

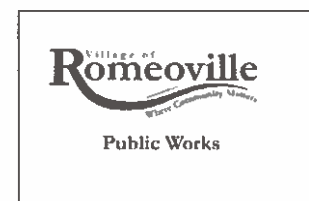
# Annual Report for Year 1 (2022-2023) of the Time Limited Water Quality Standard for Chloride

June 1, 2023

Prepared by Village of Romeoville



The village of Romeoville is a member of the Lower Des Plaines Watershed Group.



## **1.0 Introduction to Chloride Issue in CAWS/LDPR**

This Pollutant Minimization Plan (PMP) has been prepared by the Village of Romeoville to reduce the environmental impacts from the organization's chloride related operations. Village of Romeoville is a discharger covered under the Time Limited Water Quality Standard for Chloride for the Chicago Area Waterways System and Lower Des Plaines River watersheds. This PMP has been prepared to meet the requirements laid out in the Time Limited Water Quality Standard (TLWQS) for Chloride. The term of this PMP covers the first 5-years of the TLWQS period and will be updated following the re-evaluations at Years 4 ½, 9 ½, and 14 ½.

Chloride is a permanent pollutant. It does not degrade over time and continues to accumulate in the environment. Proactive measures to reduce the amount of chloride discharged can help reduce the impacts from chloride on receiving waterways and the environment. Chloride impacts aquatic life, vegetation, and infrastructure. As the chloride concentrations increase and our waters become saltier, aquatic and plant biodiversity decreases, and native species are overtaken by salt tolerant invasive species.

Chlorides are commonly found in road salt, fertilizers, water softeners, dust suppressants, and certain industrial processes. Chloride-based deicers, like rock salt, are used on parking lots, sidewalks, and roads to provide safe surfaces to the public during the winter months. These deicers are one of most common sources of chloride in the Chicago region.

The water quality standard for chloride for the Chicago Area Waterway System (CAWS) was updated as part of the rulemaking process related to changing the designated use of the CAWS. The chloride standard was updated from 1,500 mg/L during the winter and 500 mg/L during the summer to 500 mg/L all year round. The change in the chloride water quality standard took effect in 2018. Because portions of the CAWS were not going to meet this new standard due to the need to maintain public safety on roads, highways, sidewalks and parking lots during the winter months, a joint submittal and supporting individual petitions were submitted between 2015 and 2018 to the Illinois Pollution Control Board for a variance from the chloride standard. The joint petition laid out best management practices that can be achieved by the petitioners to reduce their chloride use while maintaining public safety during winter storms. In addition to the CAWS, portions of the Lower Des Plaines River watershed were included as it receives water from the CAWS.

On November 4, 2021, the IPCB issued an Opinion and Order for a Time Limited Water Quality Standard (TLWQS) for Chloride for portions of the CAWS and Lower Des Plaines River watersheds. The TLWQS for Chloride watersheds are defined in the Opinion and Order as the Des Plaines River watershed from the Kankakee River to the Will County Line (except for the DuPage River watershed) and the CAWS watershed (except the North Branch Chicago River watershed upstream of the North Shore Channel and those portions of the watershed located in Indiana). This is a watershed-based approach to reduce the chloride concentrations in the CAWS and Lower Des Plaines River. The TLWQS for Chloride requires all dischargers covered under the TLWQS for Chloride to create PMPs and implement specific best management practices based on their operations to reduce their chloride discharges.

## 2.0 Organization, Facility Information

Agency Name: Village of Romeoville		
Facility Name: Village Wide		Permit Number: ILG103031 AND ILG103032
Facility Address: 1050 W. Romeo Road		
City: Romeoville	State: Illinois	Zip Code: 60446

The Village of Romeoville is comprised of 19 square miles and a community of just over 41,000 residents. The Public Works and Engineering Divisions are located at 615 Anderson Drive. This location houses the main administration and engineering for Public Works. This location also has a waste water treatment facility, fleet services and a salt dome with a capacity of 2,500 tons. There is a secondary Public Works facility located at 14631 S. Budler Road that houses equipment and a salt dome with a capacity of 2,800 tons. Public Works is responsible for maintaining 270 lane miles of road in addition to Village Hall and Police Department campuses, three fire stations, Recreation Center campus, Athletic & Event Center campus and Metra Station.

### 2.1 Level of Service for Winter Maintenance Activities

**Priority 1** - All major and minor collector streets will be considered to be the minimum network which must be kept open for emergency vehicles.

**Priority 2** - The remaining network includes, streets, intersections, hills, curves and municipal parking lots.

**Priority 3** - All cul-de-sacs, dead ends, and recreational parking lots.

Route 53 is a State Highway; Weber Road is a Will County Road and plowed by them respectively.

This snow and ice control plan recognize three storm categories.

**Category 1** - One inch or less of snow and sleet resulting in icy conditions. Snow routes rated priority 1-3 are treated with de-icing material plowing is not required, but done as necessary.

**Category 2** - Two to five inches of snow. All snow route rated 1-2 are plowed then treated with de-icing material. Priority 3 streets will be made passable until the storm subsides. Then all priority 1-2 streets will be cleared curb to curb prior to the completion of priority 3 streets.

**Category 3** - Six or more inches of snow is considered a major snow event. Concentration is focused on all priority 3 streets are cleaned last. All priority 1-2 streets will be cleared curb to curb prior to the completion of priority 3 streets.

