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Highway Deicing...

for the WINTER MAINTENANCE PROFESSIONAL

HOW TO MAKE EARLY SALT DELIVERY PAY OFF

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or several years numerous agencies in Central Iowa have been working together in contracting for winter maintenance rock salt. The City of West Des Moines took the lead in the development and administration of this multi-agency salt contract which has had a tremendous impact on delivery options and the cost of salt for this group. While this partnership started off with just a few cities, it has now grown to over twenty cities and counties in the region. Last year the agencies contracted for over 40.000 tons of salt. While a couple of the participating agencies had the capability to take the recommended minimum of one hundred percent



of their anticipated annual tonnage, most of the entities lacked adequate storage capacity to handle anywhere close to that amount of salt at their facilities.

Lack of sufficient storage is often a major issue for agencies that use rock salt for winter maintenance

activities. A similar scenario seems to develop almost every winter for agencies in this precarious situation. Let's take a look at how things usually transpire in affected entities. In preparation for the upcoming winter the agency usually estimates their left over tonnage from the just-concluded winter. They usually contract for their seasonal salt needs and estimate what they think they can take delivery of pre-season

(before November 1) to re-charge their undersized storage facility. Throughout the pre-winter months they attempt to squeeze in every last grain of salt they can in anticipation of the approaching winter season.

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If the winter is mild in many regions of the country, salt may be readily available and they may "squeak through" the winter unfazed. In more severe winters, however, they see an inevitable chain of events which create a high level of anxiety for managers responsible for maintaining acceptable service levels in their agency. To start things out, you may see a couple of massive ice storms in a region of the southern United States. A week later winter storms begin to develop in another area of North America and the storm systems don't seem to want to let up. Suddenly, there appears to be a huge demand for salt, and then for some "unknown" reason transportation becomes a really "hot" issue.

Now is when the fun really begins. At that point, all snowfighting agencies start dealing with repetitive storms in their local region of the Snowbelt. Salt supplies are depleted and the call for "more salt" goes out. The agency is then given the "bad news" that salt loading lines are extremely long, transportation options are limited and they may have significant delays in getting the several hundred tons of salt they need "immediately". Even though this has occurred many times in the past, the agency is stunned to find out that with the intense pressure on the salt mines and transportation industry, they cannot get the tonnage of salt they need "right now" to maintain acceptable levels of service on their roadways.

After many years in the public works industry it still amazes me that despite all of the available information and the repetitious pattern over numerous years that we still have these "SURPRISE" moments.

At the recent 2009 North American Snow Conference in Des Moines, Iowa, I listened intently as questions were fielded on the state of the salt industry in one of the sessions. It appeared to me from the discussion that some agency managers have the belief that the salt companies have massive stockpiles of salt that they store in facilities at their salt mine locations. Some agencies also seemed to feel that it was the salt companies' responsibility to not only store the salt for them after it is mined or produced, but that transportation should be available at a moment's notice to have this product delivered when they need it. In a perfect world this would be a great scenario but this is where the "dose of reality" sets in.

To the best of my knowledge, a large majority of the salt companies are not in the business to store massive amounts of salt on a year round basis for buyers. They are in the business to mine or produce product and ship it to buyers throughout their markets. The salt industry's perception is that salt companies need to get the salt to the buyer so that it will be in place when they do need it. Since they typically do not own the trucks or railroad

systems that ship the salt, that part of the equation is left up to another segment of the industry.

Ever talk to a truck driver who is number 218 in the back of a mile and a half long line of trucks? If you have, they will probably tell you that most of these haulers transport relatively short distances and that their profitability is greatly reduced when they have an 18-24 hour wait to get loaded. When this occurs many of these operators will find something else to do that does not create significant financial duress for them when truck payments come due or paychecks are handed out. On the other side of the transportation issue, have you ever had some "experience" with the railroad? If you have I am sure you know that "quick" is not always a word that they are used to using when they talk about getting product somewhere, especially a "non-perishable" one.

