

**Statement of Michael J. Riley
President**

MICHAEL J. RILEY
PRESIDENT

**Motor Transport Association of Connecticut
Before
The Joint Committee on Transportation
February 28, 2014**

**Re: House Bill No. 5288 AN ACT CONCERNING CHEMICAL
ROAD TREATMENTS**

I am Michael J. Riley, President of Motor Transport Association of Connecticut (MTAC), a statewide trade association, which represents over 800 companies that operate commercial motor vehicles in and through the state of Connecticut. Our membership includes freight haulers, movers of household goods, construction companies, distributors, tank truck operators and hundreds of companies that use trucks in their business and firms that provide goods and services to truck owners.

MTAC supports this bill.

Many MTAC members have noticed that the new substances being used to prevent snow and ice from accumulating on our highways have done significant damage to their trucks. These new products have definitely improved the condition of our highways during winter storms. This year has provided ample opportunity for the DOT to demonstrate its effectiveness in keeping traffic flowing even during the worst of conditions. These new products have definitely helped do the job.

However, these substances have corroded electrical components, deteriorated brake parts and even caused corrosion on the main frame of many vehicles. The problems created by these chemicals are well documented and have become an additional burdensome cost of doing business. And, they may well have compromised the safety of the motoring public. Additionally, some of my members have questioned how these substances affect the structural steel and concrete of bridges and other infrastructure, as well as the effects that runoff might have upon the water shed in this state.

It is clear to truckers that the damage which these substances cause is wide spread and expensive.



Motor Transport Association has been involved in the issue of damage done by caustic road salts for several years now. This is the second time that we have testified before the Transportation Committee. Last year we testified before the Environment Committee.

In November, 2013, we wrote to Governor Malloy and asked him to consider alternative treatments. We have attached a copy of our letter to the Governor as well as Commissioner Redecker's response.

We were disappointed to read that Connecticut Department of Transportation has chosen not to employ anti-corrosive additives as part of their road treatment. We have heard that other states regularly use certain substances to mitigate against the rust and corrosion created by the same caustic road treatments that we use in Connecticut. Connecticut truckers are pleased that this bill will require CONNDOT to reconsider their position and to document any conclusions not to take steps to prevent further damage to cars and trucks.

This bill directs the Department of Transportation to conduct an analysis of the corrosive effects of chemical treatments on Connecticut's motor vehicles, infrastructure and the environment. It asks that the department consider the cost of corrosion created by the chemical road treatments, and requests an analysis of alternative road treatment techniques and products. This report would be submitted to this committee on or before January 1, 2015.

Thank you.

MICHAEL J. RILEY
PRESIDENT

November 7, 2013

His Excellency Dannel P. Malloy
Governor of the State of Connecticut
Executive Chambers
State Capitol
Hartford, Connecticut 06106

Dear Governor Malloy

The issue of the caustic chemicals Connecticut uses to treat its roads during winter storms has arisen again.

As you know, for the past several years, the trucking industry has been pointing out the damage to commercial vehicles caused by magnesium chloride and similar substances. Motor Transport Association of Connecticut has testified in support of bills which would have banned the new chemicals, before both the Transportation and Environment Committees. CONNDOT has consistently held that these products do the best job of clearing the highways. While acknowledging their corrosive nature the agency has indicated that, until a better product comes along, it will continue to use these road treatments.

The Department of Transportation has decided that it is the responsibility of the vehicle owner to deal with the negative impacts of these corrosive salt mixtures. According to the agency, the underside of all vehicles should be washed off after being exposed to the chemicals which cause rust and other damage. While running a car through a car wash may be a simple solution for passenger automobiles, commercial vehicles present other problems. First, their sheer size – height, length and width, exclude them from general car washes. Secondly, DEEP has strict regulations dealing with storm water and/or waste water run off from facilities like terminals, truck stops and distribution centers. Our members are concerned that in complying with CONNDOT's recommended practice of rinsing off the undercarriage of a truck, we could be violating DEEP regulations dealing with ground water contamination. It is rather ironic, inasmuch as the material is applied all over the state during winter storms and eventually finds its way into ground water anyway.