### 3.0 Best Management Practices

Details regarding Village of Romeoville’s implementation of the best management practices (BMPs) identified as part of the TLWQS for Chloride are included below.

#### Workgroup BMP

<b>BMP</b>	<b>Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP</b>
The permittee must participate in a Chlorides workgroup for the CAWS or LDPR, depending on the watershed within which the facility’s discharge is located.	The Village of Romeoville has been a member of the Lower Des Plaines Watershed Group since 2017. Staff attends meetings on a regular basis along with Robinson Engineering in support of the Village’s NPDES stormwater program.

#### Salt Storage and Handling BMPs

<b>BMP</b>	<b>Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP</b>
Store all salt on an impermeable pad that must be constructed to ensure that minimal stormwater is coming into contact with salt unless the salt is stored in a container that ensures stormwater does not come into contact with the salt.	All salt stored by Village of Romeoville is stored in a permanent dome structure on a concrete pad to prevent contact with stormwater.
Cover salt piles at all times except when in active use, unless stored indoors.	Salt is always stored in a covered structure.
For working areas, provide berms and or sufficient slope to allow snow melt and stormwater to drain away from the area. If snow melt and stormwater cannot be drained away from the working area, channeling water to a collection point such as a sump, holding tank or lined basin for collection, discharge at a later time, use for prewetting, and use for make-up water for brine must be considered.	All working areas are slopped away to convey snow melt and stormwater away from the area.
<b>MS4/CSO Only</b> - Use deicing material storage structures for	Deicing brine solution is stored in tanks designed for that purpose.

<p>all communities covered under General Permit ILR40 for MS4 communities.</p>	<p>Secondary storage is under consideration for future implementation. 2026</p>
<p>Good housekeeping practices must be implemented at the site, including:</p> <ul style="list-style-type: none"> <li>• cleanup of salt at the end of each day or conclusion of a storm event;</li> <li>• tarping of trucks for transportation of bulk chloride;</li> <li>• maintaining the pad and equipment;</li> <li>• good practices during loading and unloading;</li> <li>• cleanup of loading and spreading equipment after each snow/ice event;</li> <li>• a written inspection program for storage facility, structures and work area;</li> <li>• removing surplus materials from the site when winter activity finished where applicable;</li> <li>• annual inspection and repairs completed when practical;</li> <li>• evaluate the opportunity to reduce or reuse the wash water.</li> </ul>	<p>Salt at the loading areas is cleaned up at the end of each snow event and the area is swept.</p> <p>All bulk loads are tarped in and out of the yard.</p> <p>The salt domes and pads within are maintained in good condition.</p> <p>Emphasis is placed on careful loading and unloading to minimize spillage. Any spilled salt is collected and returned inside the dome.</p> <p>All spreading and loading equipment is cleaned up after snow events.</p> <p>A written inspection program is being developed to ensure salt storage and work areas are maintained in good condition. 2023/24</p> <p>Surplus salt is stored securely in domes. The entrances are blocked off with concrete blocks to ensure containment in the off season.</p> <p>Vehicles and equipment are inspected daily for proper operation. Repairs are completed asap.</p> <p>Wash water is minimized to the extent practical. Wash water is drained to the sanitary system.</p>

**Winter Maintenance Operations BMPs**

<b>BMP</b>	<b>Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP</b>
<p>Calibrate all salt spreading equipment at least annually before November 30th. Records of the calibration results must be maintained for each piece of spreading equipment.</p>	<p>All salt spreading equipment is calibrated annually prior to the snow season and records of calibration are maintained for reference.</p>
<p>Pre-wet road salt before use, either by applying liquids to the salt stockpile, or by applying liquids by way of the spreading</p>	<p>Salt trucks are equipped with pre-wetting equipment.</p>

equipment as the salt is deposited on the road.	
Use equipment to measure the pavement temperature unless such equipment has already been installed on road salt spreading vehicles.	Future implementation of small weather stations that can measure pavement temperatures at various locations throughout the Village is being considered. These will supplement the pavement sensors already installed on most of the snow fleet.
Develop and implement a protocol to vary the salt application rate based on pavement temperature, existing weather conditions, and forecasted weather conditions.	Protocol has been developed and will be implemented this season. Adjustments to the program will be made during implementation period based on results and implementation of additional monitoring equipment.
Track and record salt quantity used and storm conditions from each call-out.	Salt quantities are recorded for each storm and for each truck.
Develop a written plan for implementation of anti-icing, with milestones. The plan should consider increased use of liquids (e.g., carbohydrate products) beginning with critical locations such as bridges over streams.	A written protocol for anti-icing is being developed to memorialize the protocols already in place. 2023/24
Provide employees involved in winter maintenance operations with annual training before November 30th on best management practices in the use of road salt in operations, including the practice of plowing first and applying salt only after snow has been cleared.	Annual training has been provided and protocols for plowing and salt application has been in practice and in place for several years.
Be responsible for complying with all applicable BMPs even when deicing practices are contracted out and ensure that contractors are properly trained and comply with all applicable BMPs.	Snow removal is performed with in-house personnel only. The Village does not contract out snow removal.
Complete an annual report, as required by paragraph 3(B) of this order, which is standardized in an electronic format and submitted to the IEPA's website and to the watershed group.	Annual report will be completed and submitted as required.

