

**STEBEN COUNTY NATURAL GAS TASK FORCE STEERING COMMITTEE**

*Friday, October 8, 2010*

*1:30 p.m.*

*Legislative Chambers*

*Steuben County Office Building*

*Bath, New York*

**\*\*MINUTES\*\***

Committee: Patrick F. Donnelly, Chair  
Mark R. Alger  
Amy Dlugos  
Joseph J. Hauryski  
Kathryn Muller  
Dave Erwin

Advisory Members: Peggy Coleman  
James Grace  
Mark Schlechter  
James Sherron  
Alexander Wahlig

Sub-Committee Members: Lisa Baker, Housing  
Marvin Rethmel, Housing  
Dan Hamilton, Roads & Infrastructure  
Elaine Swiler, Roads & Infrastructure

Others: Philip A. Palmesano, Legislator  
Gary B. Roush, Legislator  
Randolph J. Weaver, Legislator  
Len McConnell  
Ed Young  
Rachel Treichler  
Richard Bills

**I. CALL TO ORDER**

Chairman Donnelly called the meeting to order at 1:30 p.m. He introduced William Kappel, Hydrologist with the United States Geological Survey. He is here today to give a presentation regarding the Marcellus and Utica Shales.

Mr. Kappel stated that today he is here to talk about the potential for natural gas production in the Marcellus and Utica Shales. He explained that characteristic wells will be drilled to determine if there is gas, how much, and if there are any byproducts that will need to be dealt with. There are three layers of Marcellus Shale; Oatka Creek, which is shale; Cherry Valley, which is limestone, and Union Springs, which is shale. If a gas company puts multiple wells on a site, there will be a long-term rate of return. For every one thousand feet they drill down, they are using one million gallons of water. Mr. Kappel stated that New York State would like to see one well pad per square mile, however, that will depend upon the leasing agreement the gas company has with the property owner. The fractures they make in the shale are paper thin. The drill cuttings can range anywhere in size from fine sand to the size of a fingernail. When the gas companies come in to do drilling and hydrofracking, they are looking at using four sources of water: municipal, surface water, ground water or inter-basin transfer. The Susquehanna River Basin requires permits for any use of water from the basin and they will monitor all sources of water for fracking. He stated that all shale has NORMS (naturally occurring radioactive materials); however the breakdown of those materials is an area of concern.

*Secretary's Note: An audio recording of Mr. Kappel's presentation, as well as a copy of the slide show and fact sheet, are filed with the official minutes in the Clerk of the Legislature's Office.*

Question – Once the big rigs leave and they are doing the hydrofracking, from how far away will you be able to see the wells? Mr. Kappel replied at night, the well heads will look like Christmas trees. There are many lights for the workers to be able to see. The view shed will depend upon where the pad is located. New York State would like to see six to eight wells off of one pad. With regard to noise pollution, the SGEIS requires hospital-grade mufflers and also requires the gas companies to keep light pollution down, however, the impacts will be there.

Question – Has there been any research on the impact of drilling to wildlife? Mr. Kappel replied a series of questions have been raised by Fish & Wildlife Services. Habitat fragmentation and the fact that the gas companies will not allow vegetation to grow back on the pipelines are concerns. Those concerns were not addressed in the SGEIS.

Question – Will mineral rights be taxed? In Steuben County they are purchasing land and the land owners are keeping the mineral rights. Mr. Kappel replied Pennsylvania was talking about a severance tax.

Question – What about the noise at the compression stations, which stay after all of the drilling is completed? Mr. Kappel replied there are rules and regulations in the SGEIS. The gas companies can do things, but there will still be a low drone of noise. It will not be eliminated.

Question – With regard to metering, who checks the calibration? Mr. Kappel replied the gas companies do that. They want to know how much gas is going to the pipeline and are very good with self-monitoring.

Question – Can you explain the leasing? Mr. Kappel stated that due to compulsory integration, which was formulated by the Department of Environmental Conservation and the gas companies, 60 percent of the mineral rights of a unit has to go to the gas company. The remaining 40 percent is paid to the property owner at a reduced rate for the amount of gas coming out. In the lease, the property owner can stipulate what they want. If you sign the lease and don't read it, you become a partner and you most likely would lose mineral and surface rights. Property owners aren't required to do anything, but they should get a good lease lawyer.

Question – What happens to the flowback water? Mr. Kappel replied in Pennsylvania, they have 10 percent flowback which is mixed and reused. They are also shipping the flowback water and deep injecting it in Ohio. That's what is happening currently. It would be a good idea for the Department of Environmental Conservation to have a chain of custody from the first drop of water used until it is disposed. In Pennsylvania, the Susquehanna River Basin Commission follows the chain of custody.

Question – There are so many aspects to natural gas drilling that need to be monitored. How realistic will that be with the current economy and the Department of Environmental Conservation that they will have the capability to monitor these operations and make sure that they are done relatively safely? Mr. Kappel replied right now the Department of Environmental Conservation has less than 20 people monitoring gas well drilling. The Governor's budget proposed the hiring of 50 people, but he doesn't know if that happened. Mr. Kappel stated that he doesn't believe we have the manpower needed to support this operation.

Question – Are the numbers for the radioactivity of the flowback water public information? Mr. Kappel replied yes. Approximately 13 DEC representatives went to a number of different sites and got flowback samples. The numbers for those samples were as high as what I presented to you today.

Question – Since the gas companies are not sharing their seismic data, if a landowner or municipality wanted to understand the geology of their property, can they hire someone to do a seismic study and how much would it cost? Mr. Kappel replied a micro-seismic study costs approximately \$2 million for one well site. The borehole information that the gas companies obtain from studies is their property. We, meaning the USGS, would like to see more sharing of that information. There is about a 50 – 50 chance that your property is in black shale and you would have measurable methane. It is good for property owners to know the quality of their water. A good quality test of your water would cost between \$1,500 - \$2,000 and will test for the presence of heavy metals.

Question – What do the gas companies do with the drilling fines/sludge? Mr. Kappel replied the old way is they would pump water out of the pond and then treat the water. They would then poke holes in the liner, fold it up and bury it on site. Because the Marcellus Shale is radioactive, the radium is of concern if it goes into the environment. Chemung County is taking drill cuttings from Pennsylvania. In Pennsylvania, the drilling sludge is petroleum based and they put that into a secure landfill. The drill cuttings themselves are not a problem, it is the sludge/mud.

Question – How far out does the fracking solution go from the casing? Mr. Kappel replied that varies by the formation and by what is down there. With the horizontal drilling, the solution radiates in a spheroid or elliptical shape and can go from 100's to 1,000's of feet.

Mr. Donnelly thanked Mr. Kappel for his presentation.

Respectfully Submitted by

Amanda L. Chapman  
Deputy Clerk  
Steuben County Legislature

**NEXT MEETING SCHEDULED FOR  
Friday, November 12, 2010  
1:30 p.m.**