Finally, according to recent media reports, we were surprised to learn that some states mix rust inhibitors with their road treatment. Apparently, CONNDOT has decided not to add rust inhibitors. We would respectfully request that that decision be reconsidered. If there is any possibility that rust inhibitors could prevent some of the damage currently being experienced, we believe that they should be used in Connecticut.

We know that you and the good folks at the Connecticut Department of Transportation are committed to the safest practices and procedures when it comes to Connecticut highways operations. We believe that there are legitimate safety considerations to the



continued use of magnesium chloride and similar substances. These chemicals have severely compromised the structural integrity of motor vehicles. They have also infiltrated and corroded critical components of brakes and electrical systems.

We are also concerned of the effects which these substances have on bridge decks and concrete portions of our highway infrastructure, as well as flora and fauna along the roadside. We have been told that DOT employees have experienced personal physical complications resulting from handling and being in proximity with these chemicals. Additionally, these substances have significantly increased the costs of the safe maintenance of both passenger and commercial motor vehicles as well as compromising safety.

Therefore, we respectfully suggest the following;

- CONNDOT should consider the addition of rust inhibitors to the mixture applied to the roadways during winter storms.
- DEEP should relax its enforcement of storm water/waste water runoff regulations with regard to the washing of undercarriages of commercial motor vehicles during snow and ice season.
- The application amounts should be calibrated to minimize the corrosive effects of these chemicals while remaining effective on ice and snow.
- A concerted public information campaign should be rolled out to advise the public on best practices to deal with damage caused by these substances.
- All efforts should be undertaken to identify other additives or alternative products which do not result in the same damage as these current products.

The Connecticut trucking industry remains committed to safely performing our important work in all weather conditions. We look forward to working with the state to ensure that our roads, and the vehicles that use them, are in the best and safest condition possible at all times of the year.

Thank you for your consideration.

Sincerely,

Michael J. Riley, President



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546

Phone: 860 594-3000

January 29, 2014

*Michael Riley, President
CT Motor Transport Association
60 Forest St.
Hartford, CT 06105*

Dear Mr. Riley,

Thank you for your letter to Governor Malloy regarding your Association's position on the agency's road treatments. The Connecticut Department of Transportation (Department) has the primary and fundamental responsibility of maintaining roughly 5,700 two-lane miles of roadway in the state of Connecticut. A critical component of that responsibility includes keeping our roadways safe, efficient, and passable during and after winter weather events. To this end, the Department utilizes the most modern materials and cost-effective protocols to provide the public with safe travel ways, balanced with environmental implications and concerns regarding corrosion.

The basic components of our road treatment applications consist of salt and liquid magnesium chloride. This all-salt road treatment regimen is commonly referred to as the "Salt-Priority." These materials that make up our salt-priority are identical or chemically similar to materials utilized by virtually all winter-weather state DOT's in the country, as well as, those materials that a majority of town and city Departments of Public Works use in those states. These materials are proven without question to afford the safest possible travel conditions during inclement winter weather; that fact is exemplified by their popularity and effectiveness nationwide.

As the term "salt-priority" implies, the Department has completely eliminated the outdated practice of using a sand and salt mixture to treat roadways. Prior to switching to the salt-priority, the Department applied a combination of 7 parts sand and 2 parts salt – a mixture that many states employed prior to changing to an all-salt, salt-priority. Time and time again, we found that travel conditions in Connecticut were inferior to that of our sister states utilizing a salt-priority. Quite simply, sand has no ability to melt snow and ice, and only provides a short term traction benefit. Therefore, it is nearly useless for improving roadway travel conditions, and provides no assistance for the Department in its job of getting down to bare pavement as soon as possible after storm events.

The many shortcomings of sand/salt mixtures essentially drove the development and use of more effective and modern materials. These materials are not only more effective at improving roadway conditions and safety during weather-events, but also, materials that have fewer implications for the environment. While all winter road treatment applications have negative ramifications environmentally speaking, salt-priority applications have fewer and are less severe.

