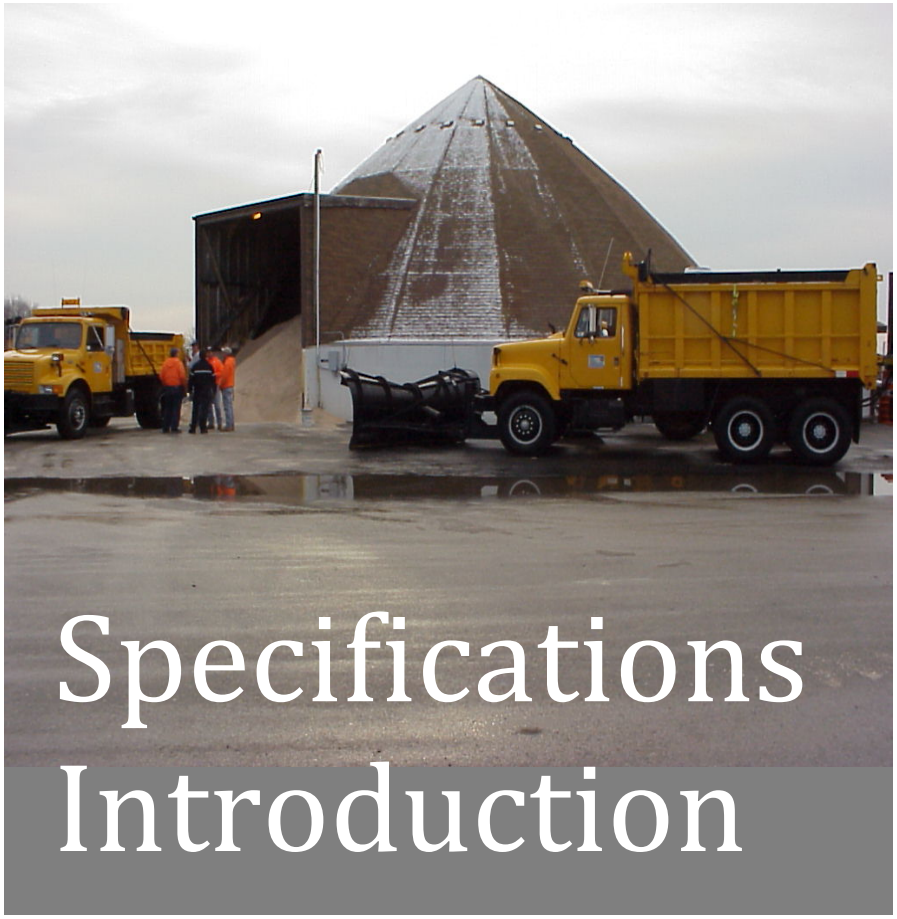

Specifications Introduction

When you put out a bid requesting materials (such as road salt) you will typically include some specifications with the bid. Any supplier responding to the bid must be able to meet those specifications. So far, so good, but how do you create a specification document to ensure that the material you get is what you want?

The easy answer to this is to use somebody else's specification! And, no, this is not lazy – it just makes sense! There are some great examples out there, and some of the best are on the Pacific Northwest Snowfighter web site http://pnsassociation.org/?doing_wp_cron=1369941146.2834010124206542968750.

If you visit that site you will see a lengthy document that spells out all sorts of things relating to materials, including test methods and so forth. Perhaps a bit more than you were looking for, but very comprehensive.

Almost all salt obtained from mines or from evaporation sources (e.g. the Great Salt Lake) will meet these limits with no problems, but some agencies have been asked to consider using natural brines or similar materials in their operations – if you are considering such things, the brines or other materials must meet these limits.

The second factor to consider is size of the salt particles. ASTM has a standard that provides two possible gradations – ASTM D 632, with one gradation being somewhat coarser than the other. However, all salt must pass through a ¾" sieve size. Yes, it is rock salt, but you do not want actual rocks in it!

Other factors come into play. You may allow providers to include an anti-caking agent in the salt to ensure that it flows freely. You should include a provision that allows for inspection of each load of material prior to delivery, and there should be details in there for why a load might be rejected. You should include details of any sampling process you will have and any tests you might perform (or have performed) on those samples. And you will need to train your folk so that they know what to do when a load turns up for delivery! In other words, there is a lot for you to think about, but by using what others have done, you can certainly reduce the work load for yourself and also ensure that what you get is what you need

But let's take a look at the critical components of a specification for salt (as an example). A few things stand out. First, there are limitations placed on a number of trace materials that can be in the salt.

This table shows what they are:

Element	Maximum PPM allowed
Arsenic	5.0
Barium	100.0
Cadmium	0.20
Chromium	1.0
Copper	1.0
Lead	1.0
Mercury	0.05
Selenium	5.0
Zinc	10.0
Phosphorus	2500
Cyanide	0.20

Amounts expressed in Parts Per Million

These limitations are all related to EPA regulations that protect the environment