## Tables

Table 1	Comparison of Chemical Deicers in use at various Municipalities/Agencies
Table 2	City of Greater Sudbury Salt/Sand Application Rates
Table 3	Ministry of Transportation Salt Application Rates
Table 4	Value Added Meteorological Report (VAMS)

Table 1 - Use of deicers/winter sand on Roadways

Municipality/Agency	Do you use a chemical deicer to maintain your roadways? (1)	Type of Deicer?	Do you use winter sand to maintain your roadways?	Do you pre-wet your roadway deicer?	Pre-wetting solution?	Do you perform a Direct Liquid Application (DLA) to your roadways? (Yes/No)	DLA Solution?
CGS	some	sodium chloride	some	Y	salt brine	Υ	salt brine
City of Timmins	some	sodium chloride	some	N	n/a	N	n/a
City of Sault Ste. Marie	some	sodium chloride	some	N	n/a	N	n/a
City of North Bay	some	sodium chloride	some	Y	calcium chloride	Y	calcium chloride
City of Thunder Bay	some	sodium chloride	some	Y	calcium chloride	N .	n/a
Region of Peel	All (only responsible for arterials)	sodium chloride	none	Y	salt brine or mag. chloride	Υ	salt brine or mag. chloride
Region of York	all	sodium chloride	some	Y	salt brine	Y	salt brine
Region of Niagara	all	sodium chloride mag. chloride (pilot)	all (in colder temps)	Y	salt brine	Y	salt brine
City of Hamilton	some (85%)	sodium chloride	some	Y	sugar-beet juice product	Υ	salt brine
City of Barrie	some	sodium chloride and treated salt	some	Y	salt brine and "Magic-0"	Y	salt brine
Ministry of Transportation	all	sodium chloride	· some	Y	salt brine, mag. chloride or calcium chloride (depending on climate)	Y	salt brine, mag. chloride or calcium chloride (depending on climate)
Greater Toronto Airport Authority	ali	sodium chloride or "Mountain Melt Deicer" (on terminal roofs only)	none	Y	salt brine	Y	salt brine
City of Mississauga	all	Mag. chloride treated salt	none	N planning to next year	salt brine when implemented	Υ	salt brine

Note: (1) The use of chemical deicers is based on the assumption that the weather (air temperature) is conducive to their use.

Table 2 - CGS Salt/Sand Application Rates

			Stor	m Response Guide										
Current	Current		Descible	Salt/Sand Application Rates										
Temperature	Pavement Condition	Current Precipitation	Possible Action		Class 4 to 6 Roads									
				Brine (Lîtres)	Salt (Kg/2-Lane KM)	Sand (Kg/2-Lane KM)	Sand							
0'C and above	Wet	Snow	Plow and Sand or Salt	65	60 to 90	Nil*	100 to 310							
	wet	Freezing Rain	Sand and Salt	65	150	Nil*	310							
	Wet	Snow	Plow and Sand or Salt	65	90 to 115	Nil*	100 to 310							
-4°C to 0°C	vvet	Freezing Rain	Sand and Salt	65	150	Nil*	310							
	Snow Packed	Nil	Plow and Salt	65	115 to 150	Nil*	Nil*							
-12'C to -4'C	Snow Packed	Snow	Plow and Sand or Salt	65	150	Nil*	100 to 310							
	Dry	Snow	Plow and Sand or Salt	65	150	Nil*	200 to 310							
	Snow Packed	Nil	Plow and Sand	Nil	Nil	200 to 310	200 to 310							
Below -12'C	Dry	Snow	Plow and Sand	Nil	Nil	200 to 310	200 to 310							

<sup>\*</sup> Section Manager or designate may change protocol at their discretion based on actual road and weather conditions

Table 3 – MTO Salt Application Rates

	Road Surface Temperature Range ('C)											
Precipitation	Warmer than -5	-5 to -10	-10 to -18									
Frost	50	70	70									
Light Snow	70	100	130									
Heavy Snow	130	130	170									
Freezing Rain	130	170	170									

## MeteoGroup Weather Services Canada Precipitation Forecast for Sudbury

Issued at Sat, Apr 28, 2018 07:00 EDT

MeteoGroup

NO ENVIRONMENT CANADA WARNINGS IN EFFECT FOR GREATER SUDBURY AND VICINITY AT TIME OF ISSUE

SATURDAY Blowing snowduring the day, probability of precipitation 90%. Winds northerly 25km/h. Cloudy with flurries ending in the evening, clear overnight, probability of precipitation 50%. Winds northerly 20km/h.

SUNDAY Sunnyduring the day. Winds northwesterly 20km/h. Clear during the night. Winds light.

