

Chloride Policy Boilerplates and Guidance:

Model ordinances and codes for decision makers that choose to focus on reducing chloride pollution through policy implementation

TMACOG 
STORMWATER COALITION

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Introduction

Background and Purpose

Chloride is easily transmitted into lakes, streams, and groundwater, where it threatens drinking water supplies, as well as the health of freshwater fish and other aquatic life. This document discusses chloride-based deicers, specifically sodium chloride (NaCl), magnesium chloride (MgCl₂), and calcium chloride (CaCl₂). For purposes of discussion, these deicers are sometimes generally referred to as “salt”. Deicers can enter the environment during storage, transport, and application. It takes only one teaspoon of salt to permanently pollute five gallons of fresh water to the threshold established by the United States Environmental Protection Agency. Once in the water, there is no easy way to remove the chloride. Northwestern Ohio residents experience the impacts of salt contamination in many ways:

- **Drinking water** - Salt has contaminated groundwater in some areas of the state; 45 percent of Ohioans rely on groundwater for drinking water. Excess salt could affect the taste and healthiness of drinking water. The Ohio EPA Drinking Water Standards for Ohio Public Water Systems Maximum Contaminant Level for Chloride is 250 mg/L. Between 2009 and 2014 the Ohio EPA found evidence in five Ohio communities of runoff from road salt storage piles contaminating public and private wells. Treatment can be difficult and expensive and, in one instance, a village in southwestern Ohio lost its wellfield due to salt contamination.
- **Fish and aquatic insects** - High amounts of chloride are toxic to fish, aquatic insects, and amphibians. Chloride can negatively affect the fish and insect community structure, diversity, and productivity, even at lower levels. Over 90% of Ohio’s state-listed aquatic species are primarily stream-dwelling, which includes more than 153 fish species, 63 mussels, 1,200 aquatic insects, 170 birds, 12 mammals, 10 reptiles, and 14 amphibians.
- **Increased corrosivity in drinking waters** - High chloride can increase the tendency of water to cause corrosion in distribution systems, increase the rate of release of lead into the water, and corrode appliances such as washing machines.
- **Plants** - Road salt scatter can kill plants and trees along the roadside; plants that take up salty water through their roots can also suffer. Chloride in streams, lakes, and wetlands harms aquatic vegetation and can change the plant community structure.
- **Soil** - Salt-laden soil can lose its ability to retain water and store nutrients and be more prone to erosion and sediment runoff, which also harms water quality.
- **Pets** - Salt can sicken pets that consume it, lick it off their paws, or drink salty snow melt/runoff. It can also irritate their paw pads.
- **Infrastructure** - Chloride corrodes road surfaces and bridges and damages reinforcing rods, increasing the frequency and cost of maintenance and repair.
- **Wildlife** - Studies have found that ingesting road salt is potentially lethal to some birds, like finches and house sparrows, sensitive species are particularly at risk.

Policy Background

Watersheds in Northwestern Ohio ultimately drain into Lake Erie, which is a shared resource of Michigan, New York and Ohio, and Ontario Canada. The Great Lakes Water Quality Agreement (GLWQA), signed by Canada and the United States, commits both countries to “restore and maintain the chemical, physical, and biological integrity of the Waters of the Great Lakes.” To achieve this, they will take specific, cooperative actions to resolve existing environmental problems and prevent potential

issues, “recognizing the inherent natural value of the Great Lakes Basin Ecosystem and guided by a shared vision of a healthy and prosperous Great Lakes region in which the Waters of the Great Lakes, through sound management, use and enjoyment, will benefit present and future generations of Canadians and Americans.”

The Maumee Area of Concern (AOC) was established in 1987 in accordance with the GLWQA, overseen by the International Joint Commission, which defined areas of concern. US EPA and Ohio EPA set the policy and program direction and oversee the Areas of Concern. The work of the Maumee Area of Concern Advisory Committee (MAAC), and its partners occurs in three stages aiming to permanently improve water quality of the rivers and streams in the AOC by correcting and removing biological or chemical issues, also known as Beneficial Use Impairments (BUIs). The three stages include identification of environmental problems and sources (completed in 1992), elimination of pollution source to improve water quality (currently in progress), and monitoring to confirm the impairments are removed and an Area of Concern can be delisted. As of 2022, the Maumee AOC has 8 of the 14 identified BUIs, while two previously designated BUIs have been removed.

Winter maintenance activities are a primary source of chloride discharges into lakes, streams, wetlands, and groundwater. The 2013 Ohio Water Resources Council, Recommendations for Salt Storage explains that, while Ohio has no rules specifically governing the storage or use of salt, there is existing state and federal legislation that address salt as a pollutant and salt storage.