<p>Obtain and put into place equipment necessary to implement all salt spreading/deicing measure specified in this BMP, such as any new or retrofitted salt spreading equipment necessary to allow for pre-wetting and proper rates of application.</p>	<p>Snow removal equipment has been retrofitted with pre-wetting equipment and electronics for several years, and all new equipment is purchased with these features installed.</p>
<p><b>MS4/CSO/IDOT/TOLLWAY Only</b> - Install equipment to measure the pavement temperature on the winter maintenance fleet for a sufficient number of vehicles to provide sufficient information to adjust application rates for the most efficient levels. Develop and complete a plan to equip the winter maintenance fleet before the first re-evaluation.</p>	<p>Numerous trucks already have pavement temperature sensors to provide adequate information regarding temperatures at various locations throughout the Village. All new trucks are ordered with the sensors installed.</p>
<p><b>MS4/CSO/IDOT/TOLLWAY Only</b> - Before the first re-evaluation, develop a method for conducting a post-winter review to identify areas of success and areas in need of improvement. Items to be completed as part of the review must include, but are not limited to, an evaluation of each salt spreader's application rate, variations in application rates, and discussion of the variation compared to the recommended rates. Once developed, the review should occur annually in the spring/early summer following each winter season.</p>	<p>A review will be conducted annually upon the compilation of salt usage data for the season. A report will be prepared summarizing the data and providing conclusions and recommendations for the next season.</p>

### 3.1 Analysis of BMPs Implemented

The Village of Romeoville has witnessed a variety of weather changes over the last few winter seasons. Staff has realized the importance of chloride reduction through up-to-date training, procedure changes, and updated equipment and technology that have been implemented. Staff also understands the effects of using liquids and other tools in helping determine when and how much deicing material is applied.

### **3.2 Analysis of Alternative Treatments or New Technology**

The Village of Romeoville will continue to update equipment when possible. The Village would like to introduce a larger amount of liquid deicing into our pre-wetting but was unable to do so this last winter with the mild weather.

## **4.0 Deicing/Anti-Icing Agents Used**

Materials used by the Village of Romeoville for the 2022-2023 winter season are included as Appendix 1.

### **4.1 Application Rates**

The application rates used by the Village of Romeoville for the 2022-2023 winter season are included as Appendix 2.

#### **4.1.1 Application Rate Analysis**

The Village's current application rates are working well. Due to the mild winter season there was not an opportunity to experiment with different application rates. The Village's plan is to try and increase the amount of liquid application rates in future winter seasons.

### **4.2 Application Practices**

The Village of Romeoville uses the following practices to apply deicing and anti-icing materials:

The Village of Romeoville applies anti-icing material when a snow and/or an ice event has been forecasted. Then the storm forecast is used to determine the approach for the deicing material. If freezing rain is forecasted every lane mile is salted at the onset of the storm event. If a snow event is forecasted all major and minor collector streets along with sensitive areas like school zones, hills and major curves are treated with deicing material. Depending on the amount and the duration of the snow event once the precipitation stops the remaining network of streets, cul-de-sacs and parking lots are plowed and deicing material is applied. All snow is removed off of pavement by some type of mechanical equipment before any additional deicing material is applied, if necessary.

### **4.3 Call Outs**

A total of 17.3 inches of snow was reported in the Village of Romeoville for the 2022-2023 winter. There were three freezing rain event(s) and 42 snow event(s) for the 2022-2023 winter.



The Village of Romeoville had 13 call outs completed during the 2022-2023 winter. A log of all call outs completed by the Village of Romeoville are included as Appendix 3.

#### **4.4 Use of Liquids**

The Village of Romeoville's use of liquids in the deicing operations has been a great asset. The Village has seen a reduction in the amount of dry chloride applications and rates used. Although the Village experienced a very mild winter and did not have the opportunity to experiment with application rates, we plan to introduce a larger amount of liquid deicing into our operations.

#### **5.0 Training**

The Village of Romeoville completed annual training for 53 of employees out of 53 of employees who are part of the winter maintenance operations on 8/3/22, 10/5/22, 10/11/22, 10/12/22, and 11/10/22. A list of annual training topics by type of employee is included as Appendix 4.

#### **6.0 Deicing and Snow Removal Equipment and Maintenance**

The Village of Romeoville uses equipment listed in Appendix 5 during winter maintenance activities.

##### **6.1 Description of Equipment Washing and Wash Water Collection**

The Village of Romeoville utilizes two wash bays. Deicing solids are caught and returned to dome storage to be used again. Equipment is washed using the minimal amount of water need to complete the job. Wash water is caught in basins and sent through the Village's water treatment plant.

#### **7.0 Material Storage**

The Village of Romeoville maintains two storage area(s). Information regarding the storage area(s) is included in Appendix 6.

#### **8.0 Capital Purchases**

Identified capital purchases from the Village of Romeoville's PMP to implement the BMPs and reduce chlorides in our operations over the first 5-year term of the Chloride TLWQS are included as Appendix 7.

##### **8.1 Explanation of Capital Purchases Unable to Be Made According to the Reported Plan**

Replacement and updated equipment has been slowed down by supply chain issues and increased cost of equipment. Replacement trucks have been pushed back 2-3 years for build dates.

## **9.0 Environmental Monitoring Data**

Chloride monitoring data is collected for the CAWS and Lower Des Plaines River watersheds per the IPCB order. The data is maintained by the workgroups. Chloride data for the CAWS is collected by MWRD for the CAWS watershed and provided to the workgroups as part of the annual reporting as required by the IPCB order. The Lower Des Plaines Watershed Group also maintains a USGS monitoring station in the Des Plaines River at Channahon, IL that collects continuous conductivity data to estimate chloride concentrations.

