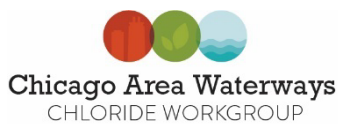


Annual Report for Year 1 (2022-2023) of the Time Limited Water
Quality Standard for Chloride

June 26th, 2023

Prepared by Village of Skokie



Village of Skokie is a member
of the Chicago Area
Waterways Chloride
Workgroup



1.0 Introduction to Chloride Issue in CAWS/LDPR

This Pollutant Minimization Plan (PMP) has been prepared by the Village of Skokie to reduce the environmental impacts from the organization's chloride related operations. The Village of Skokie 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 Skokie		
Facility Name: Public Works	NPDES Permit Numbers: MS4 (ILR400447) CSO (ILM580036) Skokie Water System Number (TLWQS): 9050 Gross Point (ILG103012), 5127 Oakton (ILG103011)	
Facility Addresses: 9050 Gross Point Rd & 5127 Oakton St		
City: Skokie	State: Illinois	Zip Code: 60077

Skokie cuts across the northeast corner of Cook County, with a total area of 10.6 square miles. Skokie borders Wilmette to the north, Lincolnwood to the south, Evanston to the east, and Morton Grove to the west. Skokie's Public Works Department manages approximately 179 miles of streets during the winter season. Skokie clears most streets within the village limits, as well as the sidewalks and parking lots of Village buildings and residential sidewalks when over 4" of snow falls.

Drainage from 10.6 square miles is collected and diverted to storm sewers and combined sewer overflows (CSOs), which discharge storm water runoff to the North Shore Channel to the southwest and Middle Fork to the northwest. It is this discharge to these receiving waters that triggers a need for the National Pollutant Discharge Elimination System (NPDES) permit for storm water from an MS4(ILR400447) and CSO operations (ILM580036).

Skokie operates one salt storage facility and three liquid brine tanks. Road salt and deicing chemicals are stored in permanent structures, protected from rainfall and storm water runoff.

Road salt application is conducted by the Public Works Department, including 179 miles of streets, village-owned sidewalks, residential sidewalks, and bridges. Snow removal and ice control activities are delegated upon four divisions within the Public Works Department: Street and Alley Division, Water and Sewer Division, Automotive Maintenance Division, and Refuse Collection Division.

Skokie has one salt storage facility where road salt is stored in permanent structures (covered dome), protected from rainfall and stormwater runoff. The salt covered dome is located at 9050 Gross Point Road, Skokie, Illinois, and has a capacity of 2,500 tons of salt. Orders for salt delivery are regularly placed to keep the storage facilities at capacity. Three liquid brine tanks store salt brine and Beet Heet and have a total capacity of 16,000 gallons. Orders for salt brine and Beet Heet are placed throughout the season based on available storage capacity.

2.1 Level of Service for Winter Maintenance Activities

The goal of the Skokie Public Works Department is to maintain Village streets and facilities in a safe and accessible manner during the winter season. Priority attention is given to all arterial streets, followed by bus routes, residential streets, and sidewalks. Every effort is made to clear

primary routes to bare pavement and to maintain a clear, bare driving lane on either side of the centerline on secondary streets within sixteen (16) hours of the end of a snowfall.

3.0 Best Management Practices

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

Workgroup BMP

BMP	Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP
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.	Village of Skokie has been a member of the Chicago Area Waterways Chloride Workgroup since 2021. Staff attend CAWS meetings and workgroups.

