Gas Industry Woos Locals by Sue Smith-Heavenrich Broader View Weekly, October 17, 2008

About 100 people showed up at the Owego Apalachin Middle School for an industry-sponsored information forum on Tuesday, October 7. Members of the Independent Oil and Natural Gas Association of NY (IOGA-NY) hosted the forum in an effort to "clarify misconceptions and provide accurate information" on the process of exploration and drilling.

The panel of industry professionals included Brad Gill, executive director of IOGA-NY, John Holko, president of Lenape Resources, and Randy Hansen, president of Elexco Land Services Inc. Representatives from Fortuna Energy also contributed to the discussion.

"Drilling is not new to New York State," Gill said during an overview of the history of gas exploration in NY. He emphasized the number of wells in the state (nearly 75,000) and the industry's safety and environmental record. He emphasized the economic advantages, saying the gas industry "provides economic opportunity for depressed regions of upstate NY."

Hansen shared his expertise in leases. "Every company modifies the leases to suit the area," he said, echoing comments by the attorney general's office that there is no such thing as a standard lease.

Hansen reminded landowners of the importance of reading through the lease language. "Unfortunately, with the fever pitch of leasing over the past year you'll find that most landmen have less than five years of experience," he said. Hansen then walked people through the different clauses of a lease, explaining the substance and intent of each clause.

He also touched on some issues that had landowners puzzled: what happens when land changes hands or an owner dies? How can we insure that land is restored properly? And what about that "free gas" clause?

Gill gave an overview of the geology of the Marcellus formation. "This is a very large field," he said referring to the 54,000 square mile area. "But," he cautioned, "just because your property falls within the area, that doesn't mean it will be the ideal place to drill."

Gill briefly mentioned how seismic data is gathered and evaluated, and invited people interested in more detail to speak with him after the forum.

Holko, who operates a drilling company, explained the process of drilling a well and the reasons that companies are interested in horizontal drilling. Unlike oil, gas trapped in shale is not collected in pockets. Instead, it is trapped within the rock, and the driller needs to have as much contact with rock surface as possible to release the gas. Holko

pointed out that with horizontal drilling you may see larger surface pads, but it reduces the overall number of wells needed to exploit the resource.

One of the themes throughout the discussion was that DEC imposes strict permit requirements. Holko described how well casing is set to reduce groundwater contamination. When an energy company applies for a permit, it must supply DEC with specific information detailing how they will comply with the regulations laid out in the Generic Environmental Impact Statement (GEIS).

For example, the GEIS requires drillers to install casings and cement the bore hole; use methods that prevent groundwater contamination, and properly contain drilling and fracking fluids.

"Fracking," Holko said, "is not new. It was developed in the 1940's and has been in use since then." The controversy isn't about the technique, but the chemicals used in the process.

"Most of the fracking fluid – about 94.5 percent – is made of water and sand," Holko said. "The additives make up only a small part." He emphasized that while not all stimulating (fracking) agents are the same, there are some categories of agents that are used.

"Flomax 70 is a non-ionic micro-emulsion surfactant used to increase the recovery of injected water," Holko said, pointing to a slide. After describing how much is used, he explained that surfactants are commonly used in detergents and fabric softeners. What frustrated some of the listeners was his reluctance to reveal the chemicals in the surfactant.

In later comments to *Broader View Weekly*, Holko said, "I can't list ingredients because every company uses their own recipe. We operators buy what works." He admitted that certain materials are less toxic than others, such as those used in offshore drilling, then added, "Pretty much, that's the direction the industry is heading."

"We use small amounts," Holko continued. He might use 2 gallons of a chemical for every 1,000 gallons of water. That's 2,000 – 6,000 gallons of chemical for the 1 - 3 million gallons of water required to frack a Marcellus well. "But you have to realize that the active ingredient is present in an even smaller percentage," Holko said. He couldn't give specifics, but when pressed did say that landowners have a right to ask for MSDS (material safety data sheets) for the chemicals used on their property.

When asked for details about specific practices drilling operators put in place to protect the quality of soil and water resources, the industry representatives pointed to DEC regulations. New York, they said, is the most highly regulated state around. For some folks, that offers little reassurance.