ORC 6111 prohibits unauthorized discharge of pollutants to waters of the state, including runoff from salt storage. Ohio EPA considers brine created from rainfall passing through salt piles to be an industrial wastewater that is subject to permitting requirements. For a new salt storage site, Ohio EPA’s Division of Surface Water (DSW) can require a permit-to-install (PTI) to ensure adequate protection of water quality resources. When complaint investigations or routine audits for existing facilities indicate impacts to water resources due to poor management practices, DSW can take action to address any problems identified. Stormwater permitting requirements pursuant to 40 CFR 122.26 and OAC 3745-39 must be met, as well as any local zoning requirements. For salt stored at an industrial site, the Industrial Multi-Sector General Storm Water Permit would apply and would require the salt to be properly covered/enclosed. For salt piles in designated urban areas, best management practices are required under a Municipal Separate Storm Sewer System Permit (MS4), including properly covered/enclosed salt piles, and properly contained tanks of brine or liquids, although there are no specific siting or design criteria. Ohio EPA-DSW can require a National Pollutant Discharge Elimination System (NPDES) permit for any site, regardless of location, if the site is found to be a source of chloride pollution. Additionally, characterization and abatement of a release from a salt facility can be required under ORC 6111.04.

When creating local codes, a municipality should evaluate which of these winter maintenance activity sources has the highest level of concern based on field observations, complaints, or facility inspections.

Using this document

This document provides general model ordinance language, including Definitions and Findings that can be used to provide the starting point for the requirements in legislation. Each section of this document includes the model ordinance or model code language, as well as a short primer or tips.

Gray “primer” boxes may appear before a section to include an introduction, the legislation’s intended purpose, or initial considerations for implementation.

To identify sections of model language, the typeface changes to Times New Roman black. These sections of model language are meant to be a guide only and are not meant to be used verbatim.

- Text that is *[Bold, Italicized and in brackets]* indicates language that would need to be tailored to a municipality’s specific needs or example language to be considered.
- Municipalities should refer to their legal counsel to determine the final language of the legislation they propose.

“*Tips” will appear at the end of sections throughout the document to help explain the rationale for specific aspects of the model language or to provide options for implementation. The tips provide context for users of this document to determine how to use or interpret model language or resources to refer to for more information. Sections where multiple tips are included, will have numbered asterisks (*1) within the text and the associated tip will be numbered the same at the end of the section.

Policy List Levels Example

All sections in this document are formatted to approximate the general style of communities in the Stormwater Coalition region, some additional formatting may be needed. Refer to the example below for the common formatting used in this document.

SECTION X: Section of Codified Ordinance

CHAPTER XXXX: Chapter of Codified Ordinance

Name of Chapter

Section of Chapter

General text of the model code or ordinance will appear in normal paragraph format as shown here.... The purpose of this regulation is to provide for the health, safety, and general welfare of the citizens of ...

- A. Ordered lists may appear as numbered, or alphabetical.
- B. ...

XL.01 NAME OF MODEL CODE OR ORDINANCE

Use as Legislation

Model ordinance language contained in this document serves as guidance for administrative officials seeking direction in regulating the use of deicers to protect water quality, animals, human health, and infrastructure. The document is separated into sections for Localities and for State Officials. Local governments may decide to institute regulatory options voluntarily or as part of their MS4 program. The state may choose to institute legislation designating the Ohio Environmental Protection Agency to implement a certification program and may implement a liability waiver for contractors and/or property owners managing salt application in accordance with Ohio’s Salt Smart Certification.

Model ordinance/resolution language focuses on four areas:

- **Occupational Licensure for Winter Maintenance Professionals** - Ohio has yet to develop a de-icing salt certification program. After the establishment of such a certification program, ordinances related to deicing salt certification may be enacted. Because no program currently exists. If over- or improper application of salt and other deicing materials is an identified issue, a municipality may wish to utilize model ordinance language requiring winter maintenance professionals (internal or contracted) and/or private winter maintenance professionals to become certified in Ohio's Salt Smart program in order to operate within their jurisdiction.
- **Deicer Bulk Storage Facility Regulations** - If improper storage, transfer, and placement of bulk amounts of salt or other deicers is an identified issue, a municipality may wish to include bulk storage regulations in their municipal code.
- **Land Disturbance Activities** - A municipality may wish to address chloride management as part of their post-construction stormwater requirements. Model language is provided that would require a land disturbance permit applicant to provide chloride use information and Ohio's Salt Smart Certification when conducting new or redevelopment activities.
- **Parking Lot, Sidewalk and Private Road Sweeping Requirements** - If salt and other deicing materials remain on surfaces after snow melts or after the winter season, a municipality may wish to include sweeping requirements in their zoning regulations.

