Windham Selectboard Special Meeting

June 3, 2019

Present:

Maureen Bell – Selectboard Chair (and notetaker)

Kord Scott – Selectman

Richard Paré – Road Commissioner

Dan Diaz – Road Crew Member

Kurt Bostrom – Road Crew Member

Rick Govani – Innovative Surface Solutions

The meeting commenced at 9:00 am.

Rick was here to give us a training session regarding the use of magnesium chloride, a product we purchase from his company. He talked us through a very professional Powerpoint presentation.

Magnesium chloride is used for dust control on unpaved surfaces. We have been using the product on our roads for a few years. Anecdotally, Kord mentioned that he didn’t know about the product until we started using it. As the school bus driver, who is on our roads a lot, he notices a real difference. In particular, he sees a real big difference when he goes into Timber Ridge where the roads are not treated. There is a big dust cloud behind the bus there, that is not present elsewhere in town.

When we started using the product we were applying it at a rate of 100 gallons/mile. The manufacturer’s recommendation is 600-800 gallons/mile. As a middle-of-the-road solution, we increased our usage to 300-400 gallons/mile. Again, Kord noticed a considerable difference.

Innovative is the largest distributor of this product in New England and Eastern Canada.

One of the positive features of magnesium is that it blends with inhibitors. They use sugars (molasses, corn syrup) to drive the freezing points down.

Fine particles lost on unpaved roads through traffic, weather and runoff run about 26%. Using this product reduces that loss. Kurt has much experience using the product; he attests that it has a build-up effect, essentially amounting to a soil stabilizer.

Liquid is the preferred form for this – it provides a more uniform product distribution, with lower overall application rates than flakes, which can be blown off. Additionally, liquids are easy to handle. (We use a special distribution tank on the truck; this helps inhibit the corrosion of the trucks. We also wash the trucks after treatment.)

Magnesium chloride is less corrosive than calcium chloride. It works well and it won’t harm plants or animals.

Multi-chloride brines are perceived as less expensive, but they actually require more application. Also, they are derived from the waste products of industries like fracking.

Rick talked a bit about road grading and crowning. Ideally, a 6% grade is the best, but that’s basically unachievable. Three to four percent is more realistic and what we should strive for.

To use magnesium chloride most effectively, pre-wetting is important. It allows the product to be more easily absorbed into the road surface. If it’s possible, we should use the weather to our advantage in this – be prepared to treat the roads after a rain. That helps draw the chloride into the ground.

The meeting adjourned at 10:30.