Salt Storage and Handling BMPs

BMP	Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP
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 the Village of Skokie 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.	All salt stored by the Village of Skokie is stored under permanent covered structures.
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	The salt dome is on a concrete pad and snow melt and stormwater drain away from the area.

use for make-up water for brine must be considered.	
MS4/CSO Only - Use deicing material storage structures for all communities covered under General Permit ILR40 for MS4 communities.	All dry salt is stored under covered structures and liquid deicing materials are stored in three (3) polypropylene tanks.
<p>Good housekeeping practices must be implemented at the site, including:</p> <ul style="list-style-type: none"> • cleanup of salt at the end of each day or conclusion of a storm event; • tarping of trucks for transportation of bulk chloride; • maintaining the pad and equipment; • good practices during loading and unloading; • cleanup of loading and spreading equipment after each snow/ice event; • a written inspection program for storage facility, structures and work area; • removing surplus materials from the site when winter activity finished where applicable; • annual inspection and repairs completed when practical; • evaluate the opportunity to reduce or reuse the wash water. 	<p>The Village of Skokie:</p> <ul style="list-style-type: none"> • Pushes all residual salt into the dome at the end on an event. • Does not transport salt. • Inspects the pad and makes repairs as necessary. • Trains employees on loading salt to minimize spilling. • Stores vehicles with salt inside and washes vehicles between events. • Stores all surplus materials inside salt dome. • Repairs salt dome as needed.

Winter Maintenance Operations BMPs

BMP	Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP
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.	All salt equipment is calibrated on an annual basis and records are maintained. If maintenance is performed on a piece of equipment it is recalibrated.

<p>Pre-wet road salt before use, either by applying liquids to the salt stockpile, or by applying liquids by way of the spreading equipment as the salt is deposited on the road.</p>	<p>All salt is treated with liquids at the spinner or the auger.</p>
<p>Use equipment to measure the pavement temperature unless such equipment has already been installed on road salt spreading vehicles.</p>	<p>Air and pavement sensors are installed on several plow trucks. In 2021 the Village of Skokie installed six (6) cameras and temperature sensors throughout town to measure air, pavement, humidity and dew point conditions.</p>
<p>Develop and implement a protocol to vary the salt application rate based on pavement temperature, existing weather conditions, and forecasted weather conditions.</p>	<p>The supervisor determines the rate to be applied for each event and relays the information to the crews. The supervisor maintains a call out record with varying rates based on weather conditions.</p>
<p>Track and record salt quantity used and storm conditions from each call-out.</p>	<p>The supervisor records storm condition and materials used for each event.</p>
<p>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.</p>	<p>Apartment areas and Primary roads are the current focus areas for the Village of Skokie. This includes all bridges maintained by the Village of Skokie. 40 gal/mi is the application rate used with a Beet Heet and Salt Brine mixture. Increased pre-wet application rates, and exploring the possibility of liquid only routes are being explored.</p>
<p>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.</p>	<p>Employees are trained annually before November 30th every year on best management practices and policies of the department.</p>
<p>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.</p>	<p>The Village of Skokie does not contract deicing services but will require all applicable BMPs if the need arises.</p>
<p>Complete an annual report, as required by paragraph 3(B) of this order, which is standardized</p>	<p>This is the first annual report for the Village of Skokie.</p>

<p>in an electronic format and submitted to the IEPA’s website and to the watershed group.</p>	
<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>The Village of Skokie maintains 45 pieces of equipment to help achieve salting/deicing measures specified in this BMP.</p>
<p>MS4/CSO/IDOT/TOLLWAY Only - 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>The Village of Skokie installed six (6) temperature sensors throughout town to provide real-time air and pavement data. Several pieces of snow equipment also have temperature sensors installed.</p>
<p>MS4/CSO/IDOT/TOLLWAY Only - 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>The first post-winter review will be conducted before the 2023-2024 winter season. This review will include:</p> <ul style="list-style-type: none"> • Salt usage across events to evaluate a correlation between snowfall amount and salt used. • Evaluate possibility of lower application rates when pavement and air temperatures are near freezing. • Accuracy/calibration of each trucks application rate.

Additional BMPs Identified for Agency/Facility

BMP	Agency Description of Current Implementation
Forecasting services	The Village of Skokie contracts with Murray & Trettle/Weather Command to provide detailed forecasts for our specific location.

3.1 Analysis of BMPs Implemented

The Village of Skokie has followed the BMPs described in our PMP as well as this report for several years. The BMPs described are part of our annual training and our employees understand the importance of reducing chloride usage and spillage. The Village of Skokie developed a plan to analyze post-storm events and determine any improvements that can be made. This review will be complete before the 2023-2024 winter season.

