

Report To: Halton-Hamilton Source Protection Committee
Report No.: SPC-23-12-02
From: Martin Keller, Senior Manager, Watershed Planning and Source Protection
Date: December 5, 2023
Subject: Draft Policy Package – Road Salt & Snow

Recommendation

THAT the Halton-Hamilton Source Protection Committee endorse the draft policies as presented in report SPC-23-12-02 Draft Policy Package – Road Salt & Snow.

Executive Summary

Following the September 26, 2023 Halton-Hamilton Source Protection Committee meeting, staff presented and discussed SPC comments on the proposed draft policies for the application, handling and storage of road salt and the storage of snow with the Municipal Working Group on October 18, 2023. Staff recommend maintaining prohibition of exposed salt storage as a feasible, low effort endeavour with significant potential benefits to drinking water sources.

Report

Staff have been drafting revised policies for the application, handling and storage of road salt and the storage of snow in response to changes to the Technical Rules released in December 2021. Reports addressing policy revisions for road salt and snow have been presented to the Halton-Hamilton Source Protection Committee (SPC) in September 2023 (SPC report 23-09-02). Previous SPC reports address revisions to the method for calculating impervious surface areas where road salt may be applied (SPC report 22-09-01, SPC report 22-12-02, SPC report 23-03-01, and SPC report 23-06-02).

Following the September 26, 2023 SPC meeting, Staff reviewed SPC member comments on the proposed draft policy text for application, handling and storage of road salt and the storage of snow and discussed them with the Municipal Working Group on October 18, 2023.

Members of the Municipal Working Group support the proposed prohibition of exposed road salt storage due to the significant threat such practice poses to drinking water sources. Staff recommend maintaining prohibition of exposed salt storage as a feasible, low effort endeavour with significant potential benefits to drinking water sources. Storing quantities of road salt fully exposed to precipitation, run off or snow melt is an unnecessary practise that can cause significant impacts to drinking water sources.

Prohibition of fully exposed salt storage does not prohibit the activity of salt storage itself, rather a circumstance of the activity, i.e., the way road salt is stored. Prohibition of fully exposed salt storage still allows the storage of salt in that location if the storage meets the criteria of the potentially exposed salt storage category, e.g., contained in an enclosure such as outdoor bins, salt boxes or container.

Appendix A summarizes the comments made by members of the SPC and Municipal Working group. The table also includes staff comments and rationale for the proposed policy.

Appendix B contains all proposed policies for the application, handling and storage of road salt and the storage of snow. No changes have been made to the proposed draft policies and reflect what was presented to the SPC at the September 26, 2023 committee meeting.

Signed & respectfully submitted:



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Senior Manager, Watershed Planning and Source Protection



Mardi Bergen
Source Water Information Coordinator, Watershed Planning and Source Protection

Appendix A

Application, Handling and Storage of Road Salt & Storage of Snow

Comments: Prohibition of Exposed Salt Storage

Tool	Proposed Policy	Comments from SPC (Sept 26, 2023)	Comments from Municipal Working Group (Oct. 18, 2023)	Staff Comments & Rationale for Proposed Policy
Handling and Storage of Salt Prohibition (S.57)	T-32.1-C - Existing and Future significant threat; storage of salt is or would be fully exposed to precipitation and run off or snow melt	<ul style="list-style-type: none">- Having two policies for the same threat is unnecessary. The threat could be managed through the RMP and prohibited as part of the RMP.- Exposed salt storage is such a bad practice that prohibition is warranted	<ul style="list-style-type: none">- Storing road salt, fully exposed to the elements is bad practice. Prohibition is justified to eliminate the significant threat to drinking water.- RMP can not be used to prohibit an activity or a circumstance of an activity.- Prohibiting the storage of exposed salt is not prohibiting the activity of salt storage itself, rather a circumstance of the activity, i.e., the way salt is stored.	<ul style="list-style-type: none">- Using prohibition clearly states the intent to eliminate a significant drinking water threat, rather than leaving to RMO/RMI discretion.- S.58 Risk Management Plan cannot be used to prohibit an activity- Prohibiting storage of fully exposed salt is a feasible, low effort practice with significant potential benefits to drinking water sources.

