission is to improve the lives of New Yorkers by helping to shape public policy and promoting responsible government.

On December 23, 2009, the New York City Department of Environmental Protection (NYCDEP) released an 11-month technical study on the impact of drilling for natural gas in the Marcellus Shale Rock formation. The formation runs from Virginia, West Virginia, Ohio, and Pennsylvania to New York. In New York State alone it extends for approximately 18,700 square miles, including under the City's entire 1,585 mile West of Hudson watershed through the Upper Delaware River area, according to New York City Department of Environmental Protection.

According to an assessment report prepared by NYCDEP, gas wells in the Marcellus formations contain naturally occurring contaminants such as hydrocarbons, metals, radionuclides, and high salinity. The well bore head creates a conduit for fluid to flow between these previously isolated geologic formations. Each well to be drilled is assigned a spacing unit of up to 640 acres. Initial site activities include clearing, grading, and construction of site access roads, well pads and utilities. These activities obviously include cutting down trees. Once the site is prepared and the drill rig and ancillary equipment are set up, operators begin drilling the well. In the New York area, wells will likely consist of a 3,000 to 7,000 foot deep vertical section that extend from the surface to the target formation, plus a horizontal section that extends laterally for an additional 2,000 to 6,000 feet. After the well is drilled, cased, and grouted, the operator proceeds with hydraulic fracturing (also called "hydro-fracking") to stimulate gas production. The process entails injecting a mixture of water (typically three to eight million gallons) and chemical additives. For a four million gallon fracture operation, this translates to 80 to 330 tons of chemicals per well. The exact composition of many

additives is not known, but of the known chemical components, many are toxic to the environment and human health.

As a result of the purely technical assessment, the department called for prohibition on drilling using present methods. Since spring 2010 New York has been functioning under a *de facto* moratorium until the State is satisfied with the Department of Environmental Conservation's Supplemental Generic Environmental Impact Statement (dSGEIS) on drilling/hydraulic fracturing.

Based on the fact that the EPA has made it clear that the impacts this drilling technology may have on water quality and public health are not settled and on March 18th announced the initiation of a two-year study of the relevant science on the impacts of the current drilling technology, the Women's City Club of New York has urged the State government to support a moratorium on hydro-fracking (Assembly bill 10490 and Senate bill 7592). It is our hope that the hydro-fracking process can be refined by the industry so that no harmful chemicals are flooded with a tremendous amount of water into the soil bed. We appreciate the actions of New York City Council Speaker Christine Quinn and Council Member James Gennaro who on July 14 called for a ban on fracking in the state. On August 3, the New York State Senate passed a bill that places a moratorium on fracking in the Marcellus Shale in New York. However the bill has not been voted on by the Assembly or signed by the Governor.

With the BP oil spill and the continuing Exxon and Mobil gas spills in Nigeria, we are seeing the disastrous effects these "accidents" are having on people, wildlife, fish, water purity and on and on. We realize that many are pushing for more drilling for natural gas, but New Yorkers need assurance that their government is relying on the best, most objective and accurate science on the effects of hydro-fracking in the drilling process. There are documented incidents of pollution of wells, explosions caused by the release of methane and numerous other "accidents". So we remain opposed to drilling for natural gas until we are assured that an environmentally safe way has been developed to do so. We must not endanger our New York City water shed.