3.2 Analysis of Alternative Treatments or New Technology

The Village of Skokie is interested in exploring the possibility of an all liquid route. The Village of Skokie will also explore increasing liquids to 15-20 gal/mi and lowering the salt application rate.

4.0 Deicing/Anti-Icing Agents Used

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

4.1 Application Rates

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

4.1.1 Application Rate Analysis

The Village of Skokie has reduced its total salt usage after following the TLWQS guidelines. Currently 400-600 pounds/lane mile are applied depending on weather conditions. This application rate was initially met with some resistance, but training and increased mechanical removal methods achieved similar results. Before TLWQS guidelines, application rates of 800-1200 pounds/lane mile were standard. The Village of Skokie will continue to follow TLWQS guidelines with a goal of reducing application rates further.

4.2 Application Practices

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

- Dry salt alone is rarely used. Only if conditions are warm and a rain/snow mix is present.
- Deicing is performed with on-board pre-wetting at the spinner or auger.
- Anti-icing is performed with a salt brine and Beet Heet mixture.

4.3 Call Outs

A total of 36.2 inches of snow was reported in the Village of Skokie for the 2022-2023 winter. There were 3 freezing rain event(s) and 17 snow event(s) for the 2022-2023 winter. Village of Skokie had 20 call outs completed during the 2022-2023 winter. A log of all call outs completed by Village of Skokie are included as Appendix 3.

4.4 Use of Liquids

The use of liquids decreased from the previous year. However, this can be attributed to less pre-wetted salt that was applied. The Village of Skokie applies liquids to dry salt at 10 gallons/ton.

5.0 Training

The Village of Skokie completed an annual snow and ice plan review training for 18 employees who are part of the winter maintenance operations on 10/11/2022. Employees also attended the virtual Public Roads & Parking Lot/Deicing Workshops hosted by the Salt Smart Collaborative. Staff members also attended a Calibration Mentoring Session/Workshop for TLWQS Workgroup members. 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 Skokie uses equipment listed in Appendix 5 during winter maintenance activities.

6.1 Description of Equipment Washing and Wash Water Collection

Equipment is washed inside the Public Works garage after every major storm event. The ability to collect wash water does not currently exist.

7.0 Material Storage

The Village of Skokie maintains 1 storage area that consists of a single salt dome and 3 liquid storage tanks. Information regarding the storage area(s) is included in Appendix 6.

8.0 Capital Purchases

Identified capital purchases from Village of Skokie'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

Purchases are scheduled, and some are already on order. The three dump trucks ordered for 2023 are part of 2022 Capital Purchases that were delayed due to supply chain and price increases.

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/>.

10.0 Program Evaluation

The first post-winter review will be conducted before the 2023-2024 winter season. This review will include:

- Salt usage across events to evaluate a correlation between snowfall amount and salt used.
- Evaluate possibility of lower application rates when pavement and air temperatures are near freezing.
- Accuracy of each trucks application rate.

Currently after every event information including miles driven, salt usage and liquid usage are collected from both the driver and GPS telematics. This information is reviewed to see if changes need to be made before the next event.

10.1 Proposed Steps for the Coming Year

The Village of Skokie will test routes using higher liquid application rates (15-20 gal/mi) to determine if the salt application rate can be lowered. Bike path will also be used to test a liquid only route before moving to streets.

11.0 Workgroup Participation

The Village of Skokie has been an active participant in the CAWCW since 2021. Staff attend quarterly membership meetings and TLWQS mentoring sessions. Staff attend virtual road and parking lot deicing workshops annually. The Village of Skokie looks forward to utilizing outreach materials provided by Salt Smart and the Workgroup on the website and newsletters. The completed PMP and Annual Report are completed and submitted to the CAWS Workgroup and the Illinois EPA.