Appendix B

Proposed Draft Policies: Application, Handling & Storage of Road Salt

Policy ID	T-32.1-C
Threat	Handling and Storage of Road Salt
Policy Tool	Prohibition
Policy Implementer	Risk Management Official
Policy	<p>a) Where the handling and storage of road Salt is or would be a significant drinking water threat and the storage is exposed to precipitation or runoff from precipitation or snow melt, this activity shall be designated for the purpose of Section 57 of the CWA and shall be prohibited.</p> <p>b) The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, actions taken regarding the handling and storage of road Salt and submit this report to the Source Protection Authority by February 1 of each year.</p>
Legal Effect (Appendix C)	<p>a) Must conform with – legally binding. List G (S.57 prohibition policy)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Existing/Future

Policy ID	T-32.2-C
Threat	Handling and Storage of Road Salt
Policy Tool	Risk Management Plan
Policy Implementer	Risk Management Official
Policy	<p>a) The handling and storage of road Salt is designated for the purpose of Section 58 of the CWA and a Risk Management Plan shall be required where all of the following applies:</p> <ol style="list-style-type: none"> 1. the activity is or would be a significant drinking water threat; and 2. the handling and storage of road Salt has the potential to be exposed to precipitation or runoff from precipitation or snow melt; and 3. the property is used for any land uses except low density residential. <p>b) The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, actions taken regarding the handling and storage of road Salt and submit this report to the Source Protection Authority by February 1 of each year.</p>
Legal Effect (Appendix C)	<p>a) Must conform with – legally binding. List H (S.58 RMP policies)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Existing/Future

Definition:

Low Density Residential – means any residentially zoned lot containing 4 or less units.

Policy ID	T-33-S
Threat	Handling and Storage of Road Salt
Policy Tool	Other Tools: Niagara Escarpment Plan
Policy Implementer	Niagara Escarpment Commission
Policy	<p>a) Where the handling and storage of road salt is or would be a significant drinking water threat and the storage is exposed to precipitation or runoff from precipitation or snow melt, the Niagara Escarpment Commission is requested to prohibit the activity in the Niagara Escarpment Plan.</p> <p>b) The Niagara Escarpment Commission is requested to provide to the Source Protection Authority by February 1 each year a report of the actions taken to prohibit the activity.</p>
Legal Effect (Appendix C)	<p>a) Strategic – non-legally binding. List K (other bodies)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Existing/Future

Policy ID	T-34-C
Threat	Application, Handling and Storage of Road Salt
Policy Tool	Education and Outreach
Policy Implementer	City of Hamilton and the Regional Municipality of Halton
Policy	<p>Where the application, handling and storage of road Salt is or would be a significant drinking water threat,</p> <p>a) City of Hamilton and the Regional Municipality of Halton shall continue to implement an education and outreach programs to address the impacts of road salt on drinking water sources and the use of best management practices. Key messages should include efficient use of road salts and the use of alternatives to help address newly identified threats.</p> <p>b) The City of Hamilton and the Regional Municipality of Halton shall document the actions taken for any new or existing education and outreach program addressing the application, handling and storage of road salt, and report this information to the Source Protection Authority by February 1 of each year. At a minimum, the report must include additional details on how the significant drinking water threat was managed and/or ceased to be significant.</p>
Legal Effect (Appendix C)	<p>a) Must comply with – legally binding. List E (municipalities)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Existing and future
Notes	Education and outreach programs inform public and private sectors about minimizing the impacts from the application, handling and storage of road salt on the sources of municipal drinking water while ensuring the safety of the traveling public.

Policy ID	T-35-C
Threat	Application, Handling and Storage of Road Salt
Policy Tool	Salt Management Plans
Policy Implementer	City of Hamilton, Town of Milton, Town of Halton Hills, City of Burlington, Town of Oakville, Township of Puslinch, County of Wellington
Policy	<p>Where the application, handling and storage of road Salt is or would be a significant drinking water threat,</p> <p>a) City of Hamilton, Town of Milton, Town of Halton Hills, City of Burlington, Town of Oakville, Township of Puslinch, County of Wellington shall ensure their Salt Management Plans are up to date and identify the location of wellhead protection areas and intake protection zones and enhance best management practices in these areas.</p> <p>b) City of Hamilton, Town of Milton, Town of Halton Hills, City of Burlington, Town of Oakville, Township of Puslinch, County of Wellington shall advise the Source Protection Authority of any revisions to the Salt Management Plans by February 1 of each year.</p>
Legal Effect (Appendix C)	<p>a) Must comply with - legally binding. List E (municipalities)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Existing and future

