Prior to Gas Drilling: Actions for Local Governments by Sue Smith-Heavenrich <u>sueh@broaderviewweekly.com</u> Broader View Weekly, May 15, 2009

A number of concerned citizens from Spencer, Van Etten and Candor joined with 200 others for a May 6 forum in Ithaca to learn how they can protect their communities from the effects of drilling in the Marcellus Shale. Dr. William Pammer, Commissioner of the Sullivan County Division of Planning and Environmental Management, explained the authority local governments have in regulating industrial gas drilling activities. He also outlined steps municipalities can take to protect their community infrastructure.

Dr. Stephen Penningroth, executive director of the Community Science Institute in Ithaca, addressed issues of water quality and potential contamination. Ezra Sherman, of Shaleshock Citizen's Action Coalition, moderated the forum that also included Don Barber, Caroline Town Supervisor and chairman of the Tompkins County Council of Governments

"I grew up in Danby in the 1950s," Barber said. "We had a well drilled into the Marcellus – though it wasn't very productive." Barber reminisced about how every few years his parents were asked to lease their land for a few dollars per acre. Then within the past few years, as the interest in unconventional gas grew, the landsmen returned asking landowners to once again sign leases.

While the drilling technology has changed, encompassing horizontal drilling and hydraulic fracturing (fracking), landowners signing leases are remembering the old vertical wells. This new technology is different, Barber emphasized.

"This [drilling in the Marcellus] can be the biggest land use change since we cut down the trees to farm," Barber told landowners.

Work Together

"Drilling for natural gas is going to be a reality," Pammer said. He stressed the need for town and county governments to work together, developing multi-municipal permit systems. Drilling for gas in shale is an industrial undertaking, and Pammer asked, "How do we make sure it is done in a responsible manner?" He then shared recommendations made by the Sullivan County Gas Drilling Task Force.

Pammer reminded people that the NYS Department of Environmental Conservation (DEC) will publish the draft Supplemental Generic Impact Statement (dSGEIS) sometime soon. There will be a short period of time for comments, and it is important that towns make their voices heard.

"Your comments will help form the basis of new regulations," Pammer said. Town and county officials need to emphasize that they are permitting entities, Pammer added. "That gives you status as an involved agency during the SEQRA process."

The Environmental Conservation Law (ECL) requires gas companies to submit a Notice of Proposed Drilling Operation to municipalities. The problem, observed Van Etten Town Councilman Joseph St. Angelo, is that the notification often comes too late – or not at all. To keep up with permit applications and other actions, Pammer recommended that municipal officials monitor DEC's weekly Environmental Notice Bulletin (ENB).

Pammer then outlined specific pro-active steps towns could pursue prior to drilling activities. Because gas drilling activity generates high volume truck traffic, it is vital that towns and counties complete a study of the structural integrity of their roads and infrastructure. This study will serve as a "baseline" for future damage reports.

Town and county highway superintendents need to know the cost per lane-mile of each road, the composition of the roadways, and the structural capacity for each type of road. A traffic study completed for a town in the Texas Barnett shale showed 582 one-way truck trips to an individual drilling site over a period of 40-45 days.

Municipalities should revise driveway permit fees for residential, commercial and industrial use, and require a site plan to accompany each permit. Officials should also require drilling companies to list the contents of fracking chemicals.

Test Your Water

"One of the biggest impacts of gas drilling will be on our ground and surface water," Steve Penningroth said. In addition to the consumptive use of water, is the fate of water after it has been used in fracking. Then too, are the concerns about potential casing failure and the possibility that fracking pressure could generate fractures that would allow water contaminated with fracking chemicals to migrate to aquifers.

Water contamination is more likely to result from spills and accidents, Penningroth said. "Accidents do happen and we can't foresee everything." Unfortunately, the burden of proof falls on landowners to show that wells have been contaminated by drilling activity. Therefore it is vital that people conduct baseline water quality tests, Penningroth said.

It would cost thousands of dollars to test for every possible contaminant. But there are half-a-dozen chemical categories that could easily be tested: brines, acids, bulk organic chemical (such as guar and bentonite), heavy metals, radioactivity and methane. Testing for these should cost closer to \$400-\$500, Penningroth noted, and these are tests any certified lab can do.

While landowners may negotiate for the gas company to pay for water testing as part of their lease, unleased landowners do not have that option. "But if you don't have that baseline testing, you won't be able to prove what your water quality was like prior to any changes brought about after the drilling," Penningroth warned.

A proposed NYS Assembly bill (A4614) would require oil and gas companies to conduct water testing prior to drilling activity. The bill would also direct DEC to follow up on landowner reports of contamination by conducting an investigation. However, that bill would only cover tests of domestic water wells within 1,000 feet of the gas well and, as one landowner pointed out, aquifer contamination could extend beyond that limit.

To read the Sullivan County Drilling Task Force report, go to http://co.sullivan.ny.us; click on the Department of Planning and Environmental Management.