Robbie forwarded me your email, I might be a little better able to answer your questions about calcium chloride. I work in maintenance and I coordinate the dust control contracting.

• "Does spraying need to be done across the entire road, side to side? It seems the solution is into the grass at a rate that the middle of road receives."

The rate and width of treatment is...fluid. The application depends on the dust control need of the road, the width of the road, and the expected traffic load. For instance, the Ball Club Road serves a number of gravel pits just north of Devil Track lake, it's been getting a ton of heavy truck traffic, so that road is getting treated up and down both lanes, full width. Something like the Old Ski Hill road up from the Gunflint would more likely just get a shot down the middle; it's low traffic, low width but the chloride helps lessen washboard on hills a bit and of course, keeps the dust down. The liquid is not at all viscous, so it's possible even a more narrow application down the middle of the road can works its way out to the shoulders. Given how dry we've been the roads are quite hard and that may have been more prevalent this year. I know our crew member that goes out with the contractor does vary the application rate depending on if it is staying in place or working its way out too much to the outsides of the road.

• Are there guidelines on how close to a lake applications take place?

No. In a perfect world we wouldn't be treating roads near lakes to avoid chloride pollution to water bodies. But people like to live by lakes, people need roads to get to where they live, and subsequently people living near lakes then complain about their dusty gravel roads. All that said, there is some trade off as well, as gravel roads can also lead higher turbidity levels in water quality from sediment runoff, and the chloride helps to keep more of the road surface in place, it's hard to say where the perfect balance between the two pollutants exists. We do generally apply at the low end of application rates.

• If a group of neighbors does not want application, how do we go about addressing that concern? I'd be happy to hear about the section of road you're concerned about. Mostly likely if there is a stretch of road that mostly everyone in that area did not want treated, we'd stop treating it. I'd just need to look at how it might affect that section of road if its especially hilly, or if there's a lot of through traffic that would be negatively affected as well. So...it would depend on the situation, but we try to appease whatever the majority of people want.

Also, would you be able to send me a copy of column that addressed the how and why of the Calcium Chloride process provided by the Highway Department, which was printed in last week's newspaper?
I've attached the article. It's relatively brief, but does touch on some pros and cons to chloride treatments. I'd also suggest you check out the county board meeting where, if I remember right, I go into a bit more detail on these treatments when we were awarding the contract. I found the link here:
https://www.youtube.com/watch?v=B_V3LmgTawk fast forward to 36 minutes in.

Hope this is helpful, let me know if there's anything else. Thanks,

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