Esse	Essex Region Conservation					
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			NKING WATER CE PROTECTION Our Actions Matter	rity re		
Esse	x Reg	ion Source Protec	tion Authority	Meeting Agenda		
Mee	ting [Date:	Thursday, June 20, 2024			
Time	e:		6:00pm			
Loca	tion a	and Details:	Council Chambers, Essex C	ivic Centre		
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9. Correspondence

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10. New Business

11. Other Business

A. Next Meeting

The next meeting of the Essex Region Source Protection Authority will be held at the Call of the Chair.

12. Adjournment

Thy

Tim Byrne CAO/Secretary-Treasurer



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Essex Region Source	e Protection Authority	Meeting Minutes		
Meeting Date:	Thursday, April	11, 2024		
Time:	6:00 pm			
Location and Detai	ls: Council Chambe	er, Essex Civic Centre		
Attendance				
Members Present:	Jim Morrison (Chair) Sue Desjarlais (Vice-Chair) Molly Allaire Peter Courtney Tracey Bailey Ryan McNamara	Michael Akpata Anthony Abraham Larry Verbeke Angelo Marignani Kieran McKenzie		
Absent:				
Regrets:	Katie McGuire-Blais Kim DeYong Jason Matyi Thomas Neufeld	Dayne Malloch Joe Bachetti Tania Jobin Mark McKenzie		
Staff Present Others	Shelley McMullen, CFO/Direc Kevin Money, Director Conse James Bryant, Director Water	e, CAO/Secretary-Treasurer upnicki, Corporate Services, Human Resources Manager/EA AcMullen, CFO/Director Finance and Corporate Services oney, Director Conservation Services yant, Director Watershed Management Services rth, Chair Source Water Protection Committee		
		y Scientist/SWP Project Manager		

1. Call to Order

Good evening and welcome to the April 11, 2024, meeting of the Essex Region Source Protection Authority

I will call the meeting to order and confirm that all members are present.

2. Land Acknowledgement

I'd like to begin by acknowledging that this land is the traditional territory of the Three Fires Confederacy of First Nations, comprised of the Ojibway, the Odawa, and the Potawatomi Peoples.

We value the significant historical and contemporary contributions of local and regional First Nations and all of the Original Peoples of Turtle Island - North America who have been living and working on the land from time immemorial.

3. Declarations of Pecuniary Interest

There were no declarations of pecuniary interest.

4. Approval of Agenda

ERSPA 01/24 Moved by Ryan McNamara Seconded by Molly Alliare

THAT the agenda for the April 11, 2024 Meeting of the Essex Region Source Protection Authority be approved. **Carried**

5. Adoption of Minutes

A. Essex Region Source Protection Authority

ERSPA 02/24

Moved by Angelo Marignani Seconded by Kieran McKenzie

THAT the minutes for the December 14, 2023 Meeting of the Essex Region Source Protection Authority (ERSPA) be approved and the recommendations therein be adopted as distributed. **Carried**

B. Essex Region Source Protection Committee

ERSPA 03/24 Moved by Molly Alliare

Seconded by Tracey Bailey

THAT the minutes for the September 13, 2023, December 14, 2023, and February 14, 2024, meetings of the Essex Region Source Protection Committee and the recommendations therein be approved as distributed.

6. Delegations

None

7. Reports for Approval

A. SPA 01/24 2023 Essex Region Source Protection Authority and Risk Management Services Annual Progress Reports

ERSPA 04/24

Moved by Kieran McKenzie Seconded by Sue Desjarlais

THAT the 2023 Essex Region Source Protection Authority Annual Progress Report be submitted to the MECP on or before May 1, 2024, pending suggested changes and additions made by the SPC and further;

THAT the ERSPA endeavour to provide presentations to municipal councils, and further,

THAT the 2023 Risk Management Services Annual Progress Report be received for information.

8. Committee of the Whole – In-Camera

A. Confidential Matters related to Personnel

ERSPA 05/24Moved by Angelo Marignani
Seconded by Anthony Abraham

THAT the meeting move from the Essex Region Source Protection Authority to the Committee of the Whole related to personnel matters. **Carried**

B. Reconvene in Open Session

ERSPA 06/24 Moved by Molly Alliare Seconded by Peter Courtney

THAT the actions of the Essex Region Source Protection Authority, Committee of the Whole, be endorsed. **Carried**

- 9. Correspondence None
- 10. New Business None

11. Other Business

A. Next Meeting

The next meeting of the Essex Region Source Protection Authority Board of Directors will be held on at the Call of the Chair.

12. Adjournment

ERSPA 07/24 Moved by Molly Alliare Seconded by Ryan McNamara

THAT the April 11, 2024 meeting of the Essex Region Source Protection Authority be adjourned. **Carried**

Jim Morrison Chair

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Tim Byrne CAO/Secretary-Treasurer

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Essex Region So	urce Protec	tion Committee		Meeting Minutes	
Meeting Date:		Wednesday, March 13, 2024			
Time:		4:00 pm			
Location and De	tails:	Essex Civic Centre, Ro	Essex Civic Centre, Room C		
Attendance					
Members Present:	John Barnett Ron Barrette Aaron Corist Jim Drummo Bill Dukes Frank Garard Victoria Pecz Larry Verbek Kirsten Servia Monica Lem	(via Zoom) ine (via Zoom) ond	Chad Quinla	au llet (via Zoom) n ers (via Zoom)	
Staff Present:	Protection Amy Weinz,	ler, Water Quality Scientist Water Quality Technician Administrative Associate, C	-	-	
Others:	Jenna Maidn Higgins	nent (CFN) Michelle McCor	mack (CFN –	via Zoom), Warren	

1. Call to Order

Good evening and welcome to the March 13, 2024 meeting of the Essex Region Source Protection Committee.

We have quorum with 8 members present, and 5 members present by Zoom. I will call the meeting to order at this time, 4:06 pm.

2. Land Acknowledgement

We would like to begin by acknowledging that this land is the traditional territory of the Three Fires Confederacy of First Nations, comprised of the Ojibway, the Odawa, and the Potawatomi Peoples.

We acknowledge the harms and mistakes of our past as we continue to move forward in the spirit of reconciliation.

As we do at our meetings, I'll begin with a statement of gratitude and a statement of hope. I would be remiss not to be grateful for this beautiful weather and I'm hopeful that we have a good meeting and that we get through our annual report.

3. Chair's Welcome

Welcome everyone. We especially welcome Jenny Gharib who is handling the technical aspect of our meeting in Amy's place. Kirsten Service is here from MECP as well as Monica Lemke. And Jenna Maidment and Michelle McCormack are here from CFN. Tim Byrne, CAO, is here today representing ERCA.

4. Declarations of Conflict of Interest

There were no declarations of conflict of interest.

5. Approval of Agenda

Resolution SPC 06/24	Moved by Bill Dukes		
	Seconded by Matthew Merrett		

That the agenda for the March 13, 2024 meeting of the Essex Region Source Protection Committee be approved.

Carried

6. Adoption of Minutes

A. Essex Region Source Protection Committee

Resolution SPC 07/24Moved by Matthew MerrettSeconded by Chris Snip

That the minutes for the February 14, 2024 meeting of the Essex Region Source Protection Committee (ERSPC) be approved and the recommendations therein be adopted as distributed.

Carried

B. Essex Region Source Protection Authority

None.

7. Correspondence

Letter to Minister Lisa Thompson

THAT the Essex Region SPC provide a letter of support to the concerns raised by the Ausable Bayfield and Maitland Valley Source Protection Committees in their letter dated February 26, 2024

Resolution SPC 08-24	Moved by Matthew Merrett		
	Seconded by Frank Garardo		

Carried

8. MECP Liaison's Update

The MECP has moved away from the old model of having liaison officers attend all SPC meetings and towards a model where we are fostering a more direct relationship with our program analysts, project managers and our committees. We are looking at workloads and what the needs of various committees are and making a decision at the time of the meeting as to who the right person would be to attend and prioritizing that as we can. The way we do our work has significantly shifted over the years. We are no longer building the program, now we are well into implementation. There is a lot of demand on us for things like Section 34 amendments and Section 36 updates. This has changed what our needs are at the branch and we are responding to that so that we can continue to provide the best service to you and support your needs. You'll see people like Monica at your meetings. I will attend the occasional meeting to hear what's on your minds and learn what's important to you.

