

## Public Works Directors Association Meeting

9:00-11:00 a.m.

Wednesday, October 10, 2007

GPCOG Conference Room

**Present:** Erik Street, Chair, (Yarmouth); Bob Burns (Gorham); Don Chaisson (North Yarmouth); Tom Eldridge (Westbrook); Doug Fortier (Windham); John Foster (Brunswick); Roger Mosley (Standish); Dan Nowell (Sebago); Adam Ogden (Cumberland); Jim Plummer (Freeport); Mike Shaw (Scarborough).

**Staff and Guests:** Arthur Bush, International Salt Co.; John Cannell, Region I, MaineDOT; Tim Cusick, Region I, MaineDOT; Carol MacKenzie (GPCOG); Sue McIntyre (GPCOG); Roger Rocque, H.P. Fairfield, LLC; Stewart Sevey, H.P. Fairfield, LLC.

1. **Welcome and Introductions** – Erik Street, Chairman  
Erik Street called the meeting to order at 9:04 a.m. and welcomed those present.
2. **Acceptance of Minutes from September 12<sup>th</sup>, 2007 Meeting**  
*Roger Mosley made a motion for approval of the September 12<sup>th</sup>, 2007 minutes, seconded by Jim Plummer. All were in favor. Minutes were unanimously approved.*
3. **Roundtable discussion – Winter Operations**
  - *Tim Cusick and John Cannell – MaineDOT*
  - *Stewart Sevey, and Roger Rocque – H.P. Fairfield, LLC*
  - *Arthur Bust – International Salt Co.*

Stewart Sevey from H.P. Fairfield, LLC provided an update on new equipment for snow removal. There has been increased interest in the “underbody scrapers”. Underbody scrapers address the slush buildup on the underside of snow removal equipment/trucks. H.P. Fairfield, LLC is continually getting steady requests from the municipalities. States in lower New England area utilize many of these units. These units do not take the place of traditional snowplows. The cost of retrofitting a truck can be anywhere from \$7,000 up to \$9,000. It is less expensive to initially install these units upon the purchase of a new vehicle rather than doing it later.

Mr. Sevey also spoke of vehicle tracking systems that have the ability to track vehicles, monitor fuel savings, and identify routes. These systems can assist in cutting down on idle time and can be managed from a desktop. Most likely, this topic will generate much discussion over the next five years.

A discussion began on European style spreaders and their benefits. MaineDOT has spent more time and monies than any other department in the Northeast since the early ‘90s on the use of liquids and the ratio of granular materials to liquid in respect to the monies it could save. That is what European spreaders do. European spreaders use much larger quantities of liquid and apply it strategically in different areas. It is like super charging the brine. It gives the brine a greater range of temperatures to work in from an iron standpoint of view. The hydraulic systems, valves, etc., are vastly different but the concept does have some merit.

Tim Cusick from the Maine DOT noted that MaineDOT is very happy with the Schmidt spreader and what it is designed to do. John Cannell added that the magic mix ratio is 20%. He noted that the Schmidts that are utilized in our region have front dumps and have hoppers that MDOT has increased the liquid capacity. They are also looking at where they get their best “fly away” and how it works best. Results at the end of this winter will provide more data and whether the use of increased liquid capacity has been successful. More discussion followed pertaining to salt brine, best ratios, pump capacity, and magnesium chloride. MDOT has also been studying the use of liquid calcium and whether it affects vehicle maintenance on cars. It was noted that newer cars are made with less expensive metals and that may be another contributing factor to some of the wear and tear from winter conditions. John Cannell said he had previously worked with a fleet of trucks that were washed immediately after a storm. This provided a huge benefit with a decrease in wear and tear. Stewart Sevey said that the fact of the matter is that DOT and MTA are using half the salt they were using five years ago. However, there is a certain level of expectation. There is a need to educate the public on the benefits of not putting down tons of sand on the roads. It dramatically reduces the risk of rocks bouncing into windshields and reduces the amount of abrasives on the underside of vehicles. Research is continuing on the use of many of these materials. Smaller wires that carry larger current are now being used in new automotive technology which makes them more susceptible to heat. It will be an issue for the foreseeable future.