Each municipality should consider which of these ordinances are most appropriate for their community based on the desired impact and the available administrative resources.

Model Code Language contained in this document serves as guidance for state officials seeking a starting point in regulating the use of deicers to protect water quality, animals, human health, and infrastructure. The state government may decide to institute voluntarily regulation or as part of a liability waiver and/or certification program. With state legislation in place, localities may choose to rely on state liability and/or certification programs to supplement and reinforce local ordinances.

Model Code Language focuses on one area:

- **Occupational Liability Waivers for Licensed Businesses and Professionals** - If participation of private deicing contractors in the licensure program is critical to successfully abating chloride pollution Ohio and there is an identified reluctance to certification by this group due to liability fears of "slip and fall" cases, the legislature may wish to incentivize participation via occupational liability waivers for licensed businesses and professionals.

The State legislatures should consider if and how to appropriately incentivize licensure based on the desired impact and the available administrative resources.

***Tip:** Currently there is no deicing salt certification program in Ohio. Once a certification program is established, municipalities may choose to enact ordinances related to such a certification. Because no program currently exists, this document will refer to the program as Ohio's Salt Smart Certification. Communities utilizing this document should remove sections pertaining to the program until one exists.

Primer: Initial clauses in this model language offer a foundation for municipalities to develop, ordain, and enact new legislation. Communities should consult their legal counsel to review the applicability and tailor each clause before introducing policies for implementation.

Chloride Policy Boilerplate Language and Guidance for Localities

General Model Ordinance or Resolution Language

ORDINANCE OR RESOLUTION FOR Chloride Reduction

WHEREAS, chloride pollution to the *[city/ village/ township]* separate storm sewer system creates water quality risks to public health, safety, and general welfare; and,

WHEREAS, chloride pollution may necessitate repair of storm sewers and distribution systems; damage to public and private infrastructure; and may damage water resources by reducing water quality; and,

WHEREAS, *[watershed(s) to which city/village/township drains]* has(have) (an) 9-Element Nonpoint Source Implementation Strategy which identified the watershed(s) as in need of chloride reduction due to elevated concentrations. *¹

WHEREAS, the Maumee Area of Concern aims to restore and maintain the chemical, physical, and biological integrity of the Waters of the Great Lakes, under the Great Lakes Water Quality Agreement, and

WHEREAS, there are watershed-wide efforts to reduce chloride pollution to the *[rivers to which city/village/township drains]* and to protect and enhance the unique water resources of the *[rivers to which city/village/township drains]* watershed(s); and,

WHEREAS, Article XVIII, Section 3 of the Ohio Constitution grants municipalities the legal authority to exercise all powers of local self-government and to adopt and enforce within their limits such local police, sanitary, and other similar regulations, as are not in conflict with general laws.*²

WHEREAS, Article X, Section 3 of the Ohio Constitution grants counties the legal authority to exercise all powers of local self-government and to adopt and enforce within their limits such local police, sanitary, and other similar regulations, as are not in conflict with general laws. *²

NOW, THEREFORE BE IT ORDAINED by the Council of *[city/ village/ township]*, county of *[county]*, State of Ohio, that:

***1TIP:** Governments using language in this section should reference Ohio EPAs "Interactive Map of 9-Element Plans in Ohio" to find approved watershed plans for their communities' watersheds. Documents for approved watershed plans can be found on Ohio EPAs list of "Approved 9-Element Nonpoint Source Implementation Strategies in Ohio" to identify if they are in a critical chloride reduction area.

***2TIP:** Governments using language in this section should keep the appropriate statement referring to legal authority of their level of government.

SECTION 1: Codified Ordinance *Chapter XXXX Chloride Pollution Control* is hereby adopted to read in total as follows:

CHAPTER XXXX

Chloride Pollution Control

PURPOSE AND SCOPE

The purpose of this regulation is to provide for the health, safety, and general welfare of the citizens of the *[community]* through the regulation of chloride pollution to the municipal separate storm sewer system (MS4). *¹This regulation establishes methods for controlling the introduction of chloride pollutants into the MS4 in order to comply with ORC 6111 The objectives of this regulation are:

- A. To reduce chloride pollution to the MS4.
- B. To establish legal authority to carry out inspections, monitoring procedures, and enforcement actions necessary to ensure compliance with this regulation.

