Fortuna Explains Plans for Mallula Well by Sue Smith-Heavenrich Broader View Weekly, January 30, 2009

"We'll try to do better." That was the message residents from Van Etten and the surrounding communities heard from Fortuna Energy this past Monday night. Residents also received assurances that their wells around the Mallula #1 unit will be tested prior to the injectivity tests.

About 60 people showed up at the January 26 information session that Fortuna hosted at the Spencer-Van Etten High School. The engineers and community-relations people hoped to alleviate citizens' concerns about the proposed testing of the Mallula Well.

# **Explaining the Testing**

In their current drilling operations Fortuna collects well wastewater and flowback in tanker trucks, and transports it to a wastewater treatment plant. This is not cheap, and Fortuna is exploring other options for disposal. One option is using underground injection wells, and the engineers believe the Mallula Well may be suitable for this use.

Janice Lobdell, who supervises community relations and Fortuna's "Good Neighbor" program, presented a brief slide show describing the steps the company has taken so far – they have yet to actually run any tests on the well.

In the summer of 2008 Fortuna applied for a State Pollutant Discharge Elimination System (SPDES) permit. This permit, good for six months, allows for testing only. They will need another permit if they choose to use Mallula Well as a disposal well, Lobdell explained.

"As required, we published a notice in the Van Etten paper, but received no comments," Lobdell said. (Fortuna put the notice in the Star-Gazette, which they believed to be a Van Etten paper.) They received their permit in October.

"The SPDES permit will allow us to pump a maximum of 2 million barrels of water into the well during the test," explained Russ Erlandson, chief of field operations. He clarified that the test can run no more than 48 hours. By measuring the pressure of the water they pump in, the engineers can determine whether the well is allowing the water to flow back into the graben – the area from which natural gas is extracted.

Pressure gauges in the well bore allow engineers to keep tabs over the course of the test. The engineers, alert to the potential for a blow-out or other problem, immediately halt the test in the event of a sudden pressure change.

Fortuna believes the Mallula Well is suited for such a test because it is deep, nearly two miles – well below any aquifer that would be tapped for drinking water supplies.

Wastewater will be stored in a graben (the gas reservoir in the Trenton Black River deposit) which lies beneath "layers of impermeable rock", explained Lobdell. One of these layers is Utica shale, a deposit – one citizen pointed out – that also may hold natural gas.

Lobdell also pointed out that the cement casing isolates the well from the aquifer. The integrity of the casing is tested throughout the life of the disposal well.

"After testing, our next steps will include posting the test results on our website and communicating them to the Van Etten Town Board," Lobdell said. "Then, if it looks viable, we will follow the regulatory requirements to license it as a disposal well."

## **More Questions than Answers**

Although the Mallula Well testing permit allows only injection of brine and wastewater from Trenton-Black River wells, many people raised concerns about potential use of the well to store Marcellus waste. They also wanted to know more about any toxic constituents of the wastewater.

"I'm not going to call it 'toxics' because it is produced water," Erlandson said, pointing out that the wastewater Fortuna proposed to pump into the Mallula well came out of a similar type of gas well.

People at the meeting clearly wanted to know more about how the brine from the Konstantinides well – brine destined for the Mallula Well test – was analyzed, and why lead, barium, and arsenic weren't on the list of tested constituents. People asked whether Fortuna tests for Normally Occurring Radioactive Material (NORM) – they don't – and whether the Toxics Release Inventory (TRI), a program administered by the EPA, will apply to Marcellus flowback.

Individuals also asked how Fortuna would guarantee the integrity of a cement casing indefinitely into the future; how horizontal fracking in layers above Trenton-Black River will affect underground injection wells; and whether Fortuna could guarantee that they would have safe water.

Frustrated by the lack of answers, one man queried, "Why are there no chemical experts or geologists from Fortuna here tonight?"

#### **Fortuna Promises Water Tests**

By the end of the meeting it was clear that residents wanted to hear that Fortuna had an investment in protecting landowner's drinking water, and that their unanswered questions would not be ignored.

Collin Guze, an engineer, explained that in applying for the SPDES permit Fortuna tested drinking water wells within an "area of influence" around the well. "Generally it's a quarter mile in radius," he said, "although it can be as high as one mile."

"I live in the Mallula drilling unit, and I didn't get my well tested," one person called out. Discussion between landowners and the Fortuna engineers made it clear that everyone in the unit is concerned about water quality.

"We can test everyone in the unit," Erlandson said. When landowners who live near the boundary of the unit objected to being excluded, he offered to test all water wells within 1,000 feet of the boundary as well.

"We'll do a pre-test. That's not an issue," Erlandson said. He said Fortuna would pay to have water tested by an independent lab, and added, "We can have it documented and posted on the website."

### **Fortuna Promises Better Communication**

In response to numerous complaints about the lack of communication between Fortuna, landowners, and town officials, Lobdell promised to do better.

"We haven't done a stellar job," Lobdell admitted. "And you're right to be upset about the Mallula Well. That's why we started this group," she said, referring to the Good Neighbor outreach program.

Lobdell directed people to check the website (www.fortunaenergy.com) for their newsletters and other information. She promised to post the list of chemicals that Fortuna provides to landowners and said that they plan to update the website on a weekly basis.

Mark Scheuerman, in charge of Fortuna's media relations, added that the company would present another information forum, and bring geology and chemical experts to address the questions left unanswered by Monday night's session.

"We'll advertise that and put it on the website," Lobdell said.

## **SIDEBAR**

What's a SPDES permit?

When applying for a SPDES Permit the applicant fills out a DEC application and may also be required to provide:

- A map showing the precise location of the project

- A general site plan with that shows the property to be affected by the project, and the location of the wastewater treatment facilities to be built in relation to natural landforms (hills, creeks, wetlands, etc.)
- Information necessary for the requirements of the State Environmental Quality Review Act (SEQR) and the State Historic Preservation Act (SHPA).
- Other relevant information which DEC staff may determine is necessary to adequately review and evaluate the application, such as an engineers report or letter from the county health department.