Chloride TLWQS Annual Report
 Appendix 1 - Deicing/Anti-Icing Agents Used

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
Salt	Dry	360		42.5					42.5
Salt	Pre-Wet	6655.9	780,261	2250.58					2250.58
Beet Heet	Liquids	3323.9		11,915					11915
Salt Brine	Liquids	3332		12,156					12155.5
									0
									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	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	7015.9	780,261	0%	95%	95%	0%	100%	0%

Organization Name: Village of Skokie

Appendix 2 - Application Rates

Condition:	Dry Deicer Product lbs/lane mile	Pre-Wet Deicer Product lbs/lane mile
Greater than 30 degrees and rising (snow)		400
Greater than 30 degrees and rising (freezing rain)		400
Greater than 30 degrees and falling (snow)		400
Greater than 30 degrees and falling (freezing rain)		400
20-30 degrees and rising (snow)		400
20-30 degrees and rising (freezing rain)		400
20-30 degrees and falling (snow)		600
20-30 degrees and falling (freezing rain)		600
10-20 degrees and rising (snow)		600
10-20 degrees and rising (freezing rain)		600
10-20 degrees and falling (snow)		600
10-20 degrees and falling (freezing rain)		600
0-10 degrees, rising or falling (snow)		600
Less than 0 degrees (snow)		600

