

Salt away for winter

It's hard to get salt in the middle of winter.

Just ask the dozens of Iowa agencies that scrambled to replenish their salt stores during the winter of 2007-2008, when some areas of the state received more than 70 inches of snow.

Getting enough salt isn't just a problem in severe winters. It's a problem every winter for almost every agency in the state. And the problem isn't always lack of planning—it's lack of storage space.

But the Des Moines metropolitan area just implemented a solution—a shared salt storage facility.

Planning ahead

The Salt Institute recommends that agencies have 100% of their anticipated annual salt usage on hand before the winter starts.

However, even though agencies can typically estimate how much salt they will need to get them through the winter, they usually don't have the facilities to store it all.

For example, West Des Moines Public Works Director Bret Hodne says the city typically uses around 5,000 tons of salt each winter. However, its storage facility only holds 1,500 tons.

"Even if we start the winter with a full storage facility, we still have to have about 3,500 tons of salt delivered during the winter months," explains Hodne.

Finding (and paying for) salt

Agencies typically contract for their annual supply of winter salt as early as May or June, when prices are lower and contractors have plenty of time to transport the salt from the mine to the agency's storage facility.

The first shipment, considered a preseason delivery, usually arrives by November 1 and contains enough salt to fill the agency's storage building. The remainder of the contracted amount is delivered throughout the winter as the agency's inventory dwindles.

But when agencies need to replenish their salt supplies in the winter months, there is a much shorter turnaround time. Instead of

having 4–5 months in which to deliver the salt, contractors often have only 7–10 days.

Winter also brings a widespread demand for salt across the country.

"In a winter like last year, you'll see situations at the salt mine where they have trucks lined up for over a mile waiting to load salt," says Hodne.

"If you place your order and your trucks have to get in that line, it can take 18-24 hours just to get one of your trucks loaded with salt—if you can even find trucks to haul salt."

The high demand for salt and short timeframe for delivery during the winter months leads to higher prices. Agencies can pay \$5 to \$10 a ton more for salt delivered in the winter months than they paid for their preseason deliveries.

In severe winters, the amount of salt an agency contracted for to get them through the winter may not be enough, and the agency may have to purchase outside the original contract. In those cases, agencies can pay as much as 2–3 times the preseason price, or worse—they may not be able to find salt at all.

A shared solution

To stock up on salt when prices are lower, nine cities in the Des Moines metropolitan area began discussions in 2007 for a shared salt facility. With completion scheduled for December 2008, the Metropolitan Salt Storage Facility consists of two fabric-covered buildings off the I-80/35 corridor in Grimes. Together they can hold 22,000 tons of salt.

Partners include Clive, Des Moines, Grimes, Johnston, Pleasant Hill, Urbandale, Waukee, West Des Moines, and Windsor Heights. The new facility is a five-year lease-purchase 28E agreement between the nine cities and the Metro Waste Authority.



The Metropolitan Salt Storage Facility will hold 22,000 tons of salt.

Each city owns a certain percentage of the total amount, with payment based on the percentage stored. Salt-loaded trucks are weighed at a local certified scale to document each agency's inventory. Once a city has used all of its salt, it will have to bring more in or get approval to buy from one of its partners.

"With this facility, we will pay the preseason price and get all of the salt here before winter begins," says Hodne.

Sharing in other parts of Iowa?

Tom McGovern, assistant to the county engineer of Adair County, says in rural settings, the distance between agencies is too big for them to join together. Marshall County Engineer Royce Fichtner expresses similar skepticism. "The materials need to be close to where they're being used," Fichtner says.

However, Hodne says the goal of the facility "is not to work out of it during a storm, but to have salt in the area that allows the agencies to re-charge their respective salt storage buildings during off-storm periods."

"Having the salt within a reasonable distance from our shop rather than in a mine in Kansas is one of the key benefits of this project," he says.

For more information

For more information about the Metropolitan Salt Storage Facility, contact Bret Hodne, 515-222-3480, bret.hodne@wdm-ia.com. ■