You may have learned already that, for the first time ever, the ministry has proposed 3year funding agreements. The current challenge we're experiencing is that the workplans that came in have significantly been oversubscribed with available funding. My team has been doing very deep analysis on each of the workplans that have come in and we're working closely with the project managers to figure out where we could land with the workplan. That conversation is very live. It is great news for the program to have funding certainty for 3 years. We are hopeful that within a couple of months, you'll see more news from the ministry in terms of detail on looking at either existing recipients or new kinds of recipients to implement our best practices. Given that there's so much volume on Section 34 amendments and Section 36 updates, we are trying to work with our project managers and Conservation Ontario on ways to streamline the process.

There are some things we can do without changing regulations and that's where we've been focused. We are working to be as efficient as we can, so you'll see some changes in the process. We are working hard to help expedite the process so that you can get to the outcomes you need more quickly. We recognize that we may need to continue evolving to ensure that we provide for the needs of the project managers and Source Protection Committees. It's always an open dialogue for us to learn from you and to figure out ways to support you based on where you're at and on some of the pressures and needs that you have.

9. **Presentations**

None.

10. Reports for Approval

A. Report SPC 03/24 – Update on Risk Management Services in the Essex Region Source Protection Area

THAT SPC Report 03/24 be received for information

Resolution SPC 09/24 Moved by Bill Dukes Seconded by Jim Drummond

Carried

B. Report SPC 04/24 – Draft Responses for the 2023 Annual Reporting Template

THAT the 2023 Essex Region Source Protection Authority Annual Progress Report be submitted to the MECP on or before May 1, 2024, pending suggested changes and additions made by the SPC and endorsement by the SPA

Resolution SPC 10/24Moved by John BarnettSeconded by Matthew Merrett

Carried

C. Report SPC 05/24 – S.36 Update – Draft Road Salt Policy - Monitoring

THAT the SPC approve the attached amended policy to be submitted to the MECP for early engagement

Resolution SPC 11/24	Moved by Chris Snip
	Seconded by Matthew Merrett

Carried

11. New Business

None.

12. Other Business

None.

13. Adjournment

Resolution SPC 12/23Moved by Tim Mousseau
Seconded by Chris Snip

That the March 13, 2024 meeting of the Essex Region Source Protection Committee be adjourned at 5:31 pm. Carried

Next Meeting

The next meeting of the Essex Region Source Protection Committee will tentatively be held on June 12, 2024 starting at 4:00 pm at the Essex Civic Centre, Room C.

Tom Fuerth Chair

Katie Stammler Water Quality Scientist/ Project Manager Source Water Protection

Essex Region Source Protection Authority

ERSPA 02/24

From: Katie Stammler, Project Manager, Source Water Protection

Date: Friday, May 31, 2024

Subject:s.36 Amendments – Policies for Application, Handling, Storage of
Road Salt and the Storage of Snow

Recommendation: That the SPA endorse the policy amendments as described in SPA Report 02/24 to be submitted to the MECP for early engagement

Summary

- The circumstances under which the Application, Handling and Storage of Road Salt is a significant drinking water threat (SDWT) changed substantially in the 2021 Director Technical Rules affecting Intake Protection Zones (IPZ) with scores of 9 or higher (Lakeshore, Windsor, and Amherstburg IPZ-1s).
- The circumstances under which the Storage of Snow is a SDWT changed substantially in the 2021 Director Technical Rules affecting IPZs with scores of 8 or higher (Lakeshore, Windsor, and Amherstburg IPZ-1s, Windsor IPZ-2).
- The current Source Protection Plan contains one policy for the Handling and Storage of Road Salt and one policy for the Storage of Snow. Due to the above, both policies are being amended. Three new policies are being added for road salt and two new policies for snow. There is one new policy to address both road salt and snow

Discussion

Handling, Storage and Application of Road Salt Threat 12 and 13; SPC Reports 10/23, 1/24, 5/24

The storage of road salt for Lakeshore, Windsor and Amherstburg IPZ-1s was previously considered a SDWT, with a limit of 5000 tonnes, that limit is now reduced to 20kg (i.e. a bag of road salt), specifically if the salt is exposed to precipitation or run off. The percentage of impervious land in these vulnerable areas is calculated to be 8-80%. Previously, application of road salt was only considered to a be a SDWT if imperviousness was >80% so the Essex Region SPP did not have a policy for this activity. With the reduction of this threshold to >8%, policies are now required to address this activity.

There is no specific drinking water standard for salt or its components (chloride and sodium). Chloride affects taste and can cause corrosion in the distribution system and has an aesthetic limit of 250 mg/L under the <u>Guidelines for Canadian Drinking Water Quality</u>. The aesthetic limit for sodium is 200mg/L and drinking water should be below 20mg/L for those on a sodium reduced diet. A key consideration is the lack of feasible treatment options to remove salt.

A <u>Good Practices Guidance for Winter Maintenance in Salt Vulnerable Areas</u> was developed by a multi-stakeholder group, chaired by the Ontario Good Roads Association and Conservation Ontario. These practices can be considered by municipalities, contractors, and risk management officials under the Clean Water Act.

<u>Storage of Snow</u> Threat 14; SPC Reports 11/23, 2/24

Currently the storage of snow >1 hectare (10,000m²) is prohibited through s.57 in IPZ-1s in Lakeshore, Windsor, and Amherstburg. The 2021 circumstances include a threshold for snow storage of 2000m² that will apply to Windsor IPZ-2, and 200m² that will apply to the IPZ-1s in Lakeshore, Windsor, and Amherstburg. As a general rule, a parking space is approximately $30m^2$. This allotment accounts for traffic aisles, end caps, entrance and exit, and space between cars. Therefore, a $200m^2$ parking lot could hold 6-7 cars and a $2000m^2$ parking lot could hold up to 65 cars. Storm water outfalls draining an area of snow storage is a new threat circumstance.

Snow removed from roads and parking lots can be contaminated with salt, oil, grease and heavy metals from vehicles, litter, and airborne pollutants. A number of chemicals from the storage of snow could make their way into drinking water sources including chloride, nitrogen, copper, petroleum hydrocarbons, cyanide, sodium, lead and zinc.

All snow disposal sites should be evaluated by the MECP. According to the <u>Guidelines on Snow</u> <u>Disposal and De-icing Operations in Ontario</u>, land disposal sites must be accessible, large enough to contain the projected maximum snow load and close to where snow is collected to be economically practical. Sites need to meet criteria based on accessibility, noise, alternate uses of the site, and visual considerations.

The SDWT circumstances specify two scenarios:

- 1. The infiltration or discharge of snowmelt from the storage of snow on a site where the predominant land use is commercial or industrial by any means other than a storm water drainage system outfall
- 2. A storm water drainage system outfall that serves a Snow Disposal Facility

About the affected IPZs

Lakeshore IPZ-1 is occupied by a marina and associated parking lots and parkland. Windsor IPZ-1 falls within a residential area with 30-40 private dwellings along a 1.3km stretch of Riverside Drive. There are several high density housing units with parking lots. Based on a review of the aerial photography, the parking lots are in the IPZ-2 with driveways in the IPZ-1. There are also two municipal parks with parking lots (~2400m² and 3000m²). Windsor IPZ-2 covers an area of approximately 16km². The area is bounded by St. Luke Road on the west, Tecumseh Road on the south and Florence Avenue on the east. The northern boundary includes the entire Detroit River shoreline from Walker Road to Sandpoint Beach. There is varied land use throughout this area. Amherstburg IPZ-1 follows 1km of Front Road with 40-50 private lots or dwellings with driveways as well as some business and the Amherstburg water treatment plant. There are also a few large parcels of vacant land, which could have high density residential units in the future. Municipal staff confirmed that storage sites for road salt are not within these IPZ-1s.

Known snow disposal facilities in Windsor

City of Windsor staff indicated by email that there are two sites used for snow disposal. The Caron Avenue site is outside of the vulnerable areas and the Ford Test Track is within Windsor IPZ-2. It is reasonable to assume that some commercial or industrial properties with parking lots for more than 6 vehicles, could meet the circumstances to be a SDWT with sufficient snowfall that requires parking lots of these sizes to be ploughed.

