



Massachusetts Municipal Association

## MMA BEST PRACTICES SERIES

*Recommendations for Effective Local Government Administration and Management from MMA Policy Committees*

January 2016 • Volume 1 • Number 8

### **MMA Policy Committee on Public Works, Transportation and Public Utilities Best Practice Recommendation: Protecting Municipal Vehicles from Storm Treatment Corrosives**

**BEST PRACTICE:** Develop a practice of washing public works and other municipal vehicles during winter months to remove corrosive substances covering vehicles in order to protect and extend the life of the vehicles.

Cities and towns are increasingly using liquid calcium chlorine and liquid magnesium chlorine to pre-treat local roads before winter storms and icy conditions. The chemical solutions are used to pre-treat roads so that snow and ice melt on contact, and are considered to be more effective than more conventional treatments (such as salt and sand) at certain times. These road treatment products are highly corrosive, however, and can damage vehicles. For example, treatment brine will corrode public works and other municipal vehicles that are deployed during storms.

Treatment brine and other snow and ice treatment materials should be removed from municipal vehicles as quickly as possible. It is recommended that cities and towns wash vehicles regularly during winter months and keep the frame, chassis, body and attachments free from corrosive chemicals, road grime, salts, and dirt that lead to vehicle damage.

The American Association of State Highway Transportation Officials (AASHTO), in "Update of the AASHTO Guide for Snow and Ice Control," published in 2008, recommends the following<sup>1</sup>:

"Snow and ice control equipment should be washed frequently to minimize corrosion, improve operating efficiency, and extend its useful life. Washing facilities should be designed to minimize environmental impact. Pressure washers and hot water may be used for effective cleaning and water conservation. Washing equipment may be portable or fixed depending on an agency's overall needs. Electric or internal combustion motors drive high-pressure pumps, and water-heating capability is available on some units. Items such as pressure washers and high-pressure pumps are relatively inexpensive and may be acquired through the procurement process.

"Wash-water handling systems usually involve separation systems and underground piping and storage tanks. The facility should be capable of disposing sediment, oil and ice control chemical solutions to meet local environmental requirements. The design and construction of these systems may be accomplished through the contract process. Agencies should check state and local regulations when developing washing facilities and waste water systems.

“Agencies should also consider sharing of equipment washing facilities with other agencies to minimize costs and adverse environmental consequences. The use of commercial equipment washing facilities, such as truck washing businesses, should also be considered since they are responsible for wash water collection and disposal.”

<sup>1</sup> American Association of State Highway Transportation Officials (AASHTO), 2008, located at:  
<http://maintenance.transportation.org/Documents/Final%20Report%2020-07%20Task%20250.pdf>