APPLICABILITY

This regulation shall apply to all residential, commercial, industrial, or institutional facilities responsible for discharges to the MS4 and on any lands in the *[community]*.

DEFINITIONS

The words and terms used in this regulation, unless otherwise expressly stated, shall have the following meaning *²:

- C. "Anti-icing" means the application of a liquid deicer prior to the onset of a snow event.
- D. "Apply salt" means to apply salt or a salt alternative to roadways, parking lots, or sidewalks for the purpose of winter maintenance.
- E. "Best Management Practice (BMP)" means structural, vegetative or managerial practices used to treat, prevent or reduce water pollution.
- F. "Certified Salt Applicator" means an individual who applies deicer and has completed Ohio's Salt Smart Certification training (Level 1 or 2).
- G. "Commercial applicator" means any individual who applies or supervises others who apply salt but shall not include municipal or state employees.
- H. "Commissioner" means the commissioner of the *[department set by municipality]*.
- I. "Deicer" means any substance used to melt snow and ice or used for its anti-icing effects.
- J. "Department" means the department of *[set by municipality]*.

- K. "Salt" means sodium chloride, calcium chloride, magnesium chloride, or any other substance containing chloride.
- L. "Salt alternative" means any substance not containing chloride used for the purpose of de-icing or anti-icing.
- M. "Winter Maintenance Professional" means an individual who applies deicer for hire (i.e., snow-plow drivers, salt truck drivers).

DISCLAIMER OF LIABILITY

Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or for the benefit of any particular parcel of property.

CONFLICTS, SEVERABILITY, NUISANCES & RESPONSIBILITY

- N. Where this regulation is in conflict with other provisions of law or ordinance, the most restrictive provisions, as determined by the *[city/ village/ township]*, shall prevail.
- O. If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.
- P. This regulation shall not be construed as authorizing any person to maintain a nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.
- Q. Failure of the *[city/ village/ township]* to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from the responsibility for the condition or damage resulting there from, and shall not result in the *[city/ village/ township]*, its officers, employees, or agents being responsible for any condition or damage resulting therefrom.

RESPONSIBILITY FOR ADMINISTRATION

The *[city/ village/ township]* shall administer, implement, and enforce the provisions of this regulation. The *[city/ village/ township]* may contract with the *[county office of XXXXXX]* to conduct inspections and monitoring and to assist with enforcement actions.

FINDINGS

- R. The removal of snow and ice from roadways is essential to both public safety and to the local economy and in order to protect the public safety, during and after winter storm events, the use of pavement deicing chemicals is a widely accepted means of keeping roadways passable; and
- S. Pavement deicing is typically accomplished through the use of deicers which can be corrosive to vehicles, roadway surfaces, and bridges and has been found to have adverse

- effects on the surface waters, ground water and to environmentally sensitive areas; and
- T. The restoration of surface and ground water quality and ecosystems in such areas can be very difficult and costly, if not impossible, to rehabilitate through reverse osmosis, once the events of contamination occur; and
 - U. Proper utilization and management of deicing materials is critical to ensure that the environmental impacts of related practices are reduced to the maximum extent possible; and
 - V. Negative environmental impacts may occur when salt and other deicers are not properly stored and transported; and
 - W. One of the primary sources of chloride entering the ground water is salt spillage that is either plowed or washed from maintenance yards, unloading, and loading areas and it is necessary to regulate all persons engaged in the storage and use of bulk deicing materials on their property and elsewhere in order to reduce the costly impacts of such use to the surrounding vegetation, surface water and ground water; and
 - X. The *[mayor and members of the city or village council/town board]* believe that it is in the best interest of the *[city/ village/ township]* to regulate and require the permitting of such business under the terms and provisions as established herein.

***1Tip:** Non-MS4 municipalities utilizing language in this section should delete the statements referring to MS4 compliance.

***2Tip:** Municipalities should edit definitions in this document to align with the guidance documents that are employed in their operations.

Primer: Municipalities, choosing to utilize this regulatory strategy, could require:

- Ohio's Salt Smart Certification,
- BMPs for the application and storage of deicing materials, or
- both of the above

via occupational licensure of winter maintenance. For the purposes of this model language the term "license" is used, however, municipalities may utilize business permits or equivalent, instead. Municipalities can incorporate these requirements as appropriate into any existing licensure regulations.

The following model language incorporates both Ohio's Salt Smart Certification and non-prescriptive BMPs into an occupational licensing requirement for winter maintenance professionals. Communities utilizing this document should not use sections pertaining to the Ohio's Salt Smart Certification program until one exists. This language should not be considered complete as individual municipalities may have their own unique insurance, liability, and licensing requirements.