So where is this discussion headed? Believe it or not, I am a fairly "blunt" person who likes to try and get to the point. Have you ever butted your head against the wall only to find out that it hurts – each time you do it? Have you ever had your head stuck in the sand only to pull it out in amazement to realize that things have not changed much since you stuck it in there? Well I think that many of us in the business of maintaining roads or trying to store salt have been there – the

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agency I work for included. Some of the reasons why: lack of funding, overbuilding on the existing site, community growth which has outpaced facilities, lack of vision by managers, etc. These and many other challenges create some real issues for those of us who still have the major responsibility of providing acceptable levels of service and overall road safety for our respective agencies.

So, you have tried your best to come up with solutions to minimize some of the storage issues you have experienced in the past but have not had much success. Many of us in Central Iowa had the same issue in our area so we decided to try another approach - the group one. While everyone was from an individual agency, many in the group had already seen the benefits associated with banding together on certain projects where there were political, financial or logistical challenges to overcome. If you have not looked at this alternative, vou may want to examine it in the future

As the administrator of the Central Iowa Salt Group, it was easy for me to see that our city was not the only agency that was experiencing significant salt storage issues at their facility. With the amount of tonnage that was being ordered for delivery after November 1, the writing was on the wall each year that there were going to be "issues." On top of that hurdle, it was apparent when

looking at past contracts that there were substantial savings for salt that was ordered for delivery in the prewinter months, before November 1. We had all "beat our heads against the wall" enough times with salt delivery delays and high salt prices during the winter months that it was time we pulled our heads out of the sand and had a discussion about the issue.

To begin the process, we decided to hold a brainstorming session with numerous city and county and DOT staff that had a stake in this regional vision. After the first meeting we determined there was enough interest by the agencies that future talks should be scheduled. After several meetings and extensive discussion, nine municipal agencies formally comprised the group. Those who elected not to participate were still very interested, but faced some challenges or different visions that precluded them from participating in the venture.

We started these meetings in the fall of 2007 and were on track to have a facility constructed prior to the winter of 2008/2009. Then, in between, came the winter of 2007/2008. I am sure you may recall that in many areas of North America, it was an extraordinary one. In our area of the state we almost doubled our normal amount of annual snowfall. With the massive salt shortages and price increases we were extremely happy that we had made our "move" and

were on track to getting something done. After months of discussions, legal negotiations and RFP's, we started construction of the Central Iowa Salt Storage Facility in Grimes, Iowa. We were very fortunate to have the opportunity to work with the regional quasi-governmental solid waste agency, the Metro Waste Authority, in the development of our facility. The MWA financed the project on a 5 year lease purchase agreement and let us construct our buildings on a ten acre tract of land they had purchased for the future construction of a waste transfer facility. With their support we were able to design the site to accommodate both facilities in the event they decide to build at this location in the future.

So what have we experienced financially? This past year we finished construction and were able to fill the facilities in late December. We now had sufficient space to take in the recommended amounts and leverage the lower, pre-season discounted salt prices. The pricing we received for salt delivered to this regional site was \$64.21/ton. For salt delivered during the winter months to other agencies in the area that were not part of this group, salt was priced at \$72.71/ton. Do the math. With our capacity to store 22,000 tons of salt, and our ability to purchase salt at lower pre-season prices, we had a total savings of approximately \$187,000 the first vear!

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This year's pricing was even better. The pricing for pre-season delivery to the regional facility came in at \$57.17/ton. The lowest prices received by agencies taking salt in throughout the winter months averaged out at close to \$70.00/ton. When you look again at the 22,000 tons we have on storage, this costs savings comes to over \$282,000. Now let's look at the savings on the manager's anxiety levels that have all of their salt "in the barn" before winter- PRICELESS.

The savings the group has realized this winter season is more than the estimated amount of our annual payment for this facility. Not only will the facility be paid off in another four years, it is hard to put a price tag on our peace of mind knowing we have the salt we need to get us through the winter. While the



project is getting the final touches of landscaping, signage and finish work, it is anticipated that this \$1.2 million dollar facility is going to pay huge dividends in the future.

If you haven't considered looking at a project like this, you may want

to give it some consideration. If you have any questions or are interested in the details of the facility, feel free to contact me at bret.hodne@ wdm-ia.com. We would be happy to share any information we have.

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