Day				Sat, Ap	or 28 2018			T	·		Sun, A	or 29 2018				Mon						
Period		Mom	ing	Afte	moon	Ev	ening		might		ming		noon		ning	Overnight						
Local Time [24hr]	6 7	8	9 10 11	12 13 14	1 15 16 17	18 19 2	0 21 22 23	0 1 2	3 4 5	6 7 8	9 10 11	12 13 14	15 16 17	18 19 20	21 22 23	0 1 2	3 4 5					
Snow		П																				
Flurries	ХХ	( X )	X	$\mathbf{x} \mathbf{x} \mathbf{x}$	X X	Х											Ш					
Blowing snow		П	(A)		<b>多</b> 注																	
SkyCondition			MAINLY	CLOUD!	<del>/                                    </del>		CLO	YDU			SU	NNY			SUI	NNY						
Sunshine (% period)				10			(	Ö				100	-		- 2	20						
Local Time [24hr]	6-	9	9 - 12	12-15	15 - 18	18 - 21	21 - 0	0-3	3-6	6-9	9-12	12 - 15	15-18	18 - 21	21 - 0	0-3	3-6					
Snowfali (cm)	0.	9	0.3	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
POP (%)	9	o l	80	90	80	50	30	20	20	20	10	10	10	10	10	0	0					
Air Temperature (°C)	-4	4	-4	-2	0	1	-1	-3	-6	-7	-2	4	9	9	6	3	1					
DewPoint (°C)		5	-7	-7	-7	-7	-8	-9	-10	-10	-11	-9	-8	-8	-5	-4	-4					
Relative Humidity(%)	9	3	83	70	60	, 56	59	67	74	80	51	36	30	31	46	59	68					
Wind Direction (8-pt)	N	ī	N	N	N	N	N	N.	N	NW	NW	NW	NW	W	W	W	W					
Wind Speed (km/h)	2	3	28	28	26	22	19	19	19	19	19	19	19	17	11	11	9					
Wind Gusts (km/h)	4	9	53	53	51	47	38	35	- 36	35	36	36	36	34		100						
Wind Chill (*)	-1	1	-12	-9	-6	-5	-7	-9:	-12	-14	-7	0			3	:- :-: 0 1	-2					

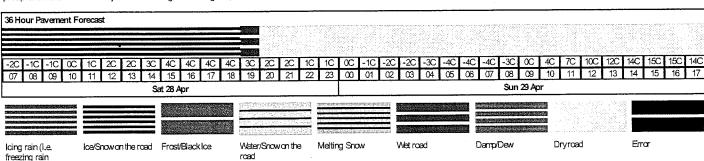
Day	1	Mon, Apr 30 2018											Tues, May 01 2018														Wed										
Period	Morning Afternoon								Evening					Overnight					Mo					moc			Evening					Overnight					
Local Time [24hr]	6	7 8	9 1	11	12	13 1	4 15	16	17	18 19	9 20	21	22	23 (	1	2	3 4	5	6	7 8	8 9	10	11	12 1	3 14	15	16	7 18	19	20	21	22 2	0	1	2	3 4	5
Showers		T									T										I				L				oxdot						$\perp$		X
Snow	П	Т					T								1_	Ш									1			┷	L	Ш	_		1	Ш	_	_	Ш
Flurries															┸	Ш	$\perp$		上		丄				$\perp$								L				Ш
SkyCondition		SUNNY											S	ANL	ΙΥ						V	4RIA	BL\	CLC	DUC	Υ						CL	<u>JUC</u>	Υ			
Sunshine (% period)	100								20						20					50												10					
Local Time [24hr]	6.	. 9	9-	12	12	- 15	1	5 - 18	8	18 -	21	2	1 - 0		0-	3	3-	6		6-9	$\perp$	9 - 1	2	12	15	1	5 - 18	1	8-	21	2	1-0		0 - 3		3-	6
Rainfall (mm)	0	.0	O.	0		0.0		0.0		0.	0		0.0	51	0.0	)	0.	0::::		0.0	L	0.0		0	0		0.0		Q.C			0.0		0.0		0.2	********
Snowfall (cm)	0.	.0	0.	0		0.0		0.0		0.	0	Ī	0.0		0.0	)	Q	0. : . :		0.0		0.0		0	0		0.0		0.0	)	***	0.0		0.0		0.0	
POP (%)	1	0	1	Ö		0		10		2	0		20		10	)	2	0		20		20		2	_		20:	L	20	$\overline{}$		20	_	20		30	
Air Temperature (°C)	1	2	8	3		13		15		10	3		9		6			5		6		12		1	****		16		15			13		12			2
DewPoint (°C)	1 -	4	-:	2		-2		-1		C	)	<u> </u>	1		2			3		4		6					7		7			8		8	_	8	
Relative Humidity(%)	6	7	4	9		37		35		4(	Ó		57		73	3	8	2		83	1	67	_	- 5			55	يـــــــــــــــــــــــــــــــــــــ	59			71		75	_	78	
Wind Direction (8-pt)	V	٧	S	Ν		S		S	.:.	S	}		S		S		5	3		S		S			3	1	S		S		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	S		S		***************************************	3
Wind Speed (km/h)	1	9	1	1		15		19		19	9		13	;	11		. 1	1		11	L	15			9:::	-	22	1_	20			19	1	19		19	_
Wind Gusts (km/h)					i,:i::	30:		37	٠	37	7		31	- 1			1111	Jan de			$\perp$	30		. 3	8.		41.	丄	40			35_	1	35	_	35	
Wind Chill (*)	-	1				:: . :			- 1					1	÷.	. : : : :		}			Г			- 1,									1			11 11	111111

MONDAY Surryduring the day. Winds light, Clear during the night, Winds light, High 15, Low 5.

TUESDAY Variably cloudy during the day. Winds southerly 15km/h becoming 20km/h. Variably cloudy in the evening with showers developing overnight. Winds southerly 20km/h. High 16, overnight Low 12.

WEDNESDAY Cloudy with light rain during the day, probability of precipitation 80%. Winds southerly 20km/h becoming southwesterly 25km/h. Mainly cloudy during the right, probability of precipitation 40%. Winds light. High 16, Low 7.

THURSDAY Cloudywith light rain during the day, probability of precipitation 80%. Winds light. Cloudywith light rain during the right, probability of precipitation 80%. Winds light. Low 6.
FRIDAY Cloudywith light rain during the day, probability of precipitation 70%. Winds northerly 15km/h shifting to westerly 20km/h. Variably cloudy in the evening, becoming mainly clear overnight, probability of precipitation 40%. Winds westerly 20km/h becoming 15km/h. High 12, Low 4.



Forecast provided by MeteoGroup Weather Services Canada Inc. © 2018