Chloride monitoring data reports are posted to <https://www.cawswatershed.org/reports/> and <https://ldpwatersheds.org/about-us/lower-des-plaines-watershed-group/our-work/chloride-tlwqs/>.

### **9.1 Organization Specific Chloride Monitoring Data**

The Village of Romeoville collects chloride monitoring data as part of its NPDES effluent data and the data is included as Appendix 8.

### **9.2 Changes to the Facility's NPDES Treatment Technologies for Chloride**

No changes are currently scheduled.

## **10.0 Program Evaluation**

The winter 2022-2023 was challenging as the Village of Romeoville experienced a mild winter and only received 17.3" of precipitation for the season. The Village had minimal opportunity to experiment with different application rates. From the introduction of liquid deicing to the operation, the Village has reduced the amount of dry chloride material needed and, in some cases, reduced the need for additional applications during an event. The Village's goal is to continue to introduce the newest and most up-to-date equipment and increase the amount of liquid deicing applied. This will continue to reduce the amount of dry chlorides needed for the Village's operation.

### **10.1 Proposed Steps for the Coming Year**

The Village of Romeoville is scheduled to replace an additional older plow truck. The truck will have the most recent technological computer control spreader and capacity to carry more liquid brine solution.

The Village will continue to increase the amount of liquid deicer applied during removal operations.

The Village will continue to educate staff and the public about the importance of reducing chlorides in the snow removal operation.

## **11.0 Workgroup Participation**

The Village of Romeoville belongs to the Lower Des Plaines Watershed Group. Staff attend and participate in bi-monthly membership meetings via Zoom. Village staff participated in Chloride TLWQS mentoring sessions. All staff that participate in snow and deicing removal operations attend winter deicing workshops. The Village utilizes seasonal outreach materials available on the member portal of the LDWG website. The Village shares drafts and work with NPDES permits with LDWG staff.

Material or Product	Dry, Pre-Wet, Pretreated, or Liquid	Lane Miles Treated with the Product for 2022-2023	Parking Lot and Sidewalk Area (Sq. Ft.) Treated with the Product for 2022-2023	Total Amount used for 2022-2023 (Year 1) in Tons or Gallons	Total Amount used for 2023-2024 (Year 2) in Tons or Gallons	Total Amount used for 2023-2024 (Year 3) in Tons or Gallons	Total Amount used for 2023-2024 (Year 4) in Tons or Gallons	Total Amount used for 2023-2024 (Year 5) in Tons or Gallons	Total Amount Used Over First 5-Year Term
Road Salt (tons)	Pre-Wet	9,996	981,534	1,484					1484
Salt Brine (gallons)	Liquids	8,900	0	7,512					7512
									0
									0
									0
									0
									0
									0
									0
									0
									0

Estimates of Relative Material Amounts Applied and Coverage Achieved

Year	Total Lane Miles Maintained	Total Parking Lot and Sidewalk Area (Sq. Ft.) Maintained	Percent of Total Lane Miles Treated with Dry Materials	Percent of Total Lane Miles Treated with Pre-Wet or Pretreated Materials	Percent of Total Lane Miles Treated with Liquids	Percent of Total Parking Lot and Sidewalk Area Treated with Dry Materials	Percent of Total Parking Lot and Sidewalk Area Treated with Pre-wet or Pretreated Materials	Percent of Total Parking Lot and Sidewalk Area Treated with Liquids
2022-2023	9,996	981,534	0%	100%	89%	0%	100%	0%

The Village of Romeoville application rates for the 2022-2023 winter season were as follows:

Anti-icing Agent      Applied 25-30 gallons per lane mile

Bulk Deicer Road Salt      Applied 200-400 lbs per lane mile depending on current road conditions and whether the road is residential or high speed limit

Liquid Pretreating Road Salt      Applied at 12-15 gallons per ton

**Organization: Village of Romeoville Chloride TLWQS Annual Report**  
**Appendix 3 – Call Outs**

The following 17 pages are details of the call outs for Village of Romeoville Public Works for the 2022-2023 winter season.



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	12/15/2022	Call Out Time:	03:00	PM
Completion Date:	12/15/2022	Completion Time:	8:00	PM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.6
Pavement Conditions:	Slick	Pavement Temp:	34 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt		
Amount Used:	73.00	Tons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
Lbs/Lane Mile		
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	252	Lane Miles
How many deicer and/or anti-icing application passes were made?	1	
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:

12/16/2022

Call Out Time:

09:00

AM

Completion Date:

12/16/2022

Completion Time:

6:00

PM

## Weather Conditions

Precipitation Type:

Light Snow

Precipitation Amt:

.8

Pavement Conditions:

Pavement Temp:

28

Degrees F

Other Weather Observations:

## Products and Amounts Used

Materials:

Rock Salt

Amount Used:

61.00

Tons

Other Information:

## Application Rates and Methods

Dry Solid Application Rates:

Pre-Wetted or Pretreated Solid App Rate:

Liquid Application Rate:

Type of Application:

Deicing

How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?

252

Lane Miles

How many deicer and/or anti-icing application passes were made?

2

Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?

