

## TxDOT responds to icy blast

Winter storms bring frigid weather, slick roads to much of state

Winter struck Texas with a vengeance in January, icing roads across the state, making travel treacherous as far south as Brownsville and precipitating a record number of calls to the TxDOT hotline.

Sleet and freezing rain moved into the state Sunday, Jan. 14. By Monday morning roads were icy, travel was dicey and many department employees got an unexpected day off.

By Tuesday morning, snow covered most highways in the Panhandle where light freezing rain continued to cause new problems. Bridges remained icy in much of the rest of the state with at least patchy ice on most highways.

New moisture late Monday and overnight worsened conditions in parts of west Texas. Interstate 10 was closed between Junction and Fort Stockton. Most other major highways remained open, but motorists were urged to use extreme caution.

Maintenance crews used sand and de-icers to keep highways open, but travel in many areas was discouraged. As of Tuesday morning, maintenance employees were reporting icy/snow conditions on 581 roadways in 135 counties across Texas.

Maintenance crews in the Dallas and Austin districts added a new weapon in their winter weather-fighting arsenal. It's known as Meltdown 20, a natural de-icing compound that vastly improves TxDOT's ability to safely combat icy highways.

The magnesium chloride compound eliminates the old salt-and-sand mixture previously used by state forces, one which caused problems once its usefulness wore off.

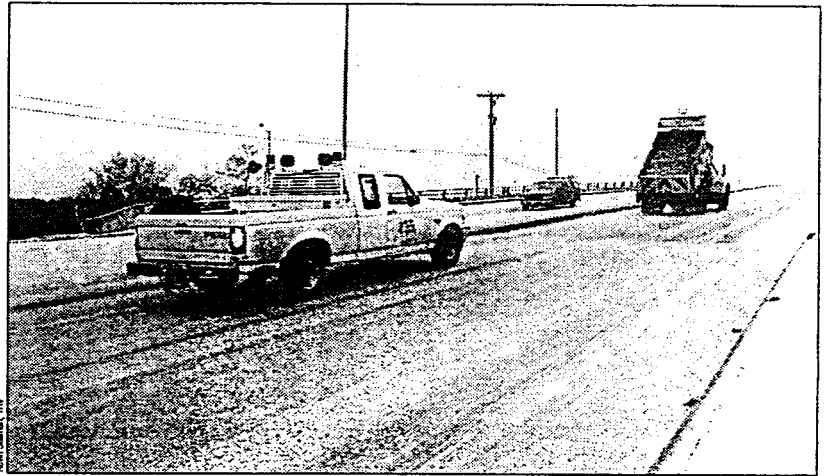
"Sand and salt present tremendous cleanup problems once the storm passes," said Mike Heise, Maintenance Operations Office in Dallas. "It takes hours to put down 10,000 cubic yards of sand throughout our district, but it takes weeks to clean it all up during normal everyday traffic. We also couldn't use a lot of salt in the sand because salt is so highly corrosive to the undercarriages of cars and trucks; without it, we'd wind up resanding many areas again as they froze over."

Heise said Meltdown 20 provides many advantages over its old counterpart.

"First and foremost, it actually melts the ice, whereas our old sand mix basically just provided traction. It's a natural material, so it's environmentally safer, doesn't require cleanup and can serve as an effective fertilizer for roadside vegetation, which salt can't," Heise said.

Maintenance forces also use less of the new material with greater effect than the salt-and-sand mixture. In the past, it took 240 pounds of salt and sand to cover each lane mile of highway; the Meltdown 20 compound covers the same distance with only 75 pounds of material.

More than 70 trucks spread out across nearly 3,300 miles of state-maintained highways throughout the seven-county Dallas District. Heise said the new de-icing material got its first test-run during



icy weather in mid-December. TxDOT crews were pleased with the results, although there was one slight drawback.

"The general public didn't think we were sanding the roads," Heise said. "It's easy to understand why, though. This new material is so finely ground that it doesn't show up on the ice as distinctively as sand does. Motorists were complaining that the roads hadn't been sanded when, in fact, we'd already covered them with the new de-icer."

In the Austin District, the de-icer was tested on the upper deck of Interstate 35 and the U.S. 183/Loop 1 interchange.

John Hurt, Austin District public information officer, said the chemical was so effective and so impressive that the district has already ordered more.

In addition to being an effective de-icer and kinder to the environment, Hurt said magnesium chloride has another distinct advantage over salt and sand. It can be spread before roads begin to ice, which saves time and could save lives, Hurt said.

Magnesium chloride was used in the Amarillo last year, where it melted four inches of snow on a bridge in 20 minutes, Hurt said.

The compound has been used in other districts as well.

The icy weather provided a trial by fire for TxDOT's toll-free hotline. The automated attendant system logged more than 220,000 calls during the peak three days of inclement weather. TxDOT's World Wide Web site, which averages 5,000 hits per day, was accessed more than 69,000 times Jan. 13. The Web server sent more than 1 billion bytes of information in response to that day's requests. ★

The Dallas District and the Public Information Office contributed to this article.

This scene was repeated across much of the state in early January as maintenance crews spread salt, sand and a new de-icer, magnesium chloride, to keep icy roads passable.