***Other topics noted and/or discussed:***

- 30% brine solution and finding the optimum solution
- The need to be more aggressive with the initial application rate.
- Cutting one salt route can reduce the material use by 25%
- Underbody scrapers: cost vs. benefits in labor savings, and material, etc.
- Levels of expectation and how to find a balance.
- MaineDOT's average in center lane miles.
- MaineDOT will work to match that level of service between towns and MaineDOT.
- The MaineDOT "Snow and Ice" book will be sent out to public works' directors. The book includes the location of each MaineDOT camp, a phone number and contact name.
- MaineDOT crew supervisors are encouraged to meet with each town's public works director and officials.
- MaineDOT contact number for weekends/holidays/evenings is tel. # 624-3339.

Arthur Bush from International Salt Co. directed the group to a price sheet handout. Prices have been consistent from 2001 to 2003. Ocean freight fees have driven the prices up since then. There are fewer and fewer ships available due to increased demand in ocean freight by countries such as China and India. He does not foresee any issues with supply and shipping this winter. International Salt had a surplus last year which is stockpiled in an outside area in New Jersey. All stockpiles are located outside except here in Portland. Discussion on the potential savings for outdoor salt followed. More information at [www.purchasing.com](http://www.purchasing.com)

The topic of discussion reverted to the installation of underbody scrapers. Mr. Sevey noted that in respect to sanders if the wheelbase is correct an underbody scraper could be installed. However, it may not be possible to install one on a truck with a front discharge body. An additional 12 inches more may be needed. If you have a rear discharge body or want to angle it, you would need to give some extra wheel base to fit that in.

Tim Cusick described the CIRUS control system that MaineDOT has been running as a pilot test. It is WIFI, has a drive-by download and parts are easier to acquire. Many drivers prefer the COMPU-spread system because they know how to repair it. There is a lot of new technology but it is preferred to keep application knowledge in the hands of the drivers. Many drivers know if a section of road needs more attention. MDOT provides a two-day Snow/Ice course for all their drivers. One day is classroom study while day two is hands-on training. Items taught include what to scrape, how to identify the brine, different application rates, the use of a simulated COMPU-Spread system as well as what angle the plow should be set at, safety items, etc. The class is taken by all new drivers and a refresher is given every three years to everyone else. Anyone interested in getting a copy of the presentation packet may contact Brian Picard at the MaineDOT.

A discussion followed pertaining to "Ice-B-Gone", MAG chloride and salt brine. Comparisons were made on the benefits and drawbacks of each. Part of the problem of calcium is that it draws the moisture to the air to itself and drops its own freeze point. That hasn't been seen with MAG chloride, which seems to work the best. Salt brine is easy to make. The salt with water ratio should include about 23% of salt. Brine is dependent on how much water is coming in. If the brine is not used it should be re-circulated/agitated at least once a month. If the ratio stays at 23% it should stay suspended. MaineDOT has holding tanks of salt brine and try to use all of their brine by the end of March. Tanks can be found in Topsham, North Brunswick, Scarborough and Yarmouth. Towns may purchase a truckload of brine for one storm for \$0.20 cents per gallon if the towns haul it themselves. It was advised to call ahead and speak to the crew supervisor or to call Tim Cusick. Further discussion followed on the idea of a regional holding tank for brine for abutting towns. An automated system for brine can be purchased for \$50,000. If four or five towns got together in one area the cost could be as low as \$10,000 each. A short discussion followed on other winter plowing topics. It was decided that a survey would be compiled pertaining to the amount of salt used by each town, plowing policies, wet or pre-wet mixture, etc.

**4. Announcements**

There were no announcements made.

**5. Other Business**

No other business was discussed.

**6. Next Meeting – November 14<sup>th</sup>, 2007**

**7. Adjourn**

The meeting adjourned at 10:50 a.m.