Preparing policies

The SPC met on several occasions to discuss policy options for all of the above named SDWT circumstances and ERSPA staff conferred with Project Managers from other Source Protection Regions. The SPC opted for policies they felt would address the threat to sources of drinking water, while not creating an overly burdensome program for residents or implementing bodies. The SPC recommended amending the two existing policies and writing six new policies.

Recommended policies for the Application of Road Salt

Both recommended policies are new as this was not previously a SDWT in the Essex Region.

1. S.58 Risk Management Plan

This policy uses s.58 of the Clean Water Act to require Risk Management Plans (RMP) for all types of properties, with the exception of residential properties with four units or fewer. High density housing units would not be exempt.

2. Specify Action

This policy uses the Specify Action tool to require municipalities (Lakeshore, Windsor, Amherstburg, County of Essex) to review, revise and/or issue a new Salt Management Plan for the application of salt on roadways. In addition to the main roadways, this policy would be expected to affect the municipally owned marina in Lakeshore and municipal parks with parking lots (~2400m² and 3000m²) in Windsor IPZ-1.

A Road Salt Management Plan documents what a municipality currently does for winter maintenance and identifies affordable actions they can take to improve their management of road salt. Importantly, this is something that the municipalities should already be doing. Currently, the <u>Code of Practice for the Environmental Management of Road Salts</u> recommends that a Salt Management Plan be completed by any road authority that uses more than 500 tonnes of road salt in a year or that applies salt in a vulnerable area (this refers to many types of sensitive area including sources of drinking water). The Code of Practice does not address salt use on parking lots or private properties.

Recommended policies for the Handling and Storage of Road Salt

This policy replaces the current s.57 policy that prohibits >5,000 tonnes of road salt storage. Note that there is no s.57 prohibition policy per the direction of the SPC.

1. S.58 Risk Management Plan

This policy uses s.58 of the Clean Water Act to require RMPs for storage of road salt greater than 100kg for all types of properties, with the exception of residential properties with four units or fewer. This would affect the same properties as the s.58 policy for the application of road salt.

The SPC opted for a minimum volume based on review of other similar policies and knowledge of storage options. <u>Commercially available salt storage bins</u> have volumes ranging from 225kg to 1500kg. The smallest volume bin can hold a sufficient amount of salt to cover 4000m² (a small parking lot). In contrast, the previous limit was 5,000,000kg.

Recommended policies for Application, Handling and Storage of Road Salt

This is a new policy for the Essex Region Source Protection Plan

1. Monitoring

This policy uses the monitoring tool to recommend that sampling frequency for sodium chloride in the raw water at drinking water intakes be increased from once every five years to quarterly to get a better sense of how impacted our intakes are and whether the measure we're taking are working.

Recommended policies for the Storage of Snow

The first two policies are new for the Essex Region. The s.58 policy replaces the current policy which uses s.57 to prohibit snow storage >1ha. Note that there is no s.57 prohibition policy per the direction of the SPC.

1. Prescribed Instrument

This policy uses Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act to manage the storage of snow at snow disposal facilities, which require an ECA to operate. This policy will likely only apply to the snow disposal facility at the Ford Test Track in Windsor IPZ-2

2. Specify Action

This policy uses the Specify Action tool to direct municipalities to require best management practices for snow storage at site plan approval. This policy may be redundant to the s.58 Risk Management Plan policy.

3. S.58 Risk Management Plan

This policy uses s.58 of the Clean Water Act to require RMPs for commercial and industrial properties that store snow sufficient to be considered a SDWT. Parking lots for high density residential properties would be exempt in accordance with the Director Technical Rules. All vulnerable areas have commercial properties that will require Risk Management Plans, there may be industrial properties in Windsor IPZ-2.

Recommended policies for all SDWT circumstances for road salt and snow

This is a new policy for the Essex Region Source Protection Plan

1. Education and Outreach

This policy uses education and outreach to address both categories of salt threats and the storage of snow. This policy addresses smaller volumes of salt storage and provides information to private homeowners on smart application of salt. Although the properties in the IPZ-1s would be targeted, this information would be available to all residents of the Essex Region through use of social media.

The table below indicates the changes to the existing policies. Attached are the updated policies showing changes from the current policies. Text that has been struck through is deleted, text that is highlighted yellow is new or changed.

ID #	Threat	Current Policy #	Circumstance	Applicable Area	Format Only	Other Edit	New Policy
12	Application of Road Salt	N/A	Yes	Yes			Yes: 2
13	Handling and Storage of Road Salt	24	Yes			Policy Tool	
12- 13	Handling, Storage and application of Road Salt	N/A					Yes: 1
14	Storage of Snow	25	Yes	Yes		Policy Tool	
14	Storage of Snow	NA					Yes: 2
12- 14	Road Salt and Snow	N/A					Yes: 1

1A

Katie Stammler, PhD., Source Water Protection Program Manager

Th

Tom Fuerth, P.Eng, Chair, Essex Region Source Protection Committee

Attachments:

- Application of Road Salt, Handling and Storage of Road Salt policies (amended and new)
- Storage of Snow policies (amended and new)

Current Policy N/A New Policy No. TBD

Current Policy ID N/A New Policy ID 12_s.58.V9.ER

12 The application of Road Salt

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1 IPZs with vulnerability scores of 9 or more

Risk Level: Significant Approach: Manage Policy Tool: Clean Water Act, Section 58 Risk Management Plan Implementing Body: Risk Management Official Legal Effect: Must conform/comply with Compliance Date:

Existing Threats: Within 5 years of the Source Protection Plan or its amendments coming into effect Future Threats: When the Source Protection Plan or its amendments come into effect

Significant Risk Circumstance:

The road salt is applied in an area where the default percentage of impervious surface area is 8% or more

Policy Text:

The Risk Management Official shall enact applicable sections under Part IV of the Clean Water Act to establish a Risk Management Plan (RMP) with the person engaged in the significant drinking water threat activity. The RMP will contain risk management measures that ensure the application of road salt ceases to be or never becomes a threat to sources of drinking water. The Risk Management Plan is expected to be based on existing programs such as "Smart about Salt" for commercial properties and the "Synthesis of Best Management Practices" for municipal properties. The Risk Management Plan may include, but is not limited to, details concerning the amount, rate and area to which road salt is applied. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan. This policy applies to properties with any land use, except residential properties consisting of four units of fewer. This policy is accompanied by an Education and Outreach policy to address smaller quantities of stored road salt.

Current Policy N/A New Policy No. TBD

Current Policy ID N/A New Policy ID 12_SpecAct_V9.ER

12 The application of Road Salt

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1 IPZs with vulnerability scores of 9 or more

Risk Level: Significant **Approach:** Specify Action **Policy Tool:** Clean Water Act O.Reg. 287/07 Section 26 (1.v.) - Specify Action to be taken to implement Plan or achieve its objectives

Implementing Body: Affected Municipalities (Municipality of Lakeshore, City of Windsor, Town of Amherstburg, County of Essex)

Legal Effect: Must conform/comply with

Compliance Date:

Existing Threats: Within 5 years of the Source Protection Plan or its amendments coming into effect Future Threats: When the Source Protection Plan or its amendments come into effect

Significant Risk Circumstance:

The road salt is applied in an area where the default percentage of impervious surface area is 8% or more

Policy Text:

Where the application of road salt is or would be a significant drinking water threat, the municipality shall review and, if necessary, revise or issue new Salt Management Plans for the application of salt on roadways where the application of road salt is a significant drinking water threat. The Salt Management Plan shall include, as a minimum, measures to ensure application rate, timing and location to reduce the potential for salt-related surface water run-off and groundwater infiltration and meet the objectives of Environment Canada's Code of Practice for Environmental Management of Road Salts including the salt vulnerable area mapping to include areas where significant threats can occur.

12 The application of Road Salt13 The handling and storage of Road Salt14 The storage of Snow

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 IPZs with vulnerability scores of 8 or more **Risk Level:** Significant **Approach:** Education and Outreach **Policy Tool:** Clean Water Act, Section 22(7) - Education & Outreach

Implementing Body: ERCA and Affected Municipalities Legal Effect: Must conform/comply with Compliance Date:

Within 2 years of the Source Protection Plan or its amendments coming into effect

Significant Risk Circumstances:

- The road salt is applied in an area where the default percentage of impervious surface area is 8% or more (Vulnerability Score 9)
- The storage of road salt in a manner that the road salt is exposed to precipitation or runoff from precipitation or snow melt where the quantity stored is more than 20 kg. (Vulnerability Score 9)
- The storage of snow >200m² (Vulnerability Score 9)
- The storage of snow >2000m² (Vulnerability Score 8)

Policy Text:

The Municipalities, in collaboration with the Conservation Authority and/or other bodies shall implement an Education and Outreach program in areas where the handling and storage and/or application of road salt and/or storage of snow is a significant drinking water threat. The program is intended to inform affected landowners of risks to sources of municipal drinking water and help identify means by which risks can be minimized. The education program should be based on existing programs such as "Smart about Salt". The program will also outline the circumstances under which s.58 Risk Management Plans would be required. Further, the program shall be made available on an ongoing basis and updated as is deemed appropriate.