Agency Name: Village of Skokie				Weather																Materials Used										Application Rates and Methods (list all used)										Other Information			
Call Out Information				Weather																Materials Used										Application Rates and Methods (list all used)										Other Information			
Date of Call Out	Call Out Time	Completion Date	Completion Time	Precipitation Type	Precipitation Amount (inches)	Pavement Temperatures	Pavement Conditions	Other Weather Info: (examples of info to include: pavement temps rising or falling, air temps, wind, blowing snow, length of storm, heavy snow, light snow, frost, duration of event, etc)	Types of Deicing Agent Used (example: rock salt, calcium chloride, etc)	Dry Solids, Pre-wetted or pretreated solids, Liquids?	Amount of Dry Material Used (including Roads, Parking Lots, Sidewalks, etc) Tons	Amount of Pre-Wetted/Pretreated Material Used (including Roads, Parking Lots, Sidewalks, etc) Tons	Amount of Liquid Used BRINE (including Roads, Parking Lots, Sidewalks, etc) Gallons	Amount of Liquid Used BEET HEET (including Roads, Parking Lots, Sidewalks, etc) Gallons	Application Rates used for Dry Solids	Application Rates used for Pre-wetted or Pretreated Solids	Application Rates used for Liquids	Type of Application (Examples: Anti-icing, Deicing, etc)	How many lane miles and/or square feet or parking lots and sidewalks were treated?	Lane miles plowed	How many deicer and/or anti-icing application passes were made?	Were mechanical methods (plowing, scraping, sweeping, etc) used before applying deicer materials? YES or NO	Did the application rate change during the event? If yes, why?	How well did the deicing/anti-icing application work?	Which assets were deployed (list truck #'s)	Notes																	
12/15/2022	3:30 PM	12/16/2022	7:00 AM	light snow	0.25	33	WET		salt	dry	6.5				260				44			NO	NO		158	158 salted primaries and lots during snow watch																	
12/16/2022	12:30 PM	12/16/2022	11:00 PM	light snow	0.25	31	WET		salt	dry	36				300				316			NO	NO		155, 141, 143, 153, 156, 157, 158	155 salted town lots bridges and paths																	
12/17/2022	2:00 AM	12/17/2022	6:00 AM	flurries	0.1				salt + beet heet	pre-wetted		0.75		6	300	10 gal/ton	Deicing	2.4				NO	NO		143	143 snow watch salted bridges																	
12/17/2022	4:00 PM	12/17/2022	7:00 PM	flurries	0.1				salt + beet heet	pre-wetted		0.33		2	300	10 gal/ton	Deicing	1.5				NO	NO		143	143 snow watch salted bridges																	
12/21/2022	7:00 AM	12/21/2022	11:00 AM		0		DRY	Predicted storm coming on 12/22.	brine + beet heet				700				40 gal/ml	Anti-icing	40		2		NO		134	134 Anti-icing in apartment areas and bike paths																	
12/22/2022	1:00 PM	12/24/2022	12:00 PM	SNOW	1.75		SNOW	snow with 50 mph wind and temps falling below zero for two days	salt+beet heet	pre-wetted		442.5		4425	400-800	10 gal/ton	Deicing	1036	823 miles			PLOWING	yes, minus 9 temp		122,122t,137,154,154t,155,13,4,140,141,142,143,144,146,14,7,148,149,150,151,153,156,15,7,158,226,227	12-22, salted town at 1pm. 3:30 -11pm salted and plowed primaries, 12-23 at 2a.m. salted primaries and plowed and salted centers. 3a.m. plowed lots and paths 7a.m plowed curb lanes. 1pm. Salted centers again. 12-24 7a.m. plowed centers and salted town until noon.																	
12/26/2022	1:00 AM	12/26/2022	3:00 PM	flurries	0.25			flurries thru out the night	salt + beet heet	pre-wetted		3		30	400	10 gal/ton	Deicing	44				NO	NO		153	153 snow watch salted bridges and primaries																	
1/4/2023	10:00 PM	1/5/2023	7:00 AM	flurries	0.25		WET	flurries thru out the night	salt + beet heet	pre-wetted		3		30	400	10 gal/ton	Deicing	44				NO	NO		153	153 snow watch salted bridges and primaries																	
1/22/2023	1:00 AM	1/22/2023	11:00 AM	light snow	0.25	32	WET		salt + brine	pre-wetted		62.75		627	600	10 gal/ton	Deicing	316				NO	NO		157, 156, 153, 141, 143	157 salted town and lots																	