XL.02 OCCUPATIONAL LICENSURE FOR WINTER MAINTENANCE PROFESSIONALS

A. Applicability

- No person will engage in the operation of a winter maintenance business for the private operation of a snowplowing service or the use or storage of salt or other deicing materials, or to assist others in the same for the purpose of managing ice and snow from private roadways, parking areas and sidewalks and on commercial, industrial, institutional, office, multi-family and private single-family residential dwellings without being in compliance with the terms and provisions of this chapter. A license must be obtained from the clerk upon approval of *[the director of public works]*. The clerk will publish to the *[city's, village's, or township's]* website a list of all license holders.

B. Certification Required

- All licensees must employ an individual who possesses current Certification from the *[Agency administering]* Ohio's Salt Smart Certification. This individual must be responsible for the application of appropriate deicing material at the proper amount and rate; the employment of correct procedures for temperature and conditions; accurate record-keeping and data recordation; and calibration of equipment as least *[frequency]*¹*. This individual and the license holder must be available for and respond to inquiries and record requests from the licensing official for purposes of determining compliance with this section. In the event of a major storm emergency, the licensing official may exempt winter maintenance professionals from the requirements of this section for services completed under contract with the *[city/ village/ township]*.

C. Insurance Required

- Any person desiring a *[license]* must file an application with the *[city/village/township clerk]*. Each applicant must file with the application one (1) or more certificates of insurance for public liability and property damage co-insuring the applicant and the

[city/ village/ township] in amounts to be established by the *[city of village council/town board]* by resolution. The insurance must be approved as to form by the *[city/village/township attorney]*.

D. Deicer Storage Requirements

- All licensees must employ best management practices to minimize the discharge of polluted runoff from salt and deicer storage and application as follows*²:
 - Designated salt and deicer storage areas must be covered or indoors;
 - Designated salt and deicer storage areas must be located on an impervious surface; and
 - Implementation of practices to reduce exposure when transferring material in designated salt and deicer storage areas (e.g., sweeping, diversions, and/or containment).

E. License Required

- Upon submittal of Ohio's Salt Smart Certification documents, filing the public liability insurance policy or certificate of insurance with the *[city/village/township clerk]*, and upon payment of the license fee required in [insert cite] to the *[city/village/township treasurer]*, the license will be issued. An updated certification document is required every *[TBD licensing agency established renewal period]* per the Ohio's Salt Smart Certification.

F. Penalty

- Any person violating this section must forfeit to the *[city/ village/ township]* a penalty of not less than *[insert amount]* nor more than *[insert amount]* for each offense.

Primer: These regulations would apply to all properties within the municipality's jurisdiction. *General Requirements* are recommended as a basic level of control for bulk facilities. Facility Siting, Snow Piles, Salt Truck Wash Water, and Transfer of Materials below are optional and should be selected by municipalities as appropriate.

XL.03 DEICER BULK STORAGE FACILITY REGULATIONS

A. Applicability

- The following sections apply to all indoor and outdoor bulk deicer storage facilities (temporary and permanent) including salt piles, salt bag storage, sand piles and other storage of deicing materials. Bulk storage, as regulated by this chapter, is defined as storage of any material used for deicing and/or traction during winter conditions that is more than [for example, *five tons in solid form (or 1,000 gallons in liquid form)*].

B. General Requirements*³

- Indoor operations for the storage of deicing materials must be provided wherever possible in order to prevent such materials from being affected by rain, snow and melt water.

- All salt, sand and other deicing materials stored outdoors must be covered at all times.
 - When not using a permanent roof, a waterproof impermeable, flexible cover must be placed over all storage piles (to protect against precipitation and surface water runoff). The cover must prevent runoff and leachate from being generated by the outdoor storage piles. The cover must be secured to prevent transport by wind or other storm events. Where feasible outdoor salt should be placed into a windrow-, radial/kidney-, or sugarloaf- shaped pile. Conical piles cannot be covered effectively with a flexible material and therefore are not recommended.
 - Any roof leaks, tears or damage should be temporarily repaired during winter to reduce the entrance of precipitation. Permanent repairs must be completed prior to the next winter season.