Yes

Notes:





# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	12/17/2022	Call Out Time:	05:00	AM
Completion Date:	12/17/2022	Completion Time:	10:00	AM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.1
Pavement Conditions:	Snow Covered	Pavement Temp:	25 Degrees F
Other Weather Observations:	North side of town had more accumulation than south and west areas.		

## Products and Amounts Used

Materials:	Rock Salt		
Amount Used:	52.00	Tons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
Type of Application:		
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	252	Lane Miles
How many deicer and/or anti-icing application passes were made?	1	
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:

12/18/2022

Call Out Time:

07:00

AM

Completion Date:

Completion Time:

11:00

AM

## Weather Conditions

Precipitation Type:

Sleet

Precipitation Amt:

trace

Pavement Conditions:

Icy

Pavement Temp:

28

Degrees F

Other Weather Observations:

## Products and Amounts Used

Materials:

Rock Salt

Amount Used:

31.00

Tons

Other Information:

## Application Rates and Methods

Dry Solid Application Rates:

Pre-Wetted or Pretreated Solid App Rate:

Liquid Application Rate:

Type of Application:

How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?

252

Lane Miles

How many deicer and/or anti-icing application passes were made?

1

Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?

No

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	12/22/2022	Call Out Time:	12:00	PM
Completion Date:	12/24/2022	Completion Time:	6:00	AM

## Weather Conditions

Precipitation Type:	Blowing/Drifting	Precipitation Amt:	2.3 inches
Pavement Conditions:	Snow Packed	Pavement Temp:	11 Degrees F
Other Weather Observations:	Extreme cold and wind		

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	158.00 Tons	1,674.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
264 Lbs/Lane Mile	11 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	1,203	Lane Miles
How many deicer and/or anti-icing application passes were made?		
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:

[Empty text box for notes]



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	12/26/2022	Call Out Time:	08:00	AM
Completion Date:	12/26/2022	Completion Time:	2:00	PM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.2
Pavement Conditions:	Snow Covered	Pavement Temp:	26 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	51.00 Tons	404.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
256 Lbs/Lane Mile	8 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	407	Lane Miles
How many deicer and/or anti-icing application passes were made?	1	
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	01/05/2023	Call Out Time:	07:00	AM
Completion Date:	01/05/2023	Completion Time:	12:00	PM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.4
Pavement Conditions:	Slick	Pavement Temp:	28 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	22.00 Tons	206.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
232 Lbs/Lane Mile	9 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	186	Lane Miles
How many deicer and/or anti-icing application passes were made?	1	
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	01/22/2023	Call Out Time:	06:15	AM
Completion Date:	01/22/2023	Completion Time:	12:00	PM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	1"
Pavement Conditions:	Snow Covered	Pavement Temp:	31 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	47.00 Tons	522.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
298 Lbs/Lane Mile	11 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	317	Lane Miles
How many deicer and/or anti-icing application passes were made?	1	
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:

01/25/2023

Call Out Time:

04:00 AM

Completion Date:

01/27/2023

Completion Time:

7:00 AM

## Weather Conditions

Precipitation Type:

Snow

Precipitation Amt:

5"

Pavement Conditions:

Snow Covered

Pavement Temp:

33 Degrees F

Other Weather Observations:

## Products and Amounts Used

Materials:

Rock Salt

Pre-Wetting

Amount Used:

291.00 Tons

2,597.00 Gallons

Other Information:

## Application Rates and Methods

Dry Solid Application Rates:

Pre-Wetted or Pretreated Solid App Rate:

Liquid Application Rate:

295 Lbs/Lane Mile

9 Gallons/Ton

Type of Application:

Deicing

How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?

1,976 Lane Miles

How many deicer and/or anti-icing application passes were made?

Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?

Yes

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	01/27/2023	Call Out Time:	01:00	PM
Completion Date:	01/27/2023	Completion Time:	5:30	PM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.5"
Pavement Conditions:	Snow Covered	Pavement Temp:	29 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	58.00 Tons	159.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
275 Lbs/Lane Mile	3 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	421	Lane Miles
How many deicer and/or anti-icing application passes were made?		
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:





# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	01/28/2023	Call Out Time:	10:30	PM
Completion Date:	01/29/2023	Completion Time:	9:30	AM

## Weather Conditions

Precipitation Type:	Freezing Rain	Precipitation Amt:	.06
Pavement Conditions:	Icy	Pavement Temp:	29 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	210.00 Tons	575.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
302 Lbs/Lane Mile	2 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	1,385	Lane Miles
How many deicer and/or anti-icing application passes were made?		
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	01/30/2023	Call Out Time:	04:00	AM
Completion Date:	01/30/2023	Completion Time:	9:30	AM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.4
Pavement Conditions:	Snow Covered	Pavement Temp:	29 Degrees F
Other Weather Observations:			

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	210.00 Tons	575.00 Gallons	
Other Information:			

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
302 Lbs/Lane Mile	2 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	1,385	Lane Miles
How many deicer and/or anti-icing application passes were made?		
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:

Large empty text box for notes.



# Winter Maintenance Event Logging Form

Public Works

Agency: **Village of Romeoville**

Clear Form

Email Form

## General Call Out Info

Call Out Date:	02/16/2023	Call Out Time:	08:00	PM
Completion Date:	02/17/2023	Completion Time:	2:00	AM

## Weather Conditions

Precipitation Type:	Light Snow	Precipitation Amt:	.9
Pavement Conditions:	Slick	Pavement Temp:	31 Degrees F
Other Weather Observations:	Road conditions varied across the town. Some were wet and slick some were snow covered.		