Current Policy ID N/A New Policy ID 12&13_Monitorting.V9.ER

12 The application of Road Salt 13 The handling and storage of Road Salt

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1 IPZs with vulnerability scores of 9 or more

Risk Level: Significant **Approach:** Monitoring **Policy Tool:** Clean Water Act, Section 22(7) - Monitoring

Implementing Body: Affected Municipalities, MECP Legal Effect: Must conform/comply with Compliance Date:

Within 2 years of the Source Protection Plan or its amendments coming into effect

Significant Risk Circumstance:

The road salt is applied in an area where the default percentage of impervious surface area is 8% or more

The storage of road salt in a manner that the road salt is exposed to precipitation or runoff from precipitation or snow melt where the quantity stored is more than 20 kg.

Policy Text:

In accordance with Section 22(2)-[7] of the Clean Water Act, further monitoring of sodium chloride is warranted for drinking water intakes with vulnerable areas where the application, handling and/or storage of road salt is significant drinking water threat. Currently testing for sodium chloride is required once every five years. The MECP shall review monitoring requirements to ensure that adequate and appropriate data are collected. Municipalities are encouraged to increase sampling from once every five years to quarterly until such time as new recommendations are made by the MECP. Participation in these monitoring programs is dependent on adequate resources (including funding and staff capacity) being available.

Current Policy ID W1L1A1-storageroadsalt-1 (Clean Water Act) New Policy ID 13.1_s.58.V9.ER

13 The handling and storage of Road Salt

13.1 Handling and Storage of Road Salt – Exposed to Precipitation or Runoff

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1 IPZs with vulnerability scores of 9 or more

Risk Level: SignificantApproach: ManagePolicy Tool: Clean Water Act, Section 58 Risk Management Plan

Implementing Body: Risk Management Official Legal Effect: Must conform/comply with Compliance Date:

Existing Threats: Within 5 years of the Source Protection Plan or its amendments coming into effect Future Threats: When the Source Protection Plan or its amendments come into effect

Current Significant Risk Circumstance

In summary, the quantity of road salt stored is > 5000 tonnes, chemicals of concern being sodium and chloride (IPZ-1 of vulnerability score 9)

The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at https://www.ontario.ca/page/tables-drinking-water-threats

New Significant Risk Circumstance:

The storage of road salt in a manner that the road salt is exposed to precipitation or runoff from precipitation or snow melt where the quantity stored is more than 20 kg.

Current Policy Text

The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1: the existing (none known to exist) and future storage of road salt in quantities greater than 5000 tonnes. The above applies to the existing and future significant threat of the storage of road salt in the vulnerable areas mentioned above.

The date of compliance is when Source Protection Plan takes effect.

New Policy Text:

The Risk Management Official shall enact applicable sections under Part IV of the Clean Water Act to establish a Risk Management Plan (RMP) with the person engaged in the significant drinking water threat activity when the quantity of road salt stored is 100kg or more. The RMP will contain risk management measures that ensure the handling and storage of road salt ceases to be or never becomes a threat to sources of drinking water. The Risk Management Plan will require that road salt be stored in such a way that it is not exposed to precipitation or runoff from precipitation or snow melt and may include, but is not limited to, details concerning the amount, containment type, etc. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan. This policy applies to properties with any land use, except residential properties consisting of four units or fewer. This policy is accompanied by an Education and Outreach policy to address smaller quantities of stored road salt.

14 Storage of Snow

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 IPZs with vulnerability scores of 8 or more

Risk Level: Significant Approach: Manage Current Policy Tool: Clean Water Act Section 57 'Prohibited Activities' New Policy Tool: Clean Water Act, Section 58 Risk Management Plan Implementing Body: Risk Management Official Legal Effect: Must conform/comply with Compliance Date:

Existing Threats: Within 5 years of the Source Protection Plan or its amendments coming into effect Future Threats: When the Source Protection Plan or its amendments come into effect

Current Significant Risk Circumstance:

- Governing circumstance is snow stored on areas 1 ha or more, chemical of concern being lead or its compound/s (IPZ-1 of vulnerability score 9)
- Other circumstances are snow stored on areas more than 5 ha, chemicals of concern being chloride, cyanide, nitrogen, sodium, copper or its compound/s, zinc or its compound/s, zinc or its compound/s (IPZ-1 of vulnerability score 9)

New Significant Risk Circumstance:

The infiltration or discharge of snowmelt from the storage of snow on a site where the predominant land use is commercial or industrial by any means other than a storm water drainage system outfall.

- 1. The area upon which snow is stored is >200m2 (Vulnerability Score 9)
- 2. The area upon which snow is stored is >2000m2 (Vulnerability Score 8)

Current Policy Text:

The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1: the existing (none known to exist) and future storage of snow over areas of 1 ha or more. The above applies to the existing and future significant threat of the storage of snow in the vulnerable areas mentioned above. The date of compliance is when Source Protection Plan takes effect.

New Policy Text:

The Risk Management Official shall enact applicable sections under Part IV of the Clean Water Act to establish a Risk Management Plan (RMP) with the person engaged in the significant drinking water threat activity. The RMP will contain risk management measures that ensure the storage of snow ceases to be or never becomes a threat to sources of drinking water. The Risk Management Plan may include, but is not limited to, but is not limited to, details concerning the volume, management of runoff, monitoring and record keeping, etc. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan. This policy applies to properties with commercial, or industrial land use. Notwithstanding the above, emergency snow storage may be permitted. This policy is accompanied by an Education and Outreach policy.

14 Storage of Snow

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 IPZs with vulnerability scores of 8 or more

Risk Level: Significant
Approach: Manage
Policy Tool: Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval),
Section 39, Part V, the Environmental Protection Act
Implementing Body: MECP
Legal Effect: Must conform/comply with
Compliance Date:

Existing Threats: Within 5 years of the Source Protection Plan or its amendments coming into effect Future Threats: When the Source Protection Plan or its amendments come into effect

Significant Risk Circumstance:

A storm water drainage system outfall that serves a Snow Disposal Facility

- 1. The area upon which snow is stored is $>200m^2$ (Vulnerability Score 9)
- 2. The area upon which snow is stored is $>2000m^2$ (Vulnerability Score 8)

Policy Text:

In reviewing existing Environmental Compliance Approvals (Certificates of Approval) for the storage of snow at a Snow Disposal Facility in IPZ's with vulnerability scores of 8 or higher, the Ministry of Environment shall ensure that the terms and conditions in the Environmental Compliance Approvals (Certificates of Approval) adequately protect the sources of drinking water.

14 Storage of Snow

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 IPZs with vulnerability scores of 8 or more

Risk Level: Significant
Approach: Manage
Policy Tool: Clean Water Act O.Reg. 287/07 Section 26 (1.v.) - Specify Action to be taken to implement Plan or achieve its objectives

Implementing Body: Affected Municipalities (Municipality of Lakeshore, City of Windsor, Town of Amherstburg)
 Legal Effect: Must conform/comply with
 Compliance Date:

Existing Threats: Within 5 years of the Source Protection Plan or its amendments coming into effect Future Threats: When the Source Protection Plan or its amendments come into effect

Significant Risk Circumstance:

The infiltration or discharge of snowmelt from the storage of snow on a site where the predominant land use is commercial or industrial by any means other than a storm water drainage system outfall.