1/24/2023	7:00 AM	1/24/2023	11:00 AM				DRY	predicted storm for 1/25					870				40 gal/ml	Anti-icing	40		2		NO		134	134 anti-iced apartment and paths																	
1/25/2023	2:00 AM	1/25/2023	11:00 PM	SNOW	1.25	33	WET	SNOW WITH WARMING TEMPS	SALT+ BRINE	PRE-WETTED		134		1340	600	10 gal/ton	Deicing	316	610 miles			PLOWING	NO		140,141,142,143,144,146,147,148,149,148,151,153,156,157,158,122,137,154,154t,122t,13,4,164,165,167,168,170,172,175,176	140,141,142,143,144,146,147,148,149,148,151,153,156,157,158,122,137,154,154t,122t,13,4,164,165,167,168,170,172,175,176 plowed and salted town, lots, and paths																	
1/26/2023	12:00 AM	1/26/2023	7:00 AM	light snow	0.25	30	WET	light snow	salt + brine	pre-wetted		78		780	600	10 gal/ton	Deicing	316				NO	NO		143, 156, 158, 134, 153, 154, 157, 141	143, 156, 158, 134, 153, 154, 157, 141 salted town and touched up lots																	
1/26/2023	4:00 PM	1/26/2023	11:00 PM	light snow	0.25	20	SNOW COVERED	LIGHT SNOW	salt + brine	pre-wetted		61.5		615	600	10 gal/ton	Deicing	316				NO	NO		151,143,156,157,153,141,	151,143,156,157,153,141, SALTED TOWN AND LOTS																	
1/27/2023	2:00 PM	1/27/2023	5:00 PM	light snow	0.25	31	SNOW COVERED	light snow	salt + brine	pre-wetted		58.25		582	600	10 gal/ton	Deicing	316				NO	NO		143,158,151,134,153,146,m15,8,142,157,156,141,144,	143,158,151,134,153,146,m15,8,142,157,156,141,144, salted town and lots																	
1/28/2023	10:00 AM	1/30/2023	6:00 PM	SNOW	3	22-30	SNOW COVERED	snow	salt + beet heet	pre-wetted		351.75		3517	600-800	10 gal/ton	Deicing	1186	1505 miles			PLOWING	NO		143,225,140,158,141,134,153,154,137,122,151,146,156,157,148,122,149,142,144,122t,147,143,156,154t,170,176,164,167,165,175,163,,	1-28 12PM SALTED AND PLOWED CENTERS,6PM SALTED AND PLOWED ARTERIALS,1-29 12AM SALTED PRIMARIES,3AM PLOWED AND SALTED CENTERS 2 OPASSES,7AM WHOLE CREW PLOWED AND SALTED TOWN, 1-30 7AM PLOWED CURBLANES AGAIN AND SALTED TOWN DUE TO A DUSTING EARLY A.M.																	
2/16/2023	9:30 AM	1/17/2023	3:30 PM	SNOW	1.5	25-32	SNOW COVERED	snow	salt + brine + beet heet	pre-wetted		546		2935	600-1000	10 gal/ton	Deicing	1308	992 miles			PLOWING	NO		140,141,142,143,144,146,147,149,151,153,156,157,158,122,122t,137,134,154,154t,226	2-16 9:30 a.m. salted town, 1:00 p.m. salted town, 3:30 pm. Plowed and salted centers, 8p.m. plowed and salted arterials, 2-17 midnight 12 trucks plowed and salted centers, 7a.m. plowed curb lanes																	
2/22/2023	3:30 AM	2/22/2023	11:00 PM	RAIN & SLEET	0.1	34	WET	ICE WAS PREDICTED	SALT + BRINE	PRE-WETTED		6.75		67.5	400	10 gal/ton	Deicing	44				NO	NO		157	157 SALTED PRIMARIES AND VILLAGE HALL LOTS																	
2/24/2023	8:00 PM	2/25/2023	5:00 AM	SNOW	0.5	31	WET	SNOW	salt + beet heet	PRE-WETTED		138		1380	800-1000	10 gal/ton	Deicing	316				NO	NO		157,157E+17	157,157E+17 SALTED TOWN, LOTS AND PATHS																	
3/9/2023	4:00 PM	3/10/2023	7:00 AM	SNOW	0.75	31	WET	TEMPS RIGHT AROUND FREEZING	SALT+ BRINE	PRE-WETTED		241.75		2417	1000	10 gal/ton	Deicing	654				NO	NO		155, 141, 143, 153, 156	155, 141, 143, 153, 156 SALTED TOWN TWICE, PRIMARIES TWICE, LOTS AND PATHS ONCE EACH																	
3/12/2023	12:00 AM	3/12/2023	9:00 AM	SNOW RAIN	0.1	32	WET	TEMPS RIGHT AROUND FREEZING	SALT- BRINE	PRE-WETTED		7.25		72	1000	10 gal/ton	Deicing	44				NO	NO		158	158 SALTED PRIMARIES AND BRIDGES																	
3/12/2023	11:00 PM	3/13/2023	7:00 AM	SNOW	0.2	29	WET	RAIN CHANGING TO SNOW	SALT-BRINE	PRE-WETTED		110.5		1105	1000	10 gal/ton	Deicing	316				NO	NO		1.41143E+23	1.41143E+23 SALTED TOWN																	
3/25/2023	9:00 AM	3/25/2023	4:00 PM	SNOW RAIN	0.1	32	WET	RAIN SNOW MIX	SALT-BRINE	pre-wetted		4.5		45	400	10 gal/ton	Deicing					NO	NO		143	143 SALTED BRIDGES																	

