First Priority Continuous Treatment Routes

Weather Event: **Frost or Black Ice**

PAVEMENT TEMPERATURE RANGE AND TREND	TRAFFIC CONDITION	INITIAL OPERATION			SUBSEQUENT OPERATIONS			COMMENTS
		Maintenance action	Spread rates		Maintenance action	Spread rates		
			Pre-wetted solid salt (lb/ln-mi)	Brine (gal/ln-mi)		Pre-wetted solid salt (lb/ln-mi)	Brine (gal/ln-mi)	
Above 32°F steady or rising	Any level	None, see comments			None, see comments			1) Monitor pavement temperature closely; begin treatment if starts to fall to 32°F and below and is at or below dew point
28 to 32°F, remaining in range or falling to 32°F or below, *and* equal to or below dew point	Traffic rate less than 100 vehicles per hr	Apply brine or pre-wetted solid salt	25-65	11-28	Reapply pre-wetted solid salt as needed	25-65		1) Monitor pavement closely; if pavement becomes wet or if thin ice forms, reapply salt at higher indicated rate. 2) Do not apply brine on ice so thick that the pavement cannot be seen
	Traffic rate greater than 100 vehicles per hr	Apply brine or pre-wetted solid salt	25-65	11-28	Reapply brine pre-wetted solid salt as needed	25-65	11-28	
20 to 28°F, remaining in range *and* equal to or below dew point	Any level	Apply brine or pre-wetted solid salt	65-130	28-57	Reapply brine pre-wetted solid salt as needed	65-130	28-57	1) Monitor pavement closely; if thin ice forms, reapply salt at higher indicated rate 2) Applications will need to be more frequent at higher levels of condensation; if traffic volumes are not enough to disperse condensation, it may be necessary to increase frequency 3) It is not advisable to apply a brine at the indicated spread rate when the pavement temperature drops below 20°F
10 to 20°F, remaining in range *and* equal to or below dew point	Any level	Apply pre-wetted solid salt	130-200		Reapply pre-wetted solid salt as needed	130-200		1) Monitor pavement closely; if thin ice forms, reapply salt at higher indicated rate 2) Applications will need to be more frequent at higher levels of condensation; if traffic volumes are not enough to disperse condensation, it may be necessary to increase frequency
Below 10°F, steady or falling	Any level	Apply abrasives			Apply abrasives as needed			1) Monitor pavement closely, salt will have limited melting power in this temperature range. 2) Liquid calcium chloride may be used for pre-wetting salt/abrasive mix at colder temperatures.

Notes: **TIMING.** (1) Conduct initial operation in advance of freezing. Apply brine up to 3 hr in advance. Use longer advance times in this range to effect drying when traffic volume is low. Apply pre-wetted solid salt 1 to 2 hr in advance. (2) In the absence of precipitation, brine at 33 gal/lane-mi has been successful in preventing bridge deck icing when placed up to 4 days before freezing on higher volume roads and 7 days before on lower volume roads.