- 1. The area upon which snow is stored is $>200m^2$ (Vulnerability Score 9)
- 2. The area upon which snow is stored is $>2000m^2$ (Vulnerability Score 8)

A storm water drainage system outfall that serves a Snow Disposal Facility

- 1. The area upon which snow is stored is $>200m^2$ (Vulnerability Score 9)
- 2. The area upon which snow is stored is $> 2000m^2$ (Vulnerability Score 8)

Policy Text:

Where the future storage of snow would be a significant drinking water threat, the municipal planning authority shall require at site plan approval that best management practices for site design to protect drinking water sources be included to manage snow storage and the associated melt water at snow storage facilities that meet the criteria to be a SDWT. The municipal planning authority shall document the number of new site plan applications reviewed for the storage of snow to be included in annual reporting to the Source Protection Authority by February 1 of each year.

Rationale:

Snow removed from roads and parking lots can be contaminated with salt, oil, grease and heavy metals from vehicles, litter, and airborne pollutants. The activities around snow storage and handling include:

- Snow that is pushed into large piles on a property (e.g., stored in parking lots)
- Snow transported to a central site from other locations (e.g., snow disposal sites); and
- Large snowbanks along roads that are close to surface water intakes (if accumulation meets area circumstances identified below).

Snowbanks on roads and parking areas either melt on site or are transported elsewhere to be melted or stockpiled. A number of chemicals from the storage of snow could make their way into drinking water sources including chloride, nitrogen, copper, petroleum hydrocarbons, cyanide, sodium, lead and zinc.

This threat is closely linked to the application, handling, and storage of road salt, because snow is able to pick up the salt that has been applied to roads. A reduction in the amount of salt applied to roads and parking areas could reduce the amount of road salt that contaminates snow. The main source of sodium, chloride and cyanide in snow is road salt; the other contaminants are generally from vehicle fluids, exhaust, brake linings, and tire and engine wear.

These policies adhere to the circumstances in the 2021 Director Technical Rule that include a threshold of 2000m² in IPZs with scores greater than 8 (Windsor IPZ-2) and 200m² in IPZs with scores greater than 9 (Lakeshore IPZ-1, Windsor IPZ-1, and Amherstburg IPZ-1). As a general rule, a parking space is approximately 30m². This allotment accounts for traffic aisles, end caps, entrance and exit, and space between cars. Therefore, a 200m² parking lot could hold 6-7 cars and a 2000m² parking lot could hold up to 65 cars. The above SDWT circumstances apply to Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-1.

Lakeshore IPZ-1 is almost entirely occupied by a marina and associated parking lots and parkland. Amherstbug IPZ-1 follows 1km of Front Road with 40-50 private lots or dwellings with driveways as well as some business and the Amherstbug water treatment plant. There are also a few large parcels of vacant land, which could have high density residential units in the future.

Windsor IPZ-1 falls within a residential area with 30-40 private dwellings along a 1.3km stretch of Riverside Drive. There are at least 10 apartment buildings or other high density housing units with parking lots. Based on a cursory review of the aerial photography, most of these parking lots are in the IPZ-2 with driveways in the IPZ-1. There are also two municipal parks with parking lots (~2400m² and 3000m²). Windsor IPZ-2 covers an area of approximately 16km² (16,000,000m²). The western boundary is St. Luke Road (just east of Walker Road), the southern boundary is Tecumseh Road and the eastern boundary is Florence Avenue. The northern boundary includes the entire Detroit River shoreline from Walker Road to Sandpoint Beach. There is varied land use throughout this area. There is a known snow disposal facility for the City of Windsor located at 3001 Seminole Street (Ford Test Track)

All snow disposal sites should be evaluated by the MECP. According to the <u>Guidelines on Snow</u> <u>Disposal and De-icing Operations in Ontario</u>, land disposal sites must be accessible, large enough to contain the projected maximum snow load and close to where snow is collected to be economically practical. Sites need to meet criteria based on accessibility, noise, alternate uses of the site, and visual considerations. The following criteria regarding drainage must also be considered:

1. Surface Drainage Factors

- The site should preferably be remote from surface watercourses. The construction of berms and dykes may be required to prevent direct drainage to a watercourse. The distance from surface water will be dependent on land slope, soil permeability, and the extent of dyking which is practicable and economical.
- The quantity of snow which can be stock-piled at a particular site should be assessed in relation to estimated runoff rates and quality, the dilution capacity of the watercourse to which the melt will discharge, and downstream water uses.
- Care should be taken in site selection that deposited snow will not seriously obstruct natural drainage patterns, and that drainage from the site will not adversely affect adjoining property.





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Essex Region Source Protection Authority

ERSPA 03/24

From: Katie Stammler, Project Manager, Source Water Protection

Date: Friday, May 31, 2024

Subject: s.36 Amendments – Fuel Policies and New Event Based Area delineation

Recommendation: That the SPA endorse the policy amendments as described in SPA Report 03/24 to be submitted to the MECP for early engagement and further; That the SPA endorse the amended delineation of the Event Based Area to be submitted to the MECP for early engagement

Summary

- The Handling and Storage of Fuel is a prescribed drinking water threat that previously only applied to the Event Based Area in the Essex Region and was limited to large volumes as determined by the results of a modelling study. The circumstances in the Director Technical Rules changed such that the handling and storage of smaller volumes of fuel are now considered to be a significant drinking water threat in Intake Protection Zones with scores of 9 or higher (Lakeshore, Windsor, and Amhersburg IPZ-1s)
- The Event Based Area (EBA) was delineated using the best available drainage network. During implementation, errors in the drainage network data were noted that resulted in errors in the EBA. Both the drainage network and EBA have been updated using the current best available data
- The current Source Protection Plan contains six policies to address these threats. Due to changes in the Director Technical Rules, five policies are being amended. One policy is being removed that is no longer necessary

Discussion

Handling and Storage of Fuel Threat 15; SPC Report 07/19

The Director Technical Rules includes 'The Handling and Storage of Fuel' as a significant drinking water threat (SDWT). The hazard rating for the handling and storage of fuel for surface water was increased from 8 to 10, making the handling and storage of fuel in quantities

greater than 2500L a significant drinking water threat in IPZ-s with vulnerability scores of 9 or 10. In the Essex Region, this impacts Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1, which have vulnerability scores of 9. There are no IPZ's with a score of 10 in the Essex Region. The volume limits are unchanged in the Event Based Area (EBA) as these were determined by a modelling exercise.

There are currently six policies in the Essex Region Source Protection Plan that address the handling and storage of fuel as a SDWT. These policies use a variety of tools including Prescribed Instruments (2 - Municipal Drinking Water Licenses and Aggregate Licenses), Risk Management Plans (1), Restricted Land Use (1), Specify Action (1), and Stewardship/Incentive Programs (1).

The Stewardship/Incentive policy is being removed as it directs ERCA to apply for funding to replace old fuel tanks. No such funding exists. The remaining five policies are amended to include the new circumstances in the identified vulnerable areas. Minor edits have also been made to clarify and/or simplify language.

The table below indicates the changes to the existing policies. Attached are the updated policies showing changes from the current policies. Text that has been struck through is deleted, text that is highlighted yellow is new or changed.

ID #	Threat	Current Policy #	Circumstance	Applicable Area	Format Only	Other Edit	New Policy
15	Handling and Storage of Fuel	16, 17, 31, 32, 41	Yes	Yes			
15	Handling and Storage of Fuel	45		Policy Re	emoved		

Event Based Area Re-delineation SPC Report 09/23

The Event Based Area for the Essex Region Source Protection Area is described in Chapter 4 of the approved ERSPA Assessment Report as:

"The Event Based Area (EBA) is an area where modelling has demonstrated that a spill from a specific activity can or could cause deterioration to the raw water quality at the drinking water system. If the modelling test is met, the activity is deemed a significant drinking water threat and becomes subject to Source Protection Plan policies. For each intake in the Essex Region, the EBA is the combination of IPZ-1, IPZ-2 and IPZ-3 for modelled activities (i.e., fuel spill containing benzene, and a volume of 34,000 L) to which associated significant drinking water threat policies apply."

The EBA was originally determined by modelling exercises completed by consulting firms. Baird conducted the modelling exercise to determine the volume limits and extent of the EBA for each intake. Stantec created the EBA maps that are still in use. Specifically, the EBA was delineated using a pre-existing watercourse layer coupled with the Essex Region Conservation Authority's Limit of Regulated Area (LORA). The watercourse layer was the Water Virtual Flow Dataset obtained from the Ministry of Natural Resources (MNR) and the constructed drain layer obtained from Ontario Ministry of Agriculture and Rural Affairs (OMAFRA). These provincially derived datasets are not used locally as they are not an accurate representation of the drainage network in the Essex Region. The EBA was delineated as a 120m setback from the watercourses or to the extent of the LORA if it exceeds the 120m setback.

