



## **Proposed Minimum Requirements for the Protection of the Seneca Lake Watershed**

Our association of over 270 members represents property owners and residents in the Seneca Lake watershed. It was formed in 1991 to promote the understanding, preservation and improvement of the water quality, natural habitat and general environmental conditions of Seneca Lake and its watershed. The association supports scientific research, collects, preserves, publishes and disseminates information concerning Seneca Lake and its watershed and encourages and supports the enforcement of laws, regulations and patterns of development and technology aimed at preserving and enhancing the water quality of the lake. The association's website at <http://www.senecalake.org/> carries current information regarding its activities.

In our comments on the dSGEIS issued by the New York State Department of Environmental Conservation, Seneca Lake Pure Waters Association stated that we support fiscally and environmentally responsible drilling for natural gas. SLPWA opposes drilling for natural gas under the vague guidelines described in NYS DEC's dSGEIS issued on September 30, 2009.

This document defines what our association means by "fiscally and environmentally responsible drilling" and what it believes to be minimum requirements to protect the water resources of New York State, including the Seneca Lake watershed, as industrial and natural resource development occurs throughout the state. While this set of minimum requirements is written with the near-term prospect of drilling for natural gas in the Marcellus Shale, these requirements are intended to be long-term in scope and the principles behind these requirements should apply to other types of future development activities in our watershed.

### **Basic Assumptions**

As applied to the drilling for natural gas, the basic assumptions in this document are the following: Significant portions, if not all, of our watershed is located above a portion of the Marcellus Shale formation, a low-permeability rock formation estimated to contain very significant reserves of natural gas. Recent technological developments including horizontal drilling and high-volume hydraulic fracturing have enabled energy exploration companies to exploit this resource in the Seneca Lake watershed and such exploration could potentially present some businesses, communities and individuals with financial benefit.

The development of the natural gas resources in the Marcellus Shale play requires the use of drilling and well stimulating technology involving both horizontal drilling and hydraulic fracturing of the shale layers. The process of hydraulic fracturing involves the use, retention and disposal of millions of gallons of fracturing fluid and wastewater that is high in dissolved solids and is likely to contain toxic and radioactive materials. The proprietary drilling formulations are

not subject to public disclosure requirements and therefore present an unknown hazard in these drilling operations.

Our association's concern is that the aforementioned potential financial benefits could easily be offset by short and long-term environmental liabilities should development of natural gas resources be allowed to continue in a largely unregulated manner. The impact on the environment could present unforeseen damage to the Upstate economy, including the tourism, wine, agricultural and educational industries.

The water resources in the State of New York are our most precious natural resources far outstripping any other natural resources in importance for the future well-being of the State and its people. Not only is this resource absolutely essential for the health and welfare of its residents and their occupations, it also represents important value to the state's attractiveness as a year-round recreational area.

The recently published draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (dSGEIS), September, 2009 by the New York State Department of Conservation was judged by our association as well as by many others throughout the state, as providing inadequate regulatory control of the proposed drilling for natural gas throughout the state. These proposed regulations, coupled with inadequate staff resources of the NYSDEC Division of Mineral Resources, Bureau of Oil and Gas Regulation to manage current drilling activities in New York State raise serious concern about the future of our water resources and environment.

### **Minimum Requirements**

The following points define what our association would find as minimally acceptable requirements for the protection of the environment of the Seneca Lake watershed which is the prime mission of our association.

#### **1) New York Water Resources Protection Act (NYWRPA)**

The New York State Legislature and Governor should enact a New York State Water Resources Protection Act (NYWRPA), as urged by a large number of environmental groups throughout the state, that reflects the State's continued commitment to water resource protection and serves as a general directive to the Department of Environmental Conservation (DEC). This legislation should grant the DEC the authority to regulate current and projected water uses (and associated activities) so that the agency may adequately prepare for future impacts to protect our valuable water resources.

Specifically the bill should set forth the following principles:

- i) The state's obligation to hold both its ground and surface water resources in public trust and to protect them for the long-term benefit of its people;
- ii) The state's obligation to preserve water for essential uses at a higher priority than nonessential uses. Essential uses include high quality drinking water sources, wetlands, wildlife habitat and other important ecological systems;
- iii) The right of every New Yorker to safe, clean, sufficient, and affordable water;

