## **DOCUMENT C:**

## LCC Subcommittee on Water Policy, Salt and Chloride Issues, August 2020 August 2020\_Salt and Chloride.docx Details available—Jim Stark

The 2202 Salt Symposium was held on August 4 and 5. The Salt Symposium shapes the chloride conversation, presenting developments about salt-use optimization for people and the environment. Day 1 focused on chloride use in water softening, fertilizer, and dust suppressants. Day 2 was about the latest developments in chloride reducing approaches for winter maintenance. Following are take-home messages and **issues that could result in legislation**. The organizers put together a web page where you can find all of the presentations from the 2020 Salt Symposium. Find those by visiting https://fortinconsulting.com/salt-symposium-2020-presentations/.

- 1. Sodium chloride is the most common de-icing chemical because it is inexpensive and efficient.
- 2. Chloride does not break down in the environment. Chloride can affect human health and the health of streams, lakes, and groundwater, as well as crop health.
- 3. Major sources of chloride include, in order: road salt, fertilizers (potash primarily), water softening, and dust suppressants.
- 4. Proper maintenance and upgrading home water softeners is a key because the waste products, including chloride are discharged to septic systems and wastewater treatment plants. Eliminating timer-based water softeners, with incentives for new equipment, would be important.
- 5. Central softening of municipal drinking water has potential but is an expensive option. It eliminates, or reduces the need for household water softening. It is used for some of our larger cities and would benefit small cities that discharge wastewater to small streams and need to meet discharge permit requirements. Central softening generally includes reverse osmosis, or lime treatment, rather than chloride treatment, as the softening agent and should be encouraged and incentivized.
- 6. There are several options for reducing chloride use for deicing. Technology and training are most important. Cities and MDOT are making good progress in reducing the use of sodium chloride.
- 7. Chloride continues to be an environmental problem. There are no silver bullets. Adoption of best management practices and new technology are the keys. Education and training should be encouraged and increased.
- 8. Limited liability legislation for certified applicators would be a major step forward in applying less deicing compounds to sidewalks and parking lots.
- 9. The symposium did not address chlorides introduced to groundwater from individual septic systems. I suggested that this be included next year.