While the RMO/I was completing threat verification site visits, they noted errors in the delineation of the IPZ-3. The three basic types of errors are:

- Type I) The IPZ-3 has been delineated where there is no watercourse,
- Type II) No IPZ-3 was delineated where there is a watercourse, OR
- Type III) The IPZ-3 is incorrectly delineated

These errors can result in Risk Management Plans (RMP) being established where they aren't actually required, or having no RMP where there should be one.

To correct the errors in the delineation of the EBA we replaced the provincial datasets representing watercourses and substituted our existing local dataset compiled by ERCA. While there are still known deficiencies in this local dataset, it represents a significant improvement over its provincial counterpart with respect to local detail. We also note that while partner municipalities also maintain watercourse (aka municipal drain) datasets, ERCA's dataset is the only one that is a consistent standard of quality that represents connected drainage pathways across the region. The updated mapping was compiled using alternate and updated data inputs applied to essentially the same methodology used previously.

ERSPA staff have confirmed that many of the originally identified errors have now been corrected. We are confident that the EBA is delineated with the best available data at this time. This new delineation will be provided to the MECP as part of the Early Engagement process prior to public consultation. In the interim, work will be done to identify properties that are affected by the change. In addition, the Risk Management Official will determine if any existing Risk Management Plans will be affected. Once approved for consultation, letters will be sent to affect to affected properties.

Katie Stammler, PhD., Source Water Protection Program Manager

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Tom Fuerth, P.Eng, Chair, Essex Region Source Protection Committee

Attachments:

- Fuel policies (amended)
- Written description of the extent of Event Based Area for each intake
- Maps showing the full extent of the Event Based Area in the Essex Region

15.0 Handling and Storage of Fuel

Chemical Existing and/or Future Activities **Risk Level:** Significant **Approach:** Manage

The following set of policies apply to the same vulnerable areas. For brevity, these are included only once below:

Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 IPZ with vulnerability score 9 or higher

All Events Based Areas (EBAs) within IPZs in the Essex Region Source Protection Area, where the EBAs are applicable as shown in the assessment report

The following set of policies apply to the same set of Significant Risk Circumstances. For brevity, these are included only once below:

Current Significant Risk Circumstances

- The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2, IPZ-3 (Cedar/Wigle/Mill Creeks, Learnington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report.
- The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report.
- The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report.
- The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report.

New Significant Risk Circumstance:

1. In Windsor IPZ-1, Lakeshore IPZ-1 and Amherstburg IPZ-1:

- Handling of liquid fuels above grade in quantities greater than 2,500L
- Storage of liquid fuels at, above, or partially below grade in quantities greater than 2,500L

2. In the EBAs of Stoney Point, Lakeshore, Windsor (upstream of intakes), Amherstburg (upstream of the intake including Turkey Creek watershed), Harrow-Colchester, Union (excluding Sturgeon Creek watershed), Pelee, and Wheatley:

• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater

3. In Union EBA (Sturgeon Creek watershed):

• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater

4. In Amherstburg EBA (downstream of the intake):

• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater

5. In Windsor EBA (downstream of intakes), and Amherstburg EBA (upstream of the intake from the vicinity of Turkey Creek to the Upper Detroit River):

• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater

Current Policy No. 16 New policy No. TBD Current Policy ID SLWA123-handlestorefuel-1 (Prescribed Instrument) New Policy ID: 15_PI(SDWA).V9.EBA.ER

Policy Tool: Prescribed Instrument – Municipal Drinking Water License and Permit under the Safe Drinking Water Act

Implementing Body: Ministry of the Environment Legal Effect: Legally binding Compliance Date:

The date of compliance for future threats <mark>and for existing threats that meet the criteria of Significant Risk Circumstances 2-5</mark> is when the Source Protection Plan and/or its amendments take effect.

For existing threats that meet the criteria of Significant Risk Circumstance 1, the date of compliance is within 5 years from the date the when the Source Protection Plan and/or its amendments take effect.

Current Policy Text:

The Ontario Ministry of Environment (MOE) shall review Municipal Drinking Water Licenses and Permits issued under the Safe Drinking Water Act, in the vulnerable areas listed below where there is an existing or future significant drinking water threat of handling and storage of liquid fuels. The MOE shall ensure that the permits refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code. This may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored.

This applies to the existing and future significant threat of the above grade handling and storage of liquid fuels, in quantities listed below in the EBAs where modeling reported in the Assessment Report has demonstrated that this activity is a significant threat. Therefore this policy applies to: (repeated SDWT circumstances)

New Policy Text:

In reviewing Municipal Drinking Water Licenses and Permits issued under the Safe Drinking Water Act with respect to the handling and storage of liquid fuel in identified vulnerable areas where this activity is a SDWT, the Ministry of the Environment shall ensure that the terms and conditions of the permit adequately manage existing and future activities in order to protect sources of drinking water. This may include, but is not limited to, reference to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored. **Policy Tool:** Prescribed Provincial Instrument: Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans under the Aggregate Resources Act

Implementing Body: Ministry of Natural Resources and Forestry Legal Effect: Legally binding Compliance Date:

The date of compliance for future threats and for existing threats that meet the criteria of Significant Risk Circumstances 2-5 is when the Source Protection Plan and/or its amendments take effect.

For existing threats that meet the criteria of Significant Risk Circumstance 1, the date of compliance is within 5 years from the date the when the Source Protection Plan and/or its amendments take effect.

Current Policy Text:

The Ministry of Natural Resources (MNR) shall review instruments under the Aggregate Resources Act (including Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans) with respect to the handling and storage of liquid fuel at aggregate operation sites. The MNR shall ensure that the permits refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code. This may include, but is not limited to, details concerning installation and operation of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored

This applies to the existing and future significant threat of the above grade handling and storage of liquid fuels, in quantities listed below where modeling reported in the Assessment Report has demonstrated that this activity is a significant threat. Therefore this policy applies to: (repeated SDWT circumstances)

New Policy Text:

In reviewing Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans under the Aggregate Resources Act with respect to the handling and storage of liquid fuel in identified vulnerable areas where this activity is a SDWT, the Ministry of Ministry of Natural Resources and Forestry shall ensure that the terms and conditions of the permit adequately manage existing and future activities in order to protect sources of drinking water. This may include, but is not limited to, reference to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored.

Policy Tool: Clean Water Act, Section 58 Risk Management Plan
Implementing Body: Risk Management Official
Legal Effect: Legally binding
Compliance Date:

The date of compliance for future threats <mark>and for existing threats that meet the criteria of Significant Risk Circumstances 2-5</mark> is when the Source Protection Plan and/or its amendments take effect.

For existing threats that meet the criteria of Significant Risk Circumstance 1, the date of compliance is within 5 years from the date the when the Source Protection Plan and/or its amendments take effect.

Current Policy Text

The following activities are designated for the purpose of Section 58 'Risk Management Plans' of the Clean Water Act in the subject vulnerable areas where modeling reported in the Assessment Report has demonstrated that this activity is a significant threat. Therefore this policy applies to: (repeated SDWT circumstances)

The Risk Management Plan may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan.

The above applies to the existing and future significant threat of the handling and storage of fuel in all EBAs within IPZs in the Essex Region Source Protection Area related to the handling and storage of fuel. For future threats, the date of compliance is when the Source Protection Plan takes effect. For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.

New Policy Text

The Risk Management Official shall enact applicable sections under Part IV of the Clean Water Act to establish a Risk Management Plan (RMP) with the person engaged in the in the handling and storage of fuel where it is a significant drinking water threat. The RMP will contain risk management measures that ensure the activity ceases to be or never becomes a threat to sources of drinking water. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan (RMP). The Source Protection Committee recommends that the RMP includes details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored. Policy Tool: Clean Water Act, Section 59 Restricted Land Use
Implementing Body: Risk Management Official
Legal Effect: Legally binding
Compliance Date: The date of compliance for future threats is when the Source Protection Plan and/or its amendments take effect.

