

Will Cornwall offer toast to alternative to rock salt?

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Article Text:

CORNWALL — Leftover soluble sludge from distilled vodka might someday be used to melt ice and snow on the town's frigid winter roads.

The price of salt is skyrocketing, with the average price the state paid for rock salt this year at \$43.50 a ton, some 25 percent higher than last year, according to the Connecticut Department of Transportation. Towns are dealing with the same price hikes prompted mostly by transportation costs.

First Selectman Gordon Ridgway said the town is exploring different ways of dealing with the sloppy, slippery roads that come with harsh Northwest Corner winters. One option being considered is a road salt alternative: a sugary syrup that is a byproduct of making vodka. The sticky syrup, which can be sprayed directly on roads or on salt piles, is touted as an environmentally safe, effective de-icing agent that reduces the amount of salt needed, eliminates the need for sand, and melts snow and ice to temperatures below minus 30 degrees Fahrenheit. The marketers of the goo say it will save a town money and labor and spare road equipment from corrosion by untreated rock salt.

"It's some sort of super slime," said First Selectman Gordon Ridgway. "It's called Magic Salt, which makes me really not want to try it, but we're going to look at it."

The town has contacted Taconic Maintenance of Poughkeepsie, N.Y., the sole distributor of Magic Salt in New York and in the Northeast, where it deals with 35 sub-distributors, including six in Connecticut.

Taconic Maintenance sells the bulk liquid product and bags of treated magnesium chloride which is used with the spray, or the company will spray a customer's pile of rock salt with the product, company official John Parker said. Spraying regular rock salt reduces its corrosive quality by up to 98 percent, Parker said.

Magic Salt got its start 10 years ago at a vodka plant in Hungary. An engineer at the plant noticed a pond next to the plant never froze, even on the coldest winter days, and he wondered why, Parker said.

The engineer discovered the plant was dumping the sugary liquidy swill left over from the vodka distilling process into the pond. On the other side of the pond, magnesium chloride was leaching in from a farm. The combination of alcohol distillery mash and magnesium chloride, an ice melter, produced a mix that lowered the pond's freezing point to below - 45 degrees. The engineer, Jenő Toth, figured out how to turn the vodka sludge into a syrup. After emigrating to the United States, he patented the product, then sold the patent to the Sears Oil Co., which is marketing the product under the Magic Salt label. It is produced in Jamaica. Magic Salt is the consistency of very thin motor oil or very thick maple syrup and weighs 10.5 pounds per gallon.

The product costs about \$2.25 to \$3.25 per gallon, depending on whether the treated salt is purchased or the company travels to a customer to spray a salt pile. Eight gallons are needed to treat a ton of rock salt. That's pricey, but users say the cost of Magic Salt is offset by the savings in reduced amounts of salt and sand needed and fewer repairs and replacement of equipment.

Cornwall has yet to estimate costs or potential savings should the town try the product. "I love it," said Walter Doyle, highway superintendent of Hyde Park, N.Y. "I've been using it for two years and it cuts down wear and tear on the vehicles, the amount of overtime the town has to pay. We'll go out when it first starts to snow and put it on the roads and then I'm able to send everybody home and we'll come back when there's five or six inches and we plow it and it's wet underneath. It doesn't refreeze," Doyle said.

Doyle said he has eliminated the use of sand altogether and last year, the town saved about \$30,000 by not having to clean up sand in the spring.

In Cornwall, Ridgway had a question outside the financial realm: What about the smell? "Apparently, it really smells disgusting, so you don't want to park your car on the side of the road when it's being sprayed," Ridgway said.

Company downplayed the odor.

"Depends on whose nose it is," Parker said. "It smells like molasses or silage because it's an agricultural by-product. It isn't horribly smelly. You wouldn't notice it on the open road."