C. Facility Siting

- The facility must be in close proximity to the area in which the deicing materials are to be used, if practical.
- Each facility must be located outside of floodplains and ***[insert distance]*⁴*** from lakes, rivers, streams, ditches, storm drains, manholes, catch basins, green infrastructure, wetlands and any other areas likely to absorb runoff. A facility must not be located ***[in close proximity to, within a certain distance of]*** surface water features, water supplies, wells or drywells.
- A facility must be located on impermeable surfaces.
- The property slope must be away from the facility's salt, deicer, and sand storage area.
- Salt vulnerable/intolerant natural areas should be avoided as storage facilities to the extent possible. Where they cannot be avoided, specific measures should be instituted to protect vulnerable areas. ***[Salt vulnerable/intolerable natural areas include, but are not limited to:***
 - ***Areas with salt sensitive vegetation***
 - ***Areas serving as a source of drinking water (surface water and ground water)***
 - ***Areas with bodies of water with low dilution, low volume or salt sensitive species***
 - ***Areas associated with ground water recharge zones or shallow water table, with medium to high permeable soils]***

D. Snow Piles

- Snow piles must be located downslope from salt and deicer storage areas to prevent the snow melt from flowing through storage areas and carrying material to the nearest drainage system or waterway.

E. Deicer Truck Wash Water

- Deicer- and salt-containing truck wash water must be captured, treated, and/or recycled for use as salt-brine in pre-wetting and anti-icing activities.

F. Transfer of Materials

- Practices must be implemented in order to reduce exposure (e.g., sweeping, diversions, and/or containment) when transferring salt or other deicing material.

Primer: The following language can be included as part of land use regulations and would apply to new and redevelopment projects which trigger the need for a land-disturbing permit. A chloride management plan is required per these regulations; the city or township could develop plan content requirements based on the regulatory strategies presented in this guidance, or per regional chloride management plans, or NPS-IS plans applicable to the city or township. These regulations apply to the property owner(s) rather than the winter maintenance professional(s).

XL.04 LAND DISTURBANCE PERMITTING

A. Chloride Management

- An applicant for a permit for land-disturbing activity on property other than individual single-family home sites must provide a plan for post-construction management of chloride use on the site that includes, at a minimum:
 - Designation of an individual authorized to implement the chloride-use plan; and
 - Designation of Ohio Deicing Salt-certified salt applicator engaged in the implementation of the chloride-use plan for the site.

Primer: The below model language is designed to show how deicer sweeping can be incorporated into existing off-street parking, sidewalk, and private roadway snow management requirements. Municipalities should incorporate sweeping language into existing code language as appropriate.

XL.05 PARKING LOT, SIDEWALK AND PRIVATE ROAD SWEEPING REQUIREMENTS

A. Sweeping of Parking Lot, Sidewalk, and Private Roads

- Every owner or occupant of any dwelling or other residential building, proprietor or lessee of any business, commercial or public premises, or [insert other entities as appropriate such as homeowner's associations] within the **[city/ village/ township]**, must conform to ice and snow removal specified under **[code section]**. If dry deicing material is spread, it must be properly swept and disposed of immediately after snow melts. If an owner, occupant, proprietor or lessee neglects or refuses to sweep excess deicing material, the **[city/ village/ township]** may sweep such material or authorize some person to do the same on behalf of the **[city/ village/ township]**. The **[city/ village/ township]**, in its sole discretion, may issue notices of violation to an owner, lessee, proprietor, or occupant for violations of this section*⁵.

***1Tip:** Frequency guidance can be found in Clear Roads', Manual of Environmental Best Practices for Snow and Ice Control (2015), or region guidance such as watershed NPS-IS plans.

***2Tip:** The BMPs specified for deicer storage are general and non-prescriptive. A municipality may choose to be more prescriptive within licensure requirements (see Deicer Bulk Storage Facility Regulations model language [§XL.09] for additional provisions).

***3Tip:** Municipalities may look to the 2013 OWRC *Recommendations for Salt Storage* for guidance. Localities should decide if industrial facilities shall be exempt from regulations. Municipalities may want to specifically exclude commercially bagged salt or salt used for manufacturing.

***4Tip:** A general recommended distance is not available due to the broad variance in conditions. Municipalities should consider the vulnerability of local water features and water supplies, and regulatory complications from the presence of existing facilities.

***5TIP:** Municipalities may want to specify the process(es) for deicer disposal. Any guidance should consider the results of such disposal. Sweeping excess material into storm drains should be strongly discouraged. But reuse could be encouraged.

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Primer: The model language below is designed to show how deicer sweeping practices can be incorporated into a municipality's general ordinances. Municipalities should incorporate sweeping language into existing code language as appropriate.

