

DPS Brine Equipment Purchase \$125,000

March 5, 2019

1. Each unit will have 1,065 gallon tank capacity
2. Cost per unit \$17,727 each. Can outfit seven (7) single axle trucks
3. Will be used to apply brine to bridge decks and main roads before a snow storm to help prevent snow from bonding to the pavement
4. By using brine Public Works Departments have seen up to a 30% reduction in rock salt usage
5. Brine is also used in combination with salt. When added at the same time, the brine helps activate the salt sooner and allows it to stick to the roadway preventing unnecessary scatter of the salt reducing waste
6. Rock salt alone will work to temperatures down to 15 degrees. When mixed at its optimal 23.3%, salt brine can work down to -6 degrees
7. 2018 rock salt pricing has been from \$90 to \$110 per ton

8. BENEFITS

- **Save Time** --Liquid anti-icing and deicers save your time during pre-storm preparation and post storm clean-up. With the prevention of hard bonding to the roadway surface and a jumpstart to cutting through snow and ice pack, post storm clean-up time is drastically reduced
 - **Save Money**-- Liquids save money by reducing the annual amount of granular product needed. Liquids also reduce waste, limiting scatter when the product is being applied. Anti-icing can also save roadway maintenance operations by providing excellent frost prevention and reducing the amount of call-outs for frosted bridges or critical areas
 - **Increase Service**--The use of liquid anti-icing and de-icing solutions can help clear snow and ice in a more effective and efficient manner, cutting two or three days off post storm clean-up. This efficiency keeps the motoring public on the move with safer roads and provides a reduced cost of operations
9. At .84 cents per gallon, AquaSalina[®] and AquaSalina+[®] is natural saltwater with a lower freeze point of -15°F than man made salt brine of -6°F. AquaSalina+[®] is corrosion inhibited to protect your equipment. It is a PNS Qualified Product Listing and is approved by the Clear Roads organization of 36 DOT's, including Ohio

Both AquaSalina[®] and AquaSalina+[®] contain 7–11% Sodium Chloride, 8%–10% Calcium Chloride, 2%–2.5% Magnesium Chloride, and 0.5–1.5% Potassium Chloride, versus manufactured salt brine, which contains only 23% Sodium Chloride. The consistent superior chemistry of AquaSalina[®] and AquaSalina+[®] account for lower freeze point and bonding to the road surface, versus manufactured salt brine which dusts and blows away after drying.