## Products and Amounts Used

Materials:	Rock Salt	Pre-Wetting	
Amount Used:	220.00 Tons	800.00 Gallons	
Other Information:	The amount of pre wet liquid and rates will be lower due to various road conditions across town requiring some trucks to turn off pre wetting systems.		

## Application Rates and Methods

Dry Solid Application Rates:	Pre-Wetted or Pretreated Solid App Rate:	Liquid Application Rate:
258 Lbs/Lane Mile	4 Gallons/Ton	
Type of Application:	Deicing	
How many lane miles and/or sq.ft. of parking lots/sidewalks were treated?	1,708	Lane Miles
How many deicer and/or anti-icing application passes were made?		
Were mechanical methods (plowing/scraping/etc) used before applying deicer materials?	Yes	

Notes:



**Weather Command® Report for  
1050 W Romeo Rd, Romeoville, IL 60446, USA**

Totals from 07/01/2022 to 06/12/2023  
Date of last uploaded report: 04/22/2023

<b>Snow</b>	<b>Ice</b>
17.3	0.09

Date	Event #	Type	Amount (in.)	Drifting	Start	End	Max Temp (°F)	Min Temp (°F)
11/12/2022	NEIL-NWIN1.1	Snow	Trace	None	7:35pm Sat	8:55pm Sat	34	32
11/15/2022	NEIL-NWIN1.1	Snow	2.2	None	2:55am Tue	8:55am Tue	36	30
11/15/2022	NEIL-NWIN2.1	Snow	0.2	None	8:55am Tue	7:35pm Tue	36	32
11/16/2022	NEIL-NWIN1.1	Snow	0.1	Minor	11:55am Wed	3:55pm Wed	34	25
11/17/2022	NEIL-NWIN1.1	Snow	0.2	None	12:35am Fri	6:15am Fri	30	25
11/18/2022	NEIL-NWIN1.1	Snow	Trace	None	12:50pm Fri	4:15pm Fri	25	21
11/19/2022	NEIL-NWIN1.1	Snow	Trace	None	12:35pm Sat	12:55pm Sat	27	27
12/09/2022	NEIL-NWIN1.1	Snow	Trace	None	7:16am Fri	12:53pm Fri	37	34
12/15/2022	NEIL-NWIN2.1	Snow	0.6	None	2:55pm Thu	7:35pm Thu	36	30
12/16/2022	NEIL-NWIN1.1	Snow	0.8	Minor	8:35am Fri	2:35am Sat	30	25
12/17/2022	NEIL-NWIN1.1	Snow	0.1	Minor	6:35pm Sat	6:15am Sun	23	14
12/22/2022	NEIL-NWIN1.1	Snow	2.2	Blizzard	10:55am Thu	1:57am Fri	32	-9
12/23/2022	NEIL-NWIN1.1	Snow	0.1	Severe	8:15am Fri	8:37am Sat	1	-8
12/26/2022	NEIL-NWIN1.1	Snow	0.2	None	6:55am Mon	1:16pm Mon	21	16

**CALL OUTS**

**Certification**

Certified by: Tom Piazza, Certified Consulting Meteorologist (CCM), 600 N. 1st Bank Drive Suite C Palatine, IL 60067

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**Weather Command® Report for  
1050 W Romeo Rd, Romeoville, IL 60446, USA**

Date	Event #	Type	Amount (in.)	Drifting	Start	End	Max Temp (°F)	Min Temp (°F)
01/05/2023	NEIL-NWIN1.1	Snow	0.4	None	7:55pm Wed	11:45am Thu	34	30
01/05/2023	NEIL-NWIN2.1	Snow	Trace	None	10:35pm Thu	12:15am Fri	32	30
01/13/2023	NEIL-NWIN1.1	Snow	0.2	None	3:16am Fri	4:35am Fri	34	32
01/13/2023	NEIL-NWIN2.1	Snow	Trace	None	3:02pm Fri	6:40pm Fri	37	37
01/20/2023	NEIL-NWIN1.1	Snow	Trace	None	5:54am Fri	6:54am Fri	34	32
01/22/2023	NEIL-NWIN1.1	Snow	0.9	None	5:35am Sun	11:55am Sun	32	28
01/22/2023	NEIL-NWIN2.1	Snow	0.1	None	12:35pm Sun	5:35pm Sun	30	28
01/25/2023	NEIL-NWIN1.1	Snow	3.9	None	12:35am Wed	12:00pm Wed	34	32
01/25/2023	NEIL-NWIN2.1	Snow	1.0	Minor	9:35pm Wed	9:55am Thu	34	21
01/26/2023	NEIL-NWIN1.1	Snow	0.2	Minor	8:55am Thu	8:35pm Thu	21	18
01/27/2023	NEIL-NWIN1.1	Snow	0.5	Severe	8:57am Fri	1:55pm Fri	32	23
01/28/2023	NEIL-NWIN1.1	Snow	0.2	None	11:55am Sat	12:55pm Sat	30	25
01/28/2023	NEIL-NWIN1.2	Ice	0.06		9:00pm Sat	12:52am Sun	30	25
01/29/2023	NEIL-NWIN1.1	Snow	0.4	Minor	9:55pm Sun	4:16am Mon	23	14
02/09/2023	NEIL-NWIN1.1	Snow	Trace	None	6:23pm Thu	6:23pm Thu	39	37
02/16/2023	NEIL-NWIN1.1	Snow	0.9	Moderate	6:55pm Thu	10:55pm Thu	30	25
02/16/2023	NEIL-NWIN1.2	Ice	0.03		9:07am Thu	5:40pm Thu	32	31

