

LPG Storage Proposed for Watkins Glen

DEC requests environmental study

by Sue Smith-Heavenrich

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More than two years ago, Inergy, a Kansas City-based fuel storage and pipeline company, purchased the U.S. Salt plant in order to convert it into a storage facility for liquid petroleum gas (LPG). The plant, located along the southwestern shore of Seneca Lake and just a couple miles north of Watkins Glen, would make good storage caverns for the estimated 88 million barrels of propane and butane the company hopes to store.

Converting the caverns to storage would require a number of construction projects. The company would have to build connections to an existing interstate pipeline, put in compressors, build a new rail-and-truck transfer facility and put in LPG storage tanks. They would also need to build a 14-acre pond to hold brine pumped out of the caverns when they need to store the gas products.

Last February, Inergy executives told Wall Street analysts they hoped to have their Finger Lakes LPG storage facility up and running sometime in the summer. They had even asked the Town of Reading Board to act as lead agency in the permitting process. Everyone, it seems, knew about the proposed LPG storage facility except the people who lived there.

“I just found out about this last week,” was the phrase repeated most often by the dozen or so Watkins Glen and Schuyler County residents who made the trek to Ithaca for an information meeting on January 27. The overwhelming response from residents living in the area was incredulity. Perching a 88-90 million gallon brine pond on the steep hillside only a thousand feet from Seneca Lake is an “accident waiting to happen,” they said.

Peter Mantius, who lives in the Village of Burdett just across the lake from the salt mine, first heard about the LPG storage project 15 months ago. “It struck us as an odd way to enhance the Seneca Lake Wine Trail,” he mused. A semi-retired journalist, Mantius wanted to learn more about the project, so he submitted one Freedom of Information letter (FOIL) after another to the Department of Environmental Conservation (DEC).

While DEC has come through with some of the information, Mantius says they have denied him access to the critical information: reports on the suitability of the salt caverns for LPG storage, safety procedures for emergency shut-downs, and the reports made by the state geologist.

Potential Problems

Dr. Thomas Shelley, a chemical safety and hazardous materials specialist at Cornell University, addresses some of the problems associated with storing pressurized gases in salt caverns. Many problems result from handling accidents, he said. “If you have industrial quantities of anything, spills will happen.”

Spills often result from poorly maintained equipment and equipment failure, Shelley noted. Another major cause is human error, often resulting from lack of training. Methane and other greenhouse gas leaks happen on a regular basis. The industry has the capability

to detect and fix these leaks, but it is expensive, Shelley said. That means only the larger companies can afford to do so.

There is always a chance of fire or explosion with LPG storage. Both Mantius and Shelley referred to a number of incidents in the past 20 years where salt caverns have collapsed or pipeline leaks have led to explosions that have rocked towns within 3 miles of the storage facility.

There are potential impacts on both surface water and aquifers, Shelley said. A leak can allow gases to migrate long distances through soil and groundwater. And, with a brine pond – especially a large one located on such a steep slope – there is always concern about potential failure. The brine pond, Shelley noted, will require digging into the hillside on one end and constructing a solid dam on the other. Yet DEC has not acknowledged the dam as a concern.

The biggest issue, Shelley said, is whether residents want their town to be turned into an industrialized landscape. “The Finger Lakes is a highly sought after destination for tourists,” he said. Projects of this scope change the landscape.

Traffic will be an issue. There will be more trucks hauling LPG to the facility, trucks hauling brine to the pond, and more rail traffic. Truck traffic is the largest contributor of greenhouse gases, Shelley noted. Not only that, but constituents in the exhaust will combine to create ground-level ozone. That’s something the wine growers in particular should be concerned about, he said, as ground-level ozone reduces yields and grapes are especially sensitive.

Shelley, whose background is in geology, pointed out that the Finger Lakes geology is one of fractures and joints. “We’re sitting on top of 11,500 feet of highly fractured rock,” he said. “And we do have the occasional earthquake.” His main concern is that some of the components in the liquefied petroleum gas are soluble and can dissolve and migrate through the salt. They could migrate from a storage well into another cavern or formation.

“There’s a lot of radioactivity in these formations,” Shelly reminded people. What scientists don’t know is whether LPG or migrating components can, and will, pick up any radioactive isotopes.

DEC Asks for Environmental Study

Local residents aren’t the only ones with questions for Inergy. In November the DEC determined that the Finger Lakes LPG facility might have potentially significant impacts on the environment. They outlined a number of concerns in a draft scoping document, identifying issues Inergy must address during environmental review.

DEC is concerned about public safety issues surrounding the handling and containment of LPG. They are concerned about the integrity and stability of the proposed brine pond, and want Inergy to address the potential for a catastrophic structural failure on the surface, as well as the potential for the ground to subside due to underground storage operations.

Other concerns include the potential for surface and groundwater contamination, impacts on transportation – including additional rail traffic over the old Watkins Glen trestle

spanning the gorge – and noise impacts on a rural area. The environmental review also calls for further public hearings and additional opportunities for the public to submit comments.