- iv) The need to maintain adequate water flows and levels to protect fish, wildlife and other natural resources;
- v) The need to safeguard and enhance opportunities for recreational use of state waters;
- vi) The need to preserve the aesthetic values of our lakes and waterways.
- vii) The need to protect existing private water uses that are dependent upon surface water flows;
- viii) Recognize that the state's surface and ground waters are public trust resources and that water withdrawals will be governed based upon the concept of sustainable yield (as defined in the statute) and by DEC implementation of regulations based on NYWRPA.
- ix) Establish a permit application process that applies to persons or organizations seeking to withdraw water greater than 50,000 gallons in any 24 hour period from one or more sources of surface or groundwater sources in New York State. The permitting process should establish the importance, priority and ultimate fate of the water that is withdrawn consistent with the principles defined in the NYWRPA.
- x) Approval of permits to withdraw water greater than 50,000 gallons in any 24 hour period will be determined by detailed DEC criteria and regulations that meet the spirit of the principles laid out in NYWRPA. Such permits will have a maximum term of 5 years provided there are no violations of the permit.
- xi) The legislation should mandate that all permit applications contain a mandatory water conservation program for the use of the water that is proposed to be withdrawn that addresses best water management practices. The permit should include monitoring requirements and regular course-of-business record keeping and monthly reporting to the DEC of water withdrawals. The DEC should be given discretion to require an applicant pay the expense of third-party monitoring (selected by DEC) to ensure compliance with all permit conditions throughout the life of the permit.
- xii) The legislation should include provisions for private rights of action, including the right to seek attorney's fees should it become necessary for citizens to enforce permit requirements and limits.
- xiii) The legislation should provide that following the submission of a water withdrawal permit application and a preliminary determination by DEC the agency will post the application online for 60 days to allow for public comment. Following public input, the Commissioner of DEC will issue a draft water withdrawal permit and provide an additional public comment period of 60 days followed by a public hearing on the draft permit (additional adjudicatory hearings if necessary) consistent with the requirements of 6 NYCRR part 624.4.
- xiv) The full cost of the permitting process should be borne by the applicant.

## **2) Allow Municipal and/or Town Control**

Allow municipal and/or town control over permitting, siting and certain construction and operational parameters in accordance with local land-use regulations, noise ordinances and other local laws. Require disclosure of development plans far enough in advance to allow for planning and bonding for bridge and roadway use.

## **3) Baseline Water Testing**

Require independent baseline water quality testing of potentially impacted public and private drinking water sources, financed by energy companies.

## **4) Complete Public Disclosure of Chemicals**

Require complete public disclosure of the composition of fracturing fluids (including concentrations) and drilling wastewater constituents (as determined by analytical testing) that are recovered from the hydraulic fracturing process.

## **5) Fracturing Fluids and Wastewater**

Require closed storage and pre-treatment of fracturing fluid and wastewater from natural gas operations. Prohibit open surface storage of fracturing fluid and wastewater from natural gas operations. Storage duration for such waste water must be controlled by a permitting process for the storage facility. Disposal of such fluids and wastewater must be preceded by approved treatment processes to reduce hazardous components in compliance with the **Federal Water Pollution Control Amendments of 1972**, the **Clean Water Act of 1977** and the **Water Quality Act of 1987**.

## **6) Protection from Uncontrolled Releases of Gas and Fluids**

Mandate setbacks from private and public water sources that are adequate to protect them from uncontrolled releases of gas and hydraulic fluid, which, according to NYSDEC historical spills data, can migrate thousands of feet in minutes. Impose strict reporting requirements for uncontrolled oil and gas releases consistent with New York State Navigation Law.

## **7) Environmental Remediation**

Impose strict financial liability on energy companies for environmental remediation costs. Require energy companies to post performance bonds or acquire pollution clean-up insurance prior to initiating site work. Allow access to New York State's Spills Remediation Fund for emergency clean-up related to natural gas drilling contamination releases.

## **8) Fiscal Responsibility**

New York State residents not directly involved in the exploitation of the natural gas resources of the State and the attendant operations should be "fiscally neutral" in their tax liabilities. These drilling and production operations should be self-sustaining through the cost of permits, fees and taxes to the State and locales in which the gas drilling and production is taking place. For example, the permit fee structure to finance adequate staffing at NYSDEC to handle the permitting and monitoring of the natural gas drilling operations. The cost of training of local emergency response personnel to support drilling operations should be handled through fees and taxes which are returned to the appropriate emergency support groups.

## **9) NYS Evaluation of Program**

Before allowing drilling to proceed, NYS should conduct a comprehensive analysis of statewide impacts of natural gas development, using a “full build-out” scenario based on the maximum allowable wells per acre and share the results publically.

### **Summary**

The risks and liabilities associated with the techniques of horizontal drilling and hydraulic fracturing of underground deposits of natural gas can only be identified through the experience of such drilling in other parts of the country, for example in Wyoming, Colorado, Texas and Pennsylvania. The problems that have arisen in these drilling experiences are problems that New York State should avoid when drilling is permitted. Our association’s attempt to lay down some minimum criteria for such drilling is a first cut at addressing some of the problems experienced in other states. It is undoubtedly an incomplete list and as our knowledge and understanding of the process and its experience develops, these requirements may be revised.

Our association is encouraged by proposed actions in the New York State Legislature such as the bill introduced by Assemblyman Brennan (A 8748) and Senator Duane (S 6244), which propose many controls on the drilling process that will assure environmental protection. While the bills are focused on the New York City watershed, the principles embodied in this proposed legislation should apply across the entire State of New York.