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NATIONAL WINTER SERVICE RESEARCH GROUP

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Mitigate the effects of snowfall on your network in Pre-Wet operations using alternate de-icers.

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The Guidance Section 3.6

- The guidance does allow for alternate de-icer use.
- It does allow for interpretation of use.
- Review for use of alternate de-icer is required.

Risk and solution.

- One of your biggest risks is snow on network.
- Can this be mitigated using alternate de-icer?
- Yes, it can!

What is the effectiveness?

Three years of operations by Transport Scotland DBFO areas have shown significant benefits to use of alternate de-icer within its snow treatment matrix allowing for less run treatments giving a considerable cost saving, reduced ploughing and the maintaining of an open road network where previous snow events have caused issues.

The outcome when alternate de-icer is used?

- Using a blended de-icer give a much lower freeze point, allowing for increased longevity.
- Less product applied to maintain road surface during event.
- Less runs required to maintain road.
- Reduce ploughing time if required at all.
- Road surface can be maintained back to black.
- Availability of network with less disruption to road users and safe road surface condition.

CASE STUDY

Bear M80 DBFO

- Snow event forecasted: Decision made to use alternate de-icer blend in pre-wet tanks.
- Two units deployed to spread at 40gm per sqm on network
- One treatment run completed units refilled and repositioned on network for patrol duties.
- Units positioned at each end on network area on over bridges.
- Snowfall occurred over a 6-hour period: road surface remained black with snow melting on contact.
- No further action was required by units during the night shift.
- By contrast the adjoining area had to do multiple runs to achieve a reasonable road condition and to keep snowfall at bay with ploughing and treatments.

CASE STUDY

Sir Robert McAlpine M6 M74 DBFO

- Over the past 3 years McAlpine have been using an alternate de-icer in their pre-wet treatment for snow events.
- During this time, they have seen a positive outcome by using these de-icers on the network especially on the longer inclined sections where snowfall was an issue for HGV's climbing these areas during previous snow events causing closures.
- We have maintained the network open during snow events since using the alternate de-icer with a clear road surface condition during event
- We have reduced ploughing activity by 90% during events.