Consequences of road treatments are always a concern for the Department, and we work to balance those consequences carefully, putting safety of the motoring public first. There is currently not an alternative application that works with any amount of effectiveness that is not corrosive. However, as we

carefully select the amount of materials to treat our roadways with, we are helping to limit that corrosiveness (Connecticut is one of a few New England states that annually calibrates its equipment to maximize the placement of salt while minimizing its usage). We also perform post-storm reviews to constantly refine our techniques to ensure best possible results with the most strategic use of materials.

Much talk has ensued about the use of corrosion inhibitors to help mitigate the corrosive properties of the chlorides the Department uses. In fact, the Department experimented with the use of various corrosion inhibitors when it switched to the salt-priority in 2007. Our experiences with inhibitors were not positive. First, we did not observe any discernable reduction in corrosion with our own plowing fleet. As corrosion inhibitors are generally designed to protect the vehicles applying road treatment materials, we found this to be disconcerting. If, in fact, we were not seeing any benefit for our own fleets, we would expect little if any benefit for the motoring public.

Additionally, soon after we began using the inhibitor, the Department of Energy and Environmental Protection (DEEP) received complaints from wastewater treatment plant operators concerning low levels of oxygen in waterways adjacent to their facilities. This appeared to be the result of the biological oxygen demand (BOD) from the inhibitor.

The Department then conducted extensive research concerning the use of the corrosion inhibitors. In short, while most inhibitors are proprietary, they typically consist of reduced sugar by-products or co-products from agriculture and food industries. As corrosion or rust needs oxygen to form, and as sugar molecules are oxygen scavengers, these inhibitors can potentially reduce corrosion by reducing the oxygen needed for corrosion to form. We did not observe any benefits with our own equipment, and with the potential for dilution and dispersion once applied to a roadway, we saw no benefit for the motoring public, and subsequently ceased using them.

There are environmental concerns associated with the use of corrosion inhibitors as mentioned previously. The principle of removing oxygen from the equation necessary to form rust and corrosive environments, also removes oxygen from waterways – oxygen needed for productive aquatic life. The Department was notified that oxygen levels in certain waterways were reduced and the correlation was directly linked to the use of corrosion inhibitors by the Department.

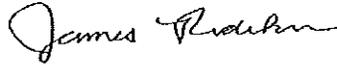
Given the real-world experiences the Department had with corrosion inhibitors, the basic ineffectiveness we observed in reducing corrosion, and the negative environmental ramifications, the Department decided no longer to pay for a product which will not help the agency or the public with corrosion issues while at the same time causing harm our to waterways.

There are other real-world conditions that make the use of corrosion inhibitors a dubious pursuit at this time. As these inhibitors tend to be metal and environment specific, no one inhibitor works well for all metals, or for all chemicals. There is also concern over the longevity of corrosion inhibitors and whether they will work effectively after shed storage, exposure to sunlight and dilution. Research on this topic is ongoing.

For the Department's part, we have found that the best corrosion deterrent is a simple program of washing and treating its equipment with a corrosion neutralizing agent after each storm. A similar, but more basic approach of post-storm fresh-water rinsing is what we continue to recommend for the motoring public as well. We will continue to research corrosion inhibitors in hope of finding a product that is first and foremost effective in real world conditions, as well as environmentally friendly while balancing the needs for reasonably safe roadways.

We are committed to continually evaluate our practices, protocols and materials for winter weather roadway treatments. To that end, as technologies become more refined and as research progresses, we will continue to consider any options that improve the products and the service that we provide for Connecticut's motoring public. We will continue to investigate current studies and technologies and will adopt new products and techniques as they are determined to be fiscally prudent, environmentally sensitive and above all proven to be effective in treatment of all the differing winter road conditions.

Sincerely,

A handwritten signature in cursive script that reads "James Redeker".

James Redeker
Commissioner