

# SALT BRINE

You may have noticed Public Works vehicles spreading liquid on the roads prior to a storm. This is a fact sheet designed to answer your questions about the material being used and the process.

**WHAT IS SALT BRINE?** Salt brine is water saturated with sodium chloride (23%), or more simply, rock salt dissolved in water. It is part of the Town of Scituate's anti-icing program which takes a proactive approach to controlling snow and ice on Scituate's roadways. Applying brine to the roadway is similar to spraying a frying pan with oil to keep food from sticking to the bottom of the pan.

**WHEN IS SALT BRINE USED?** Salt brine is applied by spraying the solution onto the pavement up to 48 hours in advance of a winter storm. The salt typically forms lines in the roadway of dried salt. The ice or snow starts to melt when it contacts the salt creating a brine solution on the roadway surface.

**WHAT IS PRE-TREATING?** Pre-treating is a snow fighting strategy used in anticipation of wintry conditions. If applied before a winter storm, salt brine will begin working as soon as the first snowflake falls and will help delay the accumulation of snow and ice on the pavement. This will delay the potential for freezing situations on the roadways.

**WHY USE SALT BRINE?** It is anticipated that pre-treating will save the Town a great deal of money in material cost alone. It is very cost effective and allows Public Works crews to apply the material during normal working hours. The pre-treatment helps prevent the snow/ice from bonding to the pavement surface. As a result, the roads return to bare pavement much quicker once the storm has ended and can also prevent ice and freeze up.

**HOW IS SALT BRINE APPLIED TO THE ROAD WHEN PRE-TREATING?** Residents and motorists can expect to see Scituate DPW crews pre-treating the roads with salt brine using a specially modified truck. The truck has a liquid tank on the back and a nozzle bar applying the liquid brine to the roadways.

**WHAT SHOULD I DO WHEN FOLLOWING A TRUCK APPLYING SALT BRINE?** The truck applying salt brine usually travels at a speed of less than 30 MPH. Motorists should stay back at least 500 feet from the vehicle.

## **WHAT ARE OTHER ADVANTAGES OF USING SALT BRINE?**

1. Brine returns road surfaces to normal faster, which improves public safety.
2. Using liquid Brine is more cost effective than pre-salting.
3. Brine doesn't bounce or blow off the road surface so material is used more efficiently which saves money and helps the environment.
4. If the storm is delayed, salt residue remains on the road ready to work when precipitation begins.

If you have any questions or concerns please feel free to contact the DPW at 781.545.8732