MODEL ORDINANCE AMENDMENT FOR Chloride Reduction

XL.06 EXCESS SALT AND CHEMICAL MELTING AGENTS

Amending Section [section number of local ordinance] of the [city/ village/ township] General Ordinances to Limit the Use of Salt and Melting Agents on Sidewalks.

A. Summary and background:

- This ordinance amends the existing snow and ice removal ordinance by limiting the use of salt or other melting agents to that amount necessary to treat the ice so that it can be removed. Under the amendment, excess salt and chemical melting agents may not accumulate on the sidewalk and must be removed following ice or snow melting. Excess use of salt and chemical melting agents not only creates its own hazard or impediment on the sidewalk, particularly for disabled persons, but the excess chemicals will eventually migrate into the City's storm and surface waters, contributing to the salinization of the City's streams, rivers, and groundwater, and Lake Erie which itself presents a current and future public health concern. The purpose of this ordinance is to give the City the ability to limit the overuse of salt and chemical melting agents, and enforcement will be coupled with an educational component designed to instruct the public on how to responsibly use such melting agents.

The *[mayor and members of the city or village council/town board]* do hereby ordain as follows:

- B. Subsection (1) of Section [section number of local ordinance] entitled ["section title of local ordinance"] of the [city/ village/ township] General Ordinances is amended as follows:

"(1) [existing local winter maintenance ordinance language].

1. Provided that when ice has so formed upon any sidewalk that it cannot be removed, then the owner shall keep the same effectively sprinkled with sand or other suitable substance in such manner as to prevent the ice from being dangerous, until such time as it the ice can be removed, and then it the ice shall be promptly removed. Reasonable quantities of salt and other lawful chemical melting agents may be used when ice is present or imminently likely to form, but only to the extent necessary to treat the ice so that the ice can be removed. Salt and other chemical melting agents shall not unreasonably accumulate on the sidewalk following ice melt or snow removal. Excess salt and other lawful chemical melting agents shall be removed following ice melt or snow removal within a period of *[number of days/ hours]* *¹
2. Any person violating any of the provisions of this section shall be subject to a forfeiture of *[not less than number of dollars (\$XX) nor more than number of dollars (\$XX) for a first offense and not less than number of dollars (\$XX) nor more than number of dollars (\$XXX)]* for any subsequent offense. Each day any violation of this ordinance continues shall constitute a separate offense."

3.

***1TIP:** Municipalities may want to specify limits for the use of sand or Specify the process for deicer disposal. Some municipalities accept excess materials for disposal or require specific locations for landfill disposal.

This completes the sections intended for local use, the following section is intended as guidance for state officials who want direction in regulating the use of deicers to protect water quality, animals, human health, and infrastructure. Localities may choose to rely on (a) state liability and/or certification programs if and when instituted to supplement and reinforce local ordinances.

The Stormwater Coalition appreciates your consideration of this document to help protect the water quality for the benefit of your constituents and the region. To help assess the impact of our work, we ask that you inform us when you adopt the model language and provide us with a copy of the adopted documents. If you have any questions, please contact TMACOG at 419-241-9155

Primer: This legislation is intended for the state to designate an agency (the Agency) to create a salt applicators certification program and establish criteria for training individual commercial applicators in methods for snow and ice removal and salt application that protect water quality. Under the bill, the Agency would certify commercial applicators who have completed approved training and passed an exam. The state may choose to enact legislation creating the certification program, and/or waive liability for injuries resulting from hazards where a certified professional has followed the approved BMPs.

The bill provides that a commercial applicator certified by the Agency and the owner of real estate that contracts with a certified commercial applicator are not liable for damages arising from a hazard resulting from the accumulation of snow and ice on any real estate maintained by the certified commercial applicator when the hazard is caused solely by snow or ice and the certified commercial applicator used methods for snow and ice removal and salt application that are taught in training approved by the department.

State Level Chloride Policy Boilerplate Language and Guidance

MODEL CODE FOR Chloride Reduction

XXXX Revised Code

Section XXXX.XXX liability waiver for salt applicators

XL Salt Applicator Certification Option

This legislation requires the Ohio Environmental Protection Agency (the Agency) to create a salt applicators certification program and establish criteria for training individual commercial applicators in methods for snow and ice removal and salt application that protect water quality. Under the bill, the Agency must certify commercial applicators who have completed approved training and passed an exam.

The bill provides that a commercial applicator certified by the Agency and the owner of real estate that contracts with a certified commercial applicator are not liable for damages arising from a hazard resulting from the accumulation of snow and ice on any real estate maintained by the certified commercial applicator when the hazard is caused solely by snow or ice and the certified commercial applicator used methods for snow and ice removal and salt application that are taught in training approved by the department.

