8/ SPECIAL SPREADING AND PLOWING PROBLEMS

Salt bridges first. Bridges freeze long before road surfaces because they do not hold warmth as a roadbed does, since cold air reaches both the top and bottom surfaces of bridge decks. They should receive early attention and an application of salt. Bridge decks may ice over even when there is no precipitation because of high humidity and low temperatures. (Or under certain other conditions, bridges will frost over without precipitation and must be salted.)

Salt on the high side of elevated curves. Salt brine will flow down and across a banked curve. If salt is spread down the centerline, everything above it will remain icy. Spread salt on the high side of the curve and let gravity do the rest of the work.

Leave no gaps. Operators must go beyond their assigned areas, if necessary, to plow or salt a gap that has not been treated for some reason. A short, neglected stretch of roadway can be very hazardous to an unsuspecting motorist.

Watch for drifting. In continued high winds, maintain a patrol to watch for drifting and slick spots, even after the pavement has been cleared. Treat icy buildups with a salt application. If the highway has a blacktop or stabilized shoulder, drifting may be controlled with a salt application on the shoulder to form a "melting barrier."

During some very low temperature stoms with dry blowing snow, salt should be used cautiously. The dry snow may blow off the pavement if no salt is used.

Avoid slick conditions from buildup of ice or packed snow by applying a salt application heavy enough to prevent refreezing.

Traffic icing is very dangerous. Occasionally, under certain weather conditions, a paper-thin sheet of ice forms in wheel paths on a bare pavement even when pavement looks clear. The light ice formation can be deadly. Maintenance operators should be instructed to watch for this condition and to apply salt immediately when it is detected.

Get equipment on the road. Once a word of an impending storm has been received and plows are mounted and trucks loaded, get vehicles out of the yard and onto their plowing and spreading sections as soon as possible. Delay in getting to critical areas may cause severe traffic tie-ups.

Make a list of trouble spots that operators should salt first during storms. Make sure all personnel understand that bridges, intersections, ramps, hills and curves come first. Have operators patrol highways rather than wait at maintenance areas for direction.

It is far better to have equipment on the road when snow begins than in the maintenance yard. Nothing is more reassuring to motorists than to see loaded spreaders and plows patrolling prior to storms.

Give interchanges special attention. Salt on and off-ramps as quickly as possible. A safe road or street is of little value without safe entrances and exits.

Can trucks be kept out of the way? One state has a novel plan aimed at reducing costly and dangerous traffic tie-ups during snowstorms by keeping truckers posted on road conditions. Here is how it works:

Eight district engineers in different regions of the state relay information about road conditions to one trucking company in their area. The trucking firm passes the information on to other truckers who request it by radio or telephone. The road condition information becomes available within minutes to a vast number of motorists equipped with CB radios as it is relayed on various citizens' band channels.

Company dispatchers are instructed not to send trucks into areas where trouble spots exist and to advise drivers if chains are needed.

The "Snow Alert" eliminates many serious tie-ups caused by trucks and other vehicles trying to negotiate impassable routes, giving maintenance crews a chance to work with less interference from traffic.

Deicing grates on bridges. Many drawbridges and other opening spans have open metal grating over part of their length. Salt applied on these structures simply falls through the mesh with very little melting effect. To melt ice that forms on the metal, spread a salt application up to the dividing point between concrete and steel and let traffic move the brine across the grating.

Salt on and off ramps early and remove plowed snow from bridges as soon as possible.