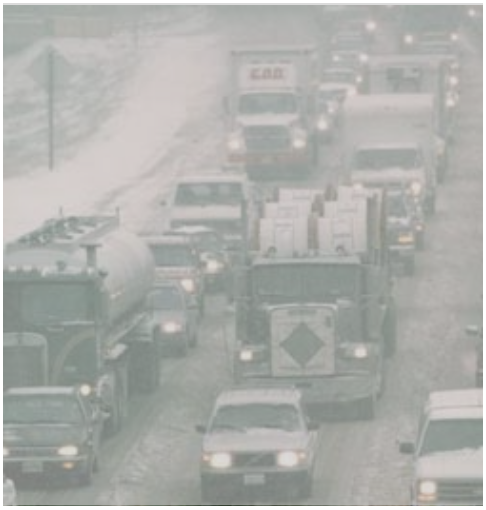
Use of Liquid Deicer on Colorado Highways



OTHER INDUSTRIES, SAME ISSUES

-- In addition to the trucking industry, other groups have indicated similar concerns. These groups include school districts, electrical cooperatives and shuttle bus/van operations. The problems with the bus operations are similar to those for trucking companies. The one unique item raised by one school district is the adverse effect the deicer has on their communications systems. This district noted that their antennae becomes coated with the deicer, become grounded and radios will not transmit or receive properly.

THE COSTS:

- Accelerated Corrosion of Truck Parts
- Increased Electrical System Problems
- Increased Potential for Communication Systems Failures
- Increased Maintenance Costs
- Increased Warranty Claims
- Increased Cost for Washing Vehicles
- Wastewater Disposal Problems
- Reduced Resale Value of Vehicles
- Slick Roads under some conditions

Deicer As a Snow Removal Technique -- Pros & Cons

BACKGROUND -- For the past several years, the Colorado Department of Transportation has been using a liquid deicer during the fall and winter. CDOT moved to a liquid deicer product both for environmental reasons and as a means to reduce road closures and improve travel conditions during adverse weather. Since its deployment, CDOT has steadily increased its use of magnesium chloride ($MgCl_2$) during the fall and winter.

DEICER BENEFITS -- CMCA recognizes the use of $MgCl_2$ has provided some benefits to mobility and air quality. Since the introduction of the liquid deicer, there has been a significant decline in road closures that may be attributed, in part, to the use of the deicer. We also, though, wish to recognize CDOT's other actions, including more maintenance and snowplow personnel on the I-70 corridor, additional chain up areas, and improved traveler information that have also contributed to the reduction in road closures.

DEICER PROBLEMS -- Recognizing the above-noted benefits, we must also note the use of this product has created a number of problems.

The problems experienced by our members and others in the trucking industry include, but are not be limited to: accelerated and excessive corrosion to various truck parts and components (aluminum, stainless steel and electrical wiring are particularly affected); increased maintenance costs and warranty claims; wastewater problems caused by heavy metals within the deicer and the tailings from corroded parts; increased costs for washing vehicles; reduced resale value of trucks and trailers; and visibility problems. In addition, several members have expressed concern that the deicer chemical makes the roads slick during certain weather conditions and poses a safety problem.

The above noted problems have proven costly to our industry, as well as posing concerns about highway and vehicle safety. The corrosion of electrical and lighting systems can prove very hazardous. It is for this reason the federal government mandates strict standards be maintained for such equipment. Concerns have also been recently raised about the effect that $MgCl_2$ mixtures is having on brake systems.

© 2006, CMCA