

&gt;

By Peter Mantius

Print Page

August 17, 2014 2:26PM

## Marcellus Watch | Peter Mantius

Twenty years ago, the roof of the largest salt mine in North America collapsed in the hamlet of Retsof, 35 miles southwest of Rochester.

Twenty years ago, the roof of the largest salt mine in North America collapsed in the hamlet of Retsof, 35 miles southwest of Rochester.

Fresh water from a major aquifer above gushed in to the sprawling mine at the rate of 18,000 gallons per minute. Giant sinkholes formed, one growing to 800 hundred feet across. Highways buckled. Bridges cracked. Methane and hydrogen sulfide gases accumulated in the basements of a hotel, homes and water wells. Other wells went dry across the Genesee Valley.

The effects of the disaster linger. Last December, state regulators quietly gave up their long battle to save a second large aquifer under Livingston County that is now being permanently ruined by brine leaking from the flooded salt mine. The ground nearby continues to sink.

In the early 1990s — as today — regulators were complacent, non-confrontational, in the thrall of presumed corporate expertise. And why not? The Retsof mine had operated continuously for a century and had grown nearly as large as the island of Manhattan.

In response to early signs of structural trouble in 1993, mine owner AkzoNobel turned to a controversial mine support technique that only accelerated the disaster. Regulators slumbered as minor collapses led up to the big one on March 12, 1994, which registered 3.6 on the Richter scale for earthquakes.

Now a new generation of regulators weighs a plan from another corporation that promises that its technology will subdue all geological issues in salt caverns next to Seneca Lake, 70 miles east of Restof.

Houston-based Crestwood proposes to store highly-pressurized natural gas (methane) and liquid petroleum gas (propane and butane), or LPG, in caverns that AkzoNobel once helped drill.

The Seneca Lake caverns are many times smaller than the Retsof mine. But they too are subject to roof collapses that could allow pressurized gas and LPG to escape with disastrous consequences, according to independent geologists.

You'd never know that listening to the Federal Energy Regulatory Commission or the New York State Geological Survey.

FERC has final authority on Crestwood's bid to expand its gas storage. In May, it approved for storage use a cavern that was once completely reconfigured by a 400,000-ton roof collapse. Houston geologist H.C. Clark called FERC's decision to ignore that geologic event an "incredible error."

Shrugging off the criticism, FERC ruled even before it had determined the depth of the rubble pile at the bottom of the cavern. The agency order, which reflected boundless confidence in the company's technological prowess, ran 44 pages.

Andrew Kozlowski of the NYSGS required only two paragraphs to vouch for the structural integrity of caverns that Crestwood plans to use to store LPG.

The state Department of Environmental Conservation has the final say on the LPG storage proposal, but the "state geologist" at NYSGS must also provide written approval.

"I hereby grant approval ... based on my findings that the project will have no adverse impact on the existing geologic environment," Kozlowski wrote in March 2013.

He did not try to support his conclusion or offer any public report addressing the caverns' large rubble piles or the conclusions of other geologists that the rock formations above the cavities were unstable.

Kozlowski is the “acting associate state geologist,” the highest ranking member of the 14-member staff shown on the NYSGS website. He declined my request for an interview last week.

Richard Young, a geologist at SUNY Geneseo who has extensive knowledge of the Retsof mine disaster, viewed Kozlowski’s statement about Crestwood’s LPG plan as inadequate and irresponsible. Young emailed him his own 23-page analysis of its geologic risks. Young said last week that Kozlowski never responded.

The DEC has been reviewing the LPG proposal for five years. Last week the agency said it would hold an “issues conference” to determine whether “significant and substantive issues” raised by Clark, Young and others call for a formal adjudication procedure.

Opponents of LPG storage next to Seneca Lake were elated. Young was more circumspect — for good reason.

In 1995, AkzoNobel had proposed a new salt mine at Hampton Corners, only three miles from the collapsed Retsof mine. Young opposed the project, believing that the ground above the mine would give way far more rapidly than the company was projecting.

The DEC held an “issues conference” on the matter, and two administrative law judges agreed that points raised by Young were ripe for adjudication. But in January 1996, then-DEC Commissioner Michael Zagata overruled both ALJs, canceling formal adjudication. He granted the Hampton Corners permit.

Earlier this summer, a Cornell researcher who uses satellite radar technology to study ground subsidence emailed Young. In his survey of the entire state, the researcher noted, the greatest amount of ground settling had occurred directly over the Hampton Corners mine.

- Peter Mantius is a freelance journalist from Schuyler County who follows shale gas drilling issues. He is a former reporter at the Atlanta Journal-Constitution and former editor of two business weeklies in the Northeast.

---

<http://www.the-leader.com/article/20140817/NEWS/140819751>

Print Page