XL.01 Definitions

- B. “Agency” means the Ohio Environmental Protection Agency.
- C. “Apply salt” means to apply salt or a salt alternative to roadways, parking lots, or sidewalks for the purpose of winter maintenance.
- D. “Commercial applicator” means any individual who applies or supervises others who apply salt, but shall not include municipal or state employees.
- E. “Director” means the director of the Ohio Environmental Protection Agency.
- F. “Owner” means a person that owns or leases real estate and that enters into a written contract with a certified commercial applicator for snow and ice removal and salt application.

- G. "Salt" means any substance used to melt snow and ice or for its deicing effects on privately owned surfaces traveled by pedestrians and vehicles.
- H. "Salt alternative" means any substance not containing chloride used for the purpose of deicing or anti-icing.

XL.02 Rulemaking Authority

- B. The Director shall adopt rules pursuant to ORC 119, relative to:
 - 1. Policies and goals for applying salt.
 - 2. Receiving and allocating federal grants and other funds or gifts for the purpose of carrying out any of the provisions of this chapter.
 - 3. The types and frequency of training programs required for certification.
 - 4. Procedures for commercial applicators to obtain certification.
 - 5. Recordkeeping required for commercial applicators to maintain certification.

XL.03 Voluntary Certification Program

- B. The department shall create a salt applicators certification program and establish criteria for training commercial applicators in methods for snow and ice removal and salt application that protect water quality. The department shall maintain a list of approved training programs that meet the criteria established under this paragraph.
 - 1. The department shall certify a commercial applicator if the commercial applicator successfully completes Ohio's Salt Smart Certification;
 - 2. and passes an examination approved by the department.
- C. The department shall maintain and publish a list of certified commercial applicators on the department's website.

XL.04 Liability

- B. A certified commercial applicator and/or an owner is not liable for damages arising from a hazard resulting from the accumulation of snow and ice on any real estate maintained by the certified commercial applicator when the hazard is caused solely by snow or ice and the certified commercial applicator used methods for snow and ice removal and salt application that are taught in a training program approved by the department under sub. 3 (1).
- C. Nothing in par. 4 (1) limits the liability of a certified commercial applicator or an owner if the certified commercial applicator or owner does any of the following:
 - 1. Commits an act or omission that constitutes gross negligence or willful or wanton disregard for the safety of entrants onto real estate of the owner that is maintained by the certified commercial applicator and the act or omission proximately causes injury, damage, or death.
 - 2. Intentionally injures an entrant onto real estate of the owner that is maintained by the certified commercial applicator
 - 3. Fails to use methods for snow and ice removal and salt application that are taught in a training program approved by the department under sub. 3 (1).

- D. This subsection does not apply to a commercial applicator who is not certified under this section.

XL.05 Record Keeping*¹

- B. A certified commercial applicator shall maintain all of the following records:
 - 1. A copy of the certified commercial applicator's certification that is issued by the department.
 - 2. Evidence of passing the examination approved by the department.
 - 3. A written record describing the road, parking lot, and property maintenance practices the certified commercial applicator used. The record shall include the types and amounts of salts used, the dates of treatment, and the weather conditions for each event requiring salt application. The certified commercial applicator shall maintain records under this paragraph for not less than *[number of years]*.
 - 4. Proof of compliance with the reporting requirements under sub. 5.

XL.06 Reporting

- B. No later than *[Month date]* of each year, a certified commercial applicator shall submit to the department on a form provided by the department the types and amounts of salts they used in the previous calendar year.

XL.07 Revocation of Certification

- B. The department may revoke the certification of a certified commercial applicator who violates this section or rules adopted under this section.

XL.08 Code Administration and Enforcement

- B. The commissioner shall administer and enforce the provisions of this chapter.
- C. The agency may issue an order to any person who is in violation of any provision of this chapter, an applicator certificate issued under this chapter, or a rule adopted under this chapter, to cease and desist from any act in violation of such provision, certification, or rule. Orders of the department under this section shall be effective immediately.
- D. The commissioner, after notice and hearing pursuant to ORC 119, may revoke the certification of any person who violates this chapter. Rehearings and appeals relating to revocation shall be governed by ORC 119.

* **TIP:** New Hampshire passed RSA 489-C *SALT Applicator Certification Option* in 2013 which may serve as a case study for such legislation in Ohio. Wisconsin has introduced similar legislation that can be tracked for feasibility in Ohio (2023-SB-52).

*¹**TIP:** The state may consider aligning recording keeping requirements to other professional certifications programs in Ohio.

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