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**Weather Command® Report for  
1050 W Romeo Rd, Romeoville, IL 60446, USA**

Date	Event #	Type	Amount (in.)	Drifting	Start	End	Max Temp (°F)	Min Temp (°F)
02/17/2023	NEIL-NWIN1.1	Snow	Trace	None	ON GOING	7:45am Fri	41	41
02/22/2023	NEIL-NWIN1.1	Snow	Trace	None	1:55pm Wed	5:15pm Wed	36	34
02/22/2023	NEIL-NWIN1.2	Ice	Trace		8:00am Wed	5:27pm Wed	33	32
02/24/2023	NEIL-NWIN1.1	Snow	0.1	Minor	8:15pm Fri	9:56pm Fri	27	25
03/03/2023	NEIL-NWIN1.1	Snow	Trace	None	2:12pm Fri	4:53pm Fri	37	33
03/09/2023	NEIL-NWIN1.1	Snow	0.1	None	11:16pm Thu	ON-GOING	36	34
03/10/2023	NEIL-NWIN1.1	Snow	Trace	None	6:55am Fri	9:55am Fri	34	34
03/12/2023	NEIL-NWIN1.1	Snow	1.1	None	9:35pm Sat	7:45am Sun	36	34
03/12/2023	NEIL-NWIN2.1	Snow	0.3	None	8:45am Sun	8:45am Mon	36	28
03/18/2023	NEIL-NWIN1.1	Snow	Trace	None	2:55am Sat	7:18am Sat	19	12
03/18/2023	NEIL-NWIN2.1	Snow	0.2	Minor	11:40am Sat	12:45pm Sat	19	19
03/25/2023	NEIL-NWIN1.1	Snow	Trace	None	11:35am Sat	11:55am Sat	37	35
04/16/2023	NEIL-NWIN1.1	Snow	0.1	None	11:35pm Sun	7:55am Mon	37	32
04/22/2023	NEIL-NWIN1.1	Snow	Trace	None	10:12am Sat	12:40pm Sat	37	37

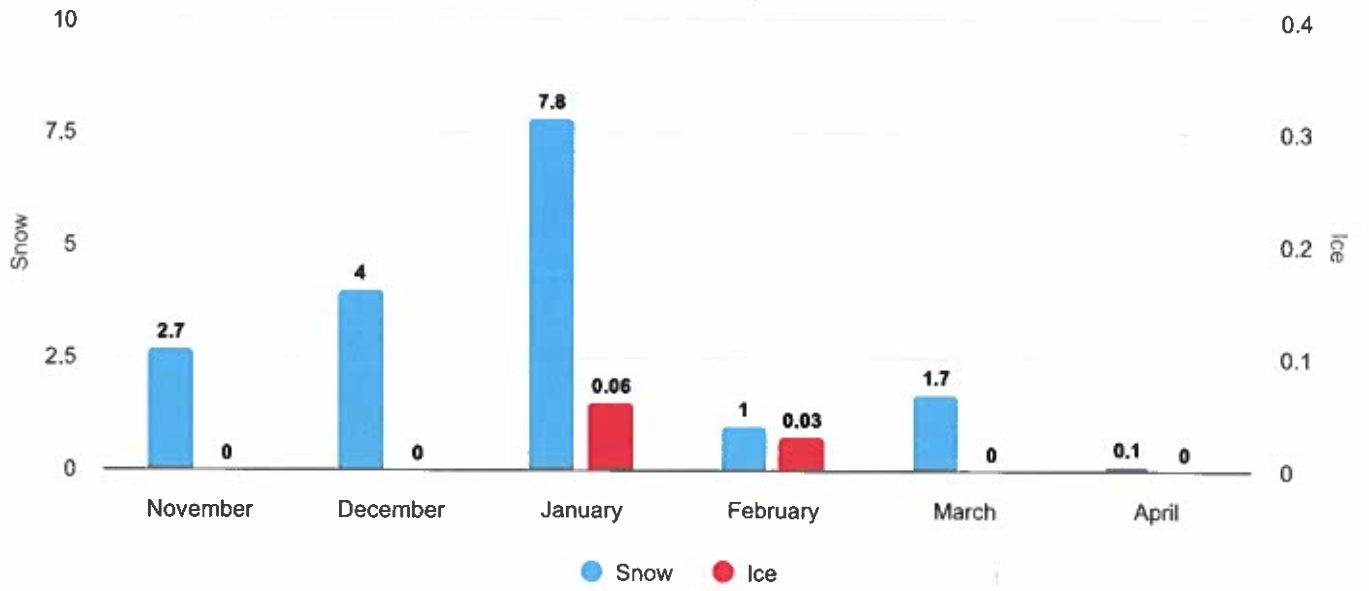
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# Monthly Snow And Ice Totals From 07/01/2022 To 06/12/2023 (In Inches)