Current Policy Text

Commercial, Agricultural and Industrial land uses identified within the Official Plan and/or Zoning By-Laws where the policies of the Source Protection Plan indicate the handling and storage of fuel in quantities described above are subject to Section 57 or Section 58 of the Clean Water Act, are hereby designated as Restricted Land Uses, with the exception of residential uses. Within these designated land uses and areas, a written notice from the Risk Management Official in accordance with Section 59(2) of the Clean Water Act shall be required prior to approval of any Building Permit or Planning Act application.

Despite the above policy, a Risk Management Official may issue written direction specifying the circumstances under which a Planning Act Approval Authority or building official may be permitted to make the determination that a site specific land use is not designated for the purposes of Section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the Planning Act or for a permit under the Building Code Act is not designated for the purposes of Section 59, provided that the Planning Act Approval Authority or building official, as the case may be, is satisfied that:

- The application complies with the circumstances specified in the written direction from the Risk Management Official; and
- The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of Section 57 or 58 will not be engaged in, or will not be affected by the application

The date of compliance is when Source Protection Plan takes effect.

New Policy Text

Commercial, Agricultural and Industrial land uses identified within the Official Plan and/or Zoning By-Laws where the policies of the Source Protection Plan indicate the handling and storage of fuel in quantities described above are subject to Section 57 or Section 58 of the Clean Water Act, are hereby designated as Restricted Land Uses, with the exception of residential uses. Within these designated land uses and areas, a written notice from the Risk Management Official in accordance with Section 59(2) of the Clean Water Act shall be required prior to approval of any Building Permit or Planning Act application.

Despite the above policy, a Risk Management Official may issue written direction specifying the circumstances under which a Planning Act Approval Authority or building official may be permitted to make the determination that a site specific land use is not designated for the purposes of Section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the Planning Act or for a permit under the Building Code Act is not designated for the purposes of Section 59, provided that the Planning Act Approval Authority or building official, as the case may be, is satisfied that:

- The application complies with the circumstances specified in the written direction from the Risk Management Official; and
- The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of Section 57 or 58 will not be engaged in, or will not be affected by the application.

Current Policy No. 41 New Policy NO. TBD Current Policy ID SLWA123-handlestorefuel-1 (Specify Action) New Policy ID: 15_SpecAct.V9.EBA.ER

Policy Tool: Clean Water Act O.Reg. 287/07 Section 26 (1.v.) - Specify Action to be taken to implement Plan or achieve its objectives

Implementing Body: Risk Management Official Legal Effect: Legally binding Compliance Date:

The date of compliance is when the Source Protection Plan and/or its amendments take effect.

Current Policy Text

The Essex Region Conservation Authority (ERCA) will initiate the development of an inventory of fuel storage sites in order to identify significant threats, when the Source Protection Plan takes effect. ERCA will also encourage municipalities to update their Emergency Plans to include a response to fuel spills. The inventory of sites and updating of emergency plans will be targeted for completion by the end of 2015, and will continue to be updated as needed based on review at that time. The above applies to the existing and future significant threat of the handling and storage of fuel in the vulnerable areas: All EBAs within IPZs in the Essex Region Source Protection Area

New Policy Text

The Essex Region Conservation Authority (ERCA<mark>) will maintain an</mark> inventory <mark>of</mark> fuel storage sites <mark>that have been identified as</mark> significant threats. ERCA will also encourage municipalities to update their Emergency Plans to include a response to fuel spills.

This information accompanies SPA Report 03/24 and summarizes the extent of the Event Based Area (EBA) for each drinking water intake in the Essex Region based on modelling exercises conducted by Baird. These are excerpts from appendices included in the Assessment Report, compiled here for reference. This information has been used to construct the updated maps of the EBA for each drinking water intake.

Stoney Point

It was recommended that the IPZ-3 for Stoney Point should include the Ruscom River and its tributaries as well as any tributaries located between the Ruscom River and the Stoney Point intake, and any tributaries between the intake and the Essex Source Protection Region boundary, which is approximately the same distance east of the Stoney Point intake as the Ruscom River is to the west. The IPZ-3 was not extended to include Pike Creek, as Pike Creek is included in the IPZ-3 for the Belle River and Windsor intakes. However, the operator of the WTP should be made aware that the intake is vulnerable to spills in Pike Creek.

Belle River

Based on the model results, it was recommended that the IPZ-3for the Belle River intake should include the Ruscom River, Belle River, Pike Creek and their tributaries, as well as any tributaries located between these tributaries and the Belle River intake.

Windsor - A.H. Weeks

Based on the model results, it was recommended that the IPZ-3 for both Windsor intakes should include Pike Creek, Puce River, Little River and their tributaries, as well as any tributaries located between Pike Creek and the Windsor intakes. Additional analyses were required to consider reverse flow in the Detroit River, based on this analysis specific areas downstream of the intake are also included in the IPZ-3.

Amherstburg

It was recommended that the IPZ-3 for Amherstburg should include Turkey Creek, the Canard River, and their tributaries, as well as any tributaries located between Turkey Creek and the Amherstburg intake. Based on the model results, spills flowing into the Detroit River from locations in Windsor resulted in exceedances at Amherstburg, therefore the IPZ-3 was extended to the upstream limit of the Detroit River and includes tributaries and transport pathways flowing into the Detroit River, upstream of the Turkey Creek outlet. The IPZ-3 boundary in the Detroit River was delineated as the international boundary.

Harrow-Colchester

Based on the model results, it was recommended that the IPZ-3 include Big Creek, Richmond Drain/Cedar Creek and their tributaries and Richmond Drain/Cedar as well as tributaries located between Big Creek and Richmond Drain/Cedar Creek.

Union

Based on the model results, it was recommended that the IPZ-3 include the Richmond Drain/Cedar Creek, Sturgeon Creek and their tributaries as well as any tributaries located between Richmond Drain/Cedar Creek and Sturgeon Creek.

