Frack Fluid Recycling Plant Proposed for Owego

Residents concerned about water contamination, truck traffic by Sue Smith-Heavenrich Broader View Weekly, November 6, 2009

At their October 27 meeting the Town of Owego Planning Board listened to a proposal for siting a frack fluid recycling treatment plant on Taylor Rd. Andrew Blocksom, one of the owners of Patriot Water Treatment, LLC explained his plans to build a facility that will remove solids and salts from frack fluid and send the treated fluid back to the well sites to be re-used in fracking the Marcellus shale.

Despite the lack of advance notice, about 50 residents showed up at the town planning board meeting. Some hoped to learn more about the treatment facility, but many were there to voice their opposition to the proposed truck route which called for trucks to travel up Day Hollow Road and then down Bodle Hill to the Taylor Road facility.

As lead agency for this project, the town planning board has the authority to approve or reject the site plan. After listening to the company's proposal and an hour or more of citizen comments, the board decided that they need more information before making a decision. They tabled the request for approval and chairman Robert Rieg sent Blocksom home with a long list of items to address before the next meeting.

The Recycling Process

The biggest concern voiced by both residents and planning board members was the lack of detailed information about the recycling treatment process. Blocksom's overly-simplified description left people wondering what happened to the frack fluid when it entered the facility and where would the solids and salts be stored after their removal from the drilling waste fluid. People also wanted more details about the proposed impoundment and what actions Patriot Water Treatment would take in the case of a spill or a flood. Perhaps the thing that bothered people the most was Blocksom's continual reference to frack waste as "non-hazardous" and "non-toxic" material.

It turns out that Patriot Water Treatment, LLC is a brand new family-owned business. Bob Dickey, son Ben, and son-in-law Blocksom created the company to offer what they feel is a much-needed service to gas companies expected to be drilling in the region next year. Blocksom explained that their company will lease the frack fluid treatment equipment from Aqua-Pure Ventures Inc., of Calgary, Alberta.

The facility proposed for Taylor Road will employ a process called "mechanical vapor recompression evaporation" (MVR), said Patrick Horner in a telephone interview. Horner, the engineering team leader at Aqua-Pure, explained that they have nine well-site units using this process in Texas and they are working with Eureka Resources in Williamsport, PA to establish a permanent facility much like the one proposed for Owego.

Frack fluid arriving at the Patriot treatment facility will go through a series of stages. During the first stage, the pH (acidity or alkalinity) of the water is adjusted. This is when metals and solids precipitate, or drop out of the frack fluid. The solids go through a de-watering process and, once they are dried into cakes, transported to an industrial waste facility.

Meanwhile, the remaining liquid is subjected to the MVR process to reduce the salts. One of the problems both Blocksom and Horner raised is that fluid with extremely high levels of salts, above 80,000 to 100,000 parts per million (ppm), are hard to distill. "And the Marcellus wells tend to have higher levels of salinity in their flowback," Horner said.

Fluid that has low salinity, and distilled water resulting from the treatment process, will be trucked back to the wells for use in fracking. Any fluid that is too salty will be sent to underground injection wells, said Blocksom. Current plans are to send that water to injection wells in Ohio.

Traffic is an Issue

A local recycling treatment facility for frack fluids will not only reduce the amount of water withdrawn from local rivers and streams, but should reduce the number of trucks transporting frack and flowback to treatment facilities out of state. Even so, the amount of truck traffic estimated for the proposed Patriot plant seems excessive to some residents.

Once they get up and running, Blocksom expects to see up to four trucks pulling into the treatment facility every hour, 24 hours a day, seven days a week. Given the curves on Day Hollow and the steep slope of Bodle Hill, many people wondered how the truck route was planned.

"Why not follow the regular truck route through town?" asked one resident. Another wanted to know whether the planning board could place a route restriction on the trucks, and a number of people expressed concern about taxpayers underwriting road maintenance for repairs, as each truck will weigh 80,000 or more pounds.

One person pointed out that there are four churches and a preschool within a couple minute walk from the site. Four trucks rumbling by each hour on Sunday morning will certainly disturb the quiet of church, he said.

Homework for Patriot

"The traffic will be the tip of the iceberg," chairman Rieg said at the close of public comments. After noting that the frack recycling project would help, if done right, Rieg said he felt the board needed more information and sent Blocksom home with a list of questions.

Rieg asked that Patriot Water Treatment, LLC provide the planning board with a list of the byproducts that will be coming out of the facility. He also requested more details of the site plan: sizes of storage tanks and pools, information about shut-off valves and safety equipment.

"We need a traffic generation plan," Rieg said. He also asked if Blocksom had completed any stress analysis of road wear and tear. In response to public questions about the lack of information on Patriot Water Treatment, LLC, Rieg asked Blocksom to provide resumes for all the owners of the business.

The planning board will resume their review of the site plan at their next meeting. In the meantime, people may submit their comments to Debra Standinger, Planning & Zoning Administrator, 2354 NYS Route 434, Apalachin, NY 13732.