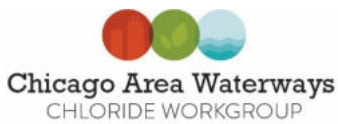


# Annual Report for Year 1 (2022-2023) of the Time Limited Water Quality Standard for Chloride

June 15, 2023

Prepared by Midwest Marine Terminals



Midwest Marine Terminals, a division of Ozinga, is a member of the Chicago Area Waterways Chloride Workgroup/Lower Des Plaines Watershed Group

**OZINGA**

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

This Pollutant Minimization Plan (PMP) has been prepared by Midwest Marine Terminals to reduce the environmental impacts from the organization's chloride related operations. Midwest Marine Terminals 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: Midwest Marine Terminals		
Facility Name: Midwest Marine Terminals		Permit Number: ILG103045
Facility Address: 11701 South Torrence Avenue		
City: Chicago	State: Illinois	Zip Code: 60617

### 2.1 Level of Service for Winter Maintenance Activities

## 3.0 Best Management Practices

Details regarding Midwest Marine Terminals' 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.	Midwest Marine Terminals has been a member of the Lower Des Plaines Watershed Group since 2022. Staff has attended regular meetings and training sessions.

### Salt Storage and Handling BMPs

BMP	Agency Description of Current Implementation or Status Update to the Plan to Implement the BMP
All salt will be stored on an impermeable pad constructed to ensure that minimal stormwater comes into contact with salt.	All salt is stored on impermeable pads.
Pads will be constructed to direct stormwater away from the salt pile. The permittee must consider directing any drainage that enters the pad to a collection point where feasible.	The site is sloped so stormwater does not flow directly into the river.
Outdoor salt piles not stored under permanent cover must be covered by well-secured tarps at all times except when in active	Salt piles are covered unless in active use.

<p>use. While working on the pile, fixed or mobile berms must be incorporated around non-working face to minimize stormwater contact. The permittee must stage tarp when starting final lift and tarp over the edge of the berm/pad where possible.</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>Good housekeeping practices for winter road salt related work including loading, salt deliveries, and facility inspections.</p>
<p>Annual training must be conducted for employees responsible for loading/unloading/handling at docks and trucks at the facility.</p>	<p>Annual training will be implemented in late 2023.</p>
<p>An Annual Report must be completed as required by paragraph 3(B) of this order. The report must be</p>	<p>Midwest Marine Terminals will complete and submit an annual report each year to IEPA and the workgroup by July 1.</p>

standardized in excel, and must be submitted to the IEPA and to the watershed group.	
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.	The site is sloped so stormwater does not flow directly into the river.
The Permittee must make use of fixed and mobile berms where appropriate to redirect flow and tarp over the edge of the pad where possible to minimize stormwater contact.	The site is sloped so stormwater does not flow directly into the river.
The Permittee must consider retaining stormwater which contacts the salt from a 25-year/24- hour storm event where feasible. Such retention could be either within the berm or in a separate basin, or the impacted stormwater could be stored and used as pre-wetting brine.	Midwest Marine Terminals will perform an evaluation to see if stormwater retention is feasible.

**Additional BMPs Identified for Agency/Facility**

<b>BMP</b>	<b>Agency Description of Current Implementation</b>
N/A	N/A

**3.1 Analysis of BMPs Implemented**

N/A

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

N/A

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

Rock salt was used by Midwest Marine Terminals for the 2022-2023 winter season for deicing purposes:

##### **4.1 Application Rates**

The application rates used by Midwest Marine Terminals for the 2022-2023 winter season were not tracked. It will be tracked in 2023-2024.

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

The application rates used by Midwest Marine Terminals for the 2022-2023 winter season were not tracked. It will be tracked in 2023-2024.

##### **4.2 Application Practices**

Midwest Marine Terminals uses the following practices to apply deicing and anti-icing materials:

- Hand distribution
- Truck distribution

##### **4.3 Call Outs**

Call outs were not recorded for the 2022-2023 Winter season. It will be tracked in 2023-2024.

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

Liquids were not used in 2022-2023.

#### **5.0 Training**

Midwest Marine Terminals will complete annual training will be implemented in late 2023.

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

Midwest Marine Terminals uses a truck distribution system and hand distribution system.

#### **7.0 Equipment Washing and Wash Water Collection**

Trucks are not washed at the site.

#### **8.0 Material Storage**

Ozinga Brothers maintains a number of storage areas. A map of the site and its respective materials are attached to this report.

## **9.0 Capital Purchases**

There have been no capital purchases related to salt treatment equipment.

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

N/A

## **10.0 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/>.

### **10.1 Organization Specific Chloride Monitoring Data**

No sampling is required for this site.

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

Not applicable.

## **11.0 Program Evaluation**

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

- Perform required training
- Monitor salt usage
- Analyze BMP's.

## **12.0 Workgroup Participation**

Midwest Marine Terminals will continue to participate in the CAWS Workgroup in the upcoming year.



# Ozinga Bros

11701 S Torrence Ave

Indian Ridge Marsh Park (Park 565)

Indian Ridge

Natural Gas Company

Salt Storage

Ozinga - South Chicago Terminal...

Salt Storage

#1

Urea Storage (Covered)

#2

Stone Storage

Pig Iron Storage

Diesel Tank

Storage and Fueling Area

Urea, Salt and Potash Storage (Covered)

Cargill Technical Oils

Cement, Flyash, Slag Storage (Covered)

Calumet River

#5

#4

#3

## Legend

● Outfall

➔ Stormwater Flow

▬ Site Boundary

Note: Outfall #5 is a series of three drains. The drains all lead to the Calumet River, and the potential storm water exposures are similar. Therefore, these outfalls are considered substantially identical.

PVS Chemical Solutions



1000 ft