36.2

TOTALS 42.5 2250.58 12155.5 11915

6655.9

Total Lane Miles Treated with Product DRY SALT PRE-WETTED SALT BRINE BEET 3332 3323.9

Role in Winter Operations	Training Topics Covered
Snow Plow/Salt Operators	Snow and Ice Plan/Policy & BMPs
	-TLWQS
	-Priority Areas
	-Proactive vs Reactive
	-Salt reduction, Use of Liquids
	-Pavement Temperatures
	-Setting up and testing trucks
	-Calibration of equipment
Virtual Public Roads Deicing Workshop	Best Management Practices (BMPs) to reduce salt
Virtual Parking Lots/Sidewalks Deicing Workshop	Best Management Practices (BMPs) to reduce salt
Calibration Mentoring Session/Workshop for TLWQS Workgroup	Calibration, BMPs

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
Pickup Truck	122	-	-	Plow Truck
1-ton Dump	134	mechanically	Pre-wet	
Pickup Truck	137	-	-	Plow Truck
6-8 yd Dump Truck	140	computer controlled	Pre-wet	
6-8 yd Dump Truck	141	computer controlled	Pre-wet	
10-12 yd Dump Truck	142	computer controlled	Pre-wet	
6-8 yd Dump Truck	143	computer controlled	Pre-wet	
10-12 yd Dump Truck	144	computer controlled	Pre-wet	
10-12 yd Dump Truck	146	computer controlled	Pre-wet	
10-12 yd Dump Truck	147	computer controlled	Pre-wet	
Dump truck with plow	148	-	-	Plow Truck
6-8 yd Dump Truck	149	computer controlled	Pre-wet	
Dump truck with plow	150	-	-	Plow Truck
10-12 yd Dump Truck	151	computer controlled	Pre-wet	
6-8 yd Dump Truck	153	computer controlled	Pre-wet	
Pickup Truck	154	-	-	Plow Truck
1-ton Dump	155	mechanically	Pre-wet	
6-8 yd Dump Truck	156	computer controlled	Pre-wet	
6-8 yd Dump Truck	157	computer controlled	Pre-wet	
6-8 yd Dump Truck	158	computer controlled	Pre-wet	
Sidewalk plow	200	-	-	
Sidewalk plow	201	-	-	
Sidewalk plow	202	-	-	
Sidewalk plow	204	-	-	
Sidewalk plow	209	-	-	
Sidewalk plow	210	-	-	
Sidewalk plow	211	-	-	
Sidewalk plow	212	-	-	
Road grader	222	-	-	Alley Plowing

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
Front end loader	225	-	-	Alley plowing/loading
Front end loader	226	-	-	Alley plowing/loading
Front end loader	227	-	-	Alley plowing/loading
Road grader	229	-	-	Alley Plowing
Front end loader	230	-	-	Alley plowing/loading
Refuse truck w/ plow	160	-	-	
Refuse truck w/ plow	161	-	-	
Refuse truck w/ plow	163	-	-	
Refuse truck w/ plow	164	-	-	
Refuse truck w/ plow	165	-	-	
Refuse truck w/ plow	167	-	-	
Refuse truck w/ plow	168	-	-	
Refuse truck w/ plow	169	-	-	
Refuse truck w/ plow	170	-	-	
Refuse truck w/ plow	171	-	-	
Refuse truck w/ plow	172	-	-	
Refuse truck w/ plow	175	-	-	
Refuse truck w/ plow	176	-	-	

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)
9050 Gross Point Rd	Rock Salt	3200 tons	yes	yes	yes	yes
9050 Gross Point Rd	Salt Brine	12155.5 gal	-	yes	yes	yes
9050 Gross Point Rd	Beet Heet	11915 gal	-	yes	yes	yes

**Organization Name: Village of Skokie Chloride TLWQS Annual Report
Appendix 7 - Capital Purchases**

Capital Purchase Description	Plan/Schedule for Purchase
Pickup truck w/ plow #154	2023 Purchase
Dump Truck #142	2023 Purchase
Dump Truck #149	2023 Purchase
Dump Truck #140 (rebuild)	2023 Purchase
SUV 4X4 (supervisor)	2023 Purchase
Refuse Truck w/plow #160	2023 Purchase
Refuse Truck w/plow #170	2024 Purchase
1 Ton Dump 4 x 4 #134	2025 Purchase
Sidewalk Plow #212	2025 Purchase
Refuse Truck w/plow #161	2025 Purchase
Refuse Truck w/plow #168	2026 Purchase
Pickup truck w/ plow #137	2027 Purchase
Dump Truck #140	2027 Purchase
1 Ton Dump 4 x 4 #155	2027 Purchase
Front End Loader #225	2027 Purchase
Front End Loader #227	2027 Purchase
Pickup truck w/ plow #122	2027 Purchase
Sidewalk Plow #202	2027 Purchase
Refuse Truck w/plow #172	2027 Purchase