Policy ID	T-36-S
Threat	Application of Road Salt
Policy Tool	Best Practices
Policy Implementer	Ministry of Transportation
Policy	<p>To seek collaboration on the use of best practices for the application of road salt on Provincial roads where this activity could be a significant, moderate, or low drinking water threat,</p> <ul style="list-style-type: none"> a) the Ministry of Transportation and their supporting de-icing contractors are requested to continue the proactive implementation of their salt management plans and to continue the use of best management practices within wellhead protection areas and intake protection zones. b) the Ministry of Transportation is requested to update their salt management plan, as required, to ensure consistency with the most current versions of Environment Canada's Code of Practice for the Environmental Management of Road Salts and the Transportation Association of Canada's Syntheses of Best Practices. c) the Ministry of Transportation should continue their ongoing investigation and implementation of innovative practices and new mitigative technologies regarding road salt application and the management of infiltration and runoff. d) the Ministry of Transportation is requested to actively consider the creation of a pilot project utilizing new practices and mitigative technologies for road salt application or the management of runoff that could benefit drinking water sources within the Halton-Hamilton Source Protection Region. e) the Halton Region and Hamilton Region Conservation Authorities shall consult with the Ministry of Transportation to: <ul style="list-style-type: none"> 1. determine the status of the Ministry's salt management plan and, if revised, request a copy; and 2. determine the status of pilot projects underway and proposed future pilot projects designed to protect drinking water sources in the Halton-Hamilton Source Protection Region and report on this information to the Source Protection Authority by February 1 of each year.

Legal Effect (Appendix C)	a), b), c), d) Significant threats: Strategic - non-legally binding. List K; Moderate and low threats: Strategic – non-legally binding. List J. e) Must conform with – legally binding. List F (monitoring policy)
Where Policy Applies	Significant threats: See Figures 2 to 11. WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)
When Policy Applies	Existing and future
Notes	The investigation and implementation of innovative practices and new mitigative technologies regarding road salt application and the management of infiltration and runoff are key to protecting drinking water sources.

Policy ID	T-36.1-C
Threat	Application of Road Salt
Policy Tool	Risk Management Plan
Policy Implementer	Risk Management Official
Policy	<p>a) The application of road salt shall be designated for the purpose of Section 58 of the CWA, and a Risk Management Plan shall be required where all of the following applies:</p> <ol style="list-style-type: none"> 1. the activity is or would be a significant drinking water threat. 2. Salt is or could be applied to the property. 3. the Salt Application Area is equal to or greater than 200 square metres or 8 parking spots; and 4. the property is used for any land uses except low density residential. <p>b) The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, actions taken regarding risk management plans for the application of road Salt and submit this report to the Source Protection Authority by February 1 of each year.</p>
Legal Effect (Appendix C)	<p>a) Must conform with – legally binding. List H (S.58 RMP policies)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Existing/Future

Proposed Draft Policies: Storage of Snow

Policy ID	T-38-S
Threat	Storage of Snow
Policy Tool	Niagara Escarpment Plan
Policy Implementer	Niagara Escarpment Commission
Policy	<p>Where the storage of snow would be a significant drinking water threat and the area on which the snow would be stored is greater than 200 metres square,</p> <p>a) the Niagara Escarpment Commission is requested to prohibit the storage of snow in the Niagara Escarpment Plan.</p> <p>b) the Niagara Escarpment Commission is requested to provide to the Source Protection Authority by February 1 of each year a report on the actions taken to prohibit future storage of snow in the Niagara Escarpment Plan.</p>
Legal Effect (Appendix C)	<p>a) Strategic – non-legally binding. List K (other bodies)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 9; ICA (chloride)</p>
When Policy Applies	Future

Policy ID	T-39-C
Threat	Storage of Snow
Policy Tool	Land Use Planning
Policy Implementer	Municipal Planning Authority
Policy	<p>Where the future storage of snow would a significant drinking water threat and the area on which the snow would be stored is greater than 200 metres square,</p> <ul style="list-style-type: none"> a) the municipal planning authority shall prohibit the storage of snow on an area greater than 200m square through planning tools. b) the Municipal Planning Authority shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, actions taken to manage the activity and submit this report to the Source Protection Authority by February 1 of each year
Legal Effect (Appendix C)	<ul style="list-style-type: none"> a) Must conform with – legally binding. List A (Planning Authorities) b) Must conform with – legally binding. List F (monitoring policy)
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 8; ICA (chloride)</p>
When Policy Applies	Future

Policy ID	T-39.1-C
Threat	Storage of Snow
Policy Tool	Risk Management Plan
Policy Implementer	Risk Management Official
Policy	<p>a) The storage of snow shall be designated for the purpose of Section 58 of the CWA, and a Risk Management Plan shall be required where the following apply:</p> <ol style="list-style-type: none"> 1. Any existing area upon which snow is stored; or 2. Any future area upon which snow would be stored is not more than 200 metres square. <p>b) The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, actions taken to manage the activity and submit this report to the Source Protection Authority by February 1 of each year</p>
Legal Effect (Appendix C)	<p>a) Must conform with – legally binding. List H (S.58 RMP policies)</p> <p>b) Must conform with – legally binding. List F (monitoring policy)</p>
Where Policy Applies	<p>See Figures 2 to 11.</p> <p>WHPA-A & B – V. score 10; WHPA-E – V. score 8; ICA (chloride)</p>
When Policy Applies	Existing/Future