1050 W Romeo Rd, Romeoville, IL 60446, USA



Highcharts.com

**Organization Name: Village of Romeoville Chloride TLWQS Annual Report  
Appendix 4 - Annual Training**

<b>Role in Winter Operations</b>	<b>Training Topics Covered</b>
8/3/22 All management staff, superintendents, foremen and supervisors	Salt Symposium - The importance of chloride reduction in design, equipment and techniques.
10/5/22 Supervisors, plow drivers and office staff	Winter Deicing Workshop Public Roads - Chloride reduction with equipment, products and techniques.
10/11/22 Snow removal personnel that handle parking lots and sidewalks	2022 Virtual Deicing Workshop Parking Lots & Sidewalks - Proper snow removal and the use of chlorides for parking lots and sidewalks.
10/12/22 Supervisors, plow drivers and office staff	Winter Deicing Workshop Public Roads - Chloride reduction with equipment, products and techniques.
10/27/22 Maintenance staff and plow drivers	Salt Truck Calibration Mentoring Session - Proper procedures in calibrating salt spreaders and liquid applicators.
11/10/22 Management staff, superintendents, foremen and all snow removal personnel	Annual Pre-season Snow & Ice Meeting - We cover any changes to equipment, snow plow routes, personnel, application rates and discuss safety protocols.



Type of Equipment	Equipment/Vehicle Number	Type of Spreader (mechanically controlled, computer controlled, etc.)	Type of Material Used with Equipment (Dry, Pre-Wet, Pretreated, Liquids)	Other Important Equipment Information
2018 Peterbilt 348 single axle	1108	V-box computer control	Salt w/pre-wet	Front plow and under body scraper
2015 International 4900 single axle	1012	V-box spreader computer control	Salt w/pre-wet	Front plow
2015 International 4900 single axle	1030	RDS body spreader computer control	Salt w/pre-wet	Front plow
2017 Peterbilt 348 single axle	1043	RDS body spreader computer control	Salt w/pre-wet	Front plow and under body scraper
2016 Ford F550 one-ton dump	1075	V-box spreader computer control	Salt w/pre-wet	Front plow
2019 Ford F550 one-ton dump	1080	V-box spreader computer control	Salt w/pre-wet	Front plow
2018 Peterbilt 348 single axle	1081	V-box spreader computer control	Salt w/pre-wet	Front plow and under body scraper
2019 Ford F550 one-ton dump	1082	V-box spreader computer control	Salt w/pre-wet	Front plow
2020 Peterbilt 348 tandem axle	1087	V-box spreader computer control	Salt w/pre-wet	Front plow and wing plow
2020 Peterbilt 348 tandem axle	1088	V-box spreader computer control	Salt w/pre-wet	Front plow and wing plow
2020 Peterbilt 348 single axle	1089	V-box spreader computer control	Salt w/pre-wet	Front plow
2020 Ford F550 one-ton dump	1098	V-box spreader computer control	Salt w/pre-wet	Front plow
2021 Peterbilt 348 single axle	1106	V-box spreader computer control	Salt w/pre-wet	Front plow and wing plow
2021 Peterbilt 348 single axle	1107	V-box spreader computer control	Salt w/pre-wet	Front plow

Type of Equipment	Equipment/Vehicle Number	Type of Spreader (mechanically controlled, computer controlled, etc.)	Type of Material Used with Equipment (Dry, Pre-Wet, Pretreated, Liquids)	Other Important Equipment Information
2022 Ford F550 one-ton dump	1110	V-box spreader computer control	Salt w/pre-wet	Front plow
2023 Peterbilt 348 single axle	1111	RDS body spreader computer control	Salt w/pre-wet	Front plow and under body scraper
2010 International 4900 single axle	1011	V-box spreader computer control	Dry salt	Front plow back-up truck
2010 International 4900 single axle	1018	V-box spreader computer control	Dry salt	Front plow back-up truck
2010 International 4900 single axle	1033	900 gallon liquid computer control	Anti-icing liquids	
2015 Ford F550 one-ton dump	1072	V-box spreader mechanically control	Dry salt	Front plow back-up truck
2016 Ford F350 pick-up truck	1074	V-box spreader mechanically control	Dry salt	Front plow
2015 Ford F550 one-ton dump	5014	V-box spreader mechanically control	Dry salt	

Location of Storage Area	Material Stored (Rock Salt, Salt Brine, etc.)	Amount of Material Stored 2022-2023	Material stored under permanent cover? (yes/describe other)	Material stored in a fully enclosed structure? (yes/describe other)	Material stored on an impervious pad? (yes/describe other)	Good housekeeping practices followed at storage area? (yes/describe other)
615 Anderson Dr	rock salt	2,500 tons	yes	yes	yes	yes
615 Anderson Dr	salt brine	11,000 gallons	no - stored in 2 one-piece polyethylene tanks	yes	yes	yes
14631 S Budler Rd	rock salt	2,800 tons	yes	yes	yes	yes
14631 S Budler Rd	salt brine	6,000 gallons	no - stored in one-piece polyethylene tank	yes	yes	yes

<b>Capital Purchase Description</b>	<b>Plan/Schedule for Purchase</b>
Replace single axle dump with snow and ice equipment	One new truck every year for 2024, 2025 and 2026
Purchase brine maker with building and product storage	2026

**Romeoville Chloride Sample Results  
Village of Romeoville  
Wastewater Effluent  
Monthly Chlorides MG/L**

	2022	2023
January	596	329
February	760	316
March	566	287
April	604	341
May	287	359
June	293	
July	2280	
August	700	
September	287	
October	292	
November	526	
December	367	