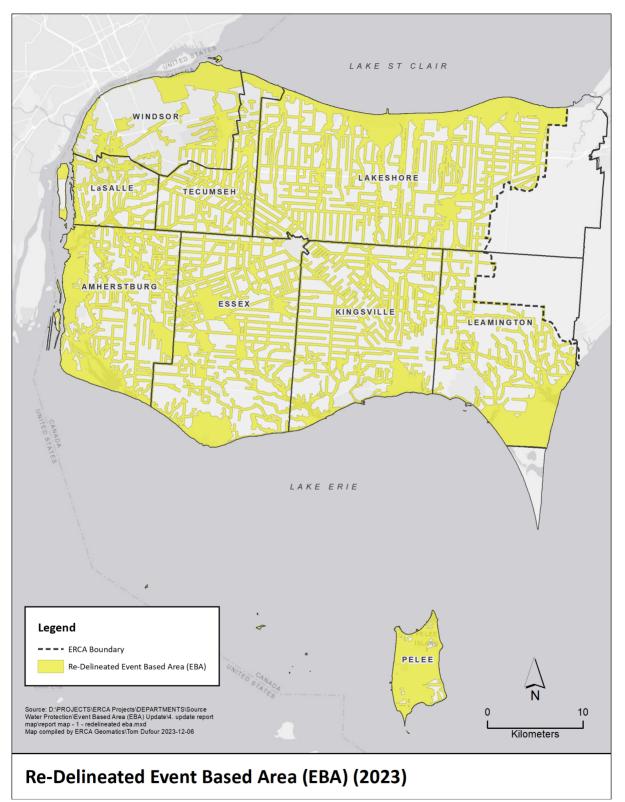
Wheatley

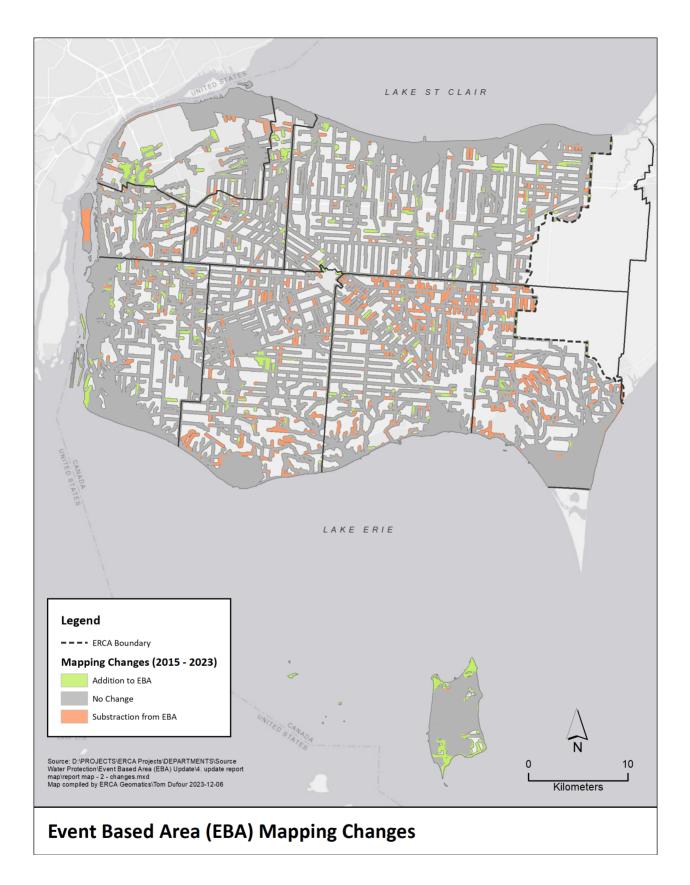
Although the Wheatley intake is within the Thames Sydenham and Region SPR, the vulnerable areas extend into the Essex Region Based on the model results, it was recommended that the IPZ-3 for the Wheatley intakes should include Pelee/Hillman Creek and their tributaries, as well as any tributaries located between these tributaries and the Wheatley intakes.

Pelee Island

The analysis and modelling showed that a fuel spill from a tanker truck at East Shore Rd. and East-West Rd. on Pelee Island would result in an exceedance at the Pelee Island intake. Based on the model results, it was recommended that the IPZ-3 for the Pelee Island intake should include any drainage canals located between the spill and the intake, which includes all drainage canals on the island.

The first map shows the new delineation of the EBA using updated information as described in SPA Report 03/24. The second map shows the changes between the new delineation and current delineation in the approved 2015 Source Protection Plan. The new delineation is draft until approved by the MECP.







vation Authority

Essex Region Source Protection Authority

ERSPA 04/24

From: Katie Stammler, Project Manager, Source Water Protection

Date: Monday, June 3, 2024

Subject: s.36 Amendments – policies for 'The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage'

Recommendation: That the SPA endorse the policy amendments as described in SPA Report 04/24 to be submitted to the MECP for early engagement

Summary

the place for life

- There are 8 prescribed drinking water threat categories that apply to sewage activities. Six of these have circumstances that are identified as significant drinking water threats for intakes in the Essex Region
- The current Source Protection Plan contains 14 policies to address these threats, 11 of these policies were to address municipal wastewater
- Due to changes in the Director Technical Rules, nine policies are being amended
- Five policies are being removed that are no longer necessary or are captured in other policies

Discussion

The Director Technical Rules includes several sub-threats under the category of 'The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage'. This section of the DTR underwent significant change, including amendments to threat circumstances and the vulnerable areas to which they apply. The existing Source Protection Plan also contained several Specific Action policies for work that has since been completed by the City of Windsor.

Industrial Effluent Discharges Sub-threat 2.1; SPC Report 06/22

The significant threat circumstances for industrial effluent discharges were updated in the 2021 Director Technical Rules to correct an issue that was encountered during implementation where the existing language did not capture all existing risks. There are two policies in the current SPP. The SPC determined at the time the SPP was developed that industrial effluent, , should be a prohibited activity, with the exception of non-contact cooling water which is managed. The original policy included a clause that any existing industrial effluent in Amherstburg IPZ-1 could be managed through Environmental Compliance Approvals (ECA), but that future activities be prohibited. However, no existing threats have been identified so this clause has been removed. The two existing policies have been **merged** into a single policy with the MECP as the implementing Body.

<u>Stormwater</u>

Sub-threat 2.3 and 2.4; SPC Report 10.22

The circumstances under which storm water activities can be a SDWT have been substantially updated to better capture all possible risks to drinking water. Previously, the risk circumstances were included in a single sub-threat 'Storm water management' which is now separated into two sub-threats 'Outfall from a Storm Water Management Facility or Storm Water Drainage System' and 'Storm Water Infiltration Facility'. Previously, the risk circumstances were dependent on total drainage area, whereas the current risk circumstances use the percentage of impervious area of the land *serving the storm water management facility*. All storm water activities require an Environmental Compliance Approval issued by the MECP and any proposed storm water management facility will need to provide this information when completing their Environmental Compliance Approval following the instructions provided for the <u>application process</u>. This may have the biggest impact in Windsor IPZ-2.

Storm water activities are managed through an **amended** Prescribed Instrument policy in the SPP and no other policies for this activity are required. It is noted that this is separate from the percentage of impervious area for the vulnerable area itself, therefore there is no burden on the ERSPA to provide this information. Persons potentially affected by this policy will be engaged during the consultation process. Importantly, the change to this policy is required to align with the current version of the Technical Rules. Note that there may be some additional verbal information provided to the SPA regarding stormwater following the Project Manager meeting June 3 and 4, 2024 and the SPC meeting on June 12, 2024 regarding the Consolidated Linear Infrastructure ECA process.

Municipal Wastewater

Sub-threats 2.6, 2.7 and 2.8, SPC Reports 2.23, 5.23, 8.23

Municipal wastewater falls the sub-threat categories listed below. The existing threat circumstances were amended in the 2021 DTR to adjust volume thresholds and to use language consistent with other legislation (sub-threat 2.6 and 2.8). A new threat circumstance was also added to address wet wells, holding tanks or tunnels in sanitary sewage pumping stations or lift stations where human waste is stored (sub-threat 2.7).

- Sub-threat 2.6: Wastewater Collection Facilities and Associated Parts: Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer Overflow (SSO) from a Manhole or Wet Well.
- Sub-threat 2.7: Wastewater Collection Facilities and Associated Parts: Sewage Pumping Station or Lift Station Wet Well, a Holding Tank or a Tunnel. **(new)**
- Sub-threat 2.8: Wastewater Treatment Facilities and Associated Parts.

The circumstances under which combined sewer discharge (also known as combined sewer overflow or CSO) from a stormwater outlet to surface water was changed in the 2021 Technical Rules to include the addition of sanitary sewer overflow (SSO) and sanitary sewage pumping station overflow (PSO). The addition of SSOs and PSOs is meant to capture all potential instances of raw sanitary sewage being discharged to the environment. The daily flow rates for WWTPs was also changed. Importantly the Little River Pollution Control Plant has a capacity of 73,000 m³d, putting it below the threshold to be a SDWT. This activity was previously addressed by one Prescribed Instrument policy implemented by the MECP, which has been **amended** to align with the 2021 Rules. There was also one Specify Action policy and one Govern Research policy with the City of Windsor as the Implementing Body. The Govern Research policy has been **removed** as it required the City to <u>initiate</u> a research program to characterize CSOs and this work is now complete. The Specify Action policy addresses both sub-threat 2.6 and 2.8 and has been **amended** to reflect completed work and ongoing actions.

A new threat circumstance was added to address wet wells, holding tanks or tunnels in sanitary sewage pumping stations or lift stations where human waste is stored (sub-threat 2.7). This new sub-threat is being addressed by adding it to two existing Prescribed Instrument policies that address sub-threat 2.8. One policy prohibits the activity using a Prescribed Instrument with the MECP as the implementing body. The second policy prohibits the activity through municipal by-law with Lakeshore, Windsor and Amherstburg as the implementing bodies. These policies are not expected to have a negative impact since sewage is not stored in these locations, apart from the Windsor retention basin.

Sub-threat 2.8 applies to the final outfall of a water treatment plant. The language used in the Director Technical Rules has changed substantially, but generally serves to simplify the meaning and intent of the circumstance. In addition, the previous version of the Director Technical Rules listed specific chemicals as SDWTs, whereas the current Rules do not. Sewer outfalls are a SDWT in vulnerability scores greater than 8 (Windsor IPZ-1, Windsor IPZ-2, Lakeshore IPZ-1 and Amherstburg IPZ-1). The outfall of the Little River Pollution Control Plant is within the Windsor IPZ-2.

The Source Protection Plan currently includes three Prescribed Instrument policies, using Environmental Compliance Approval under Section 39 of the Environmental Protection Act. The current policy numbers are provided for reference. Policy 2 prohibits the activity in Windsor IPZ-1, Lakeshore IPZ-1 and Amherstburg IPZ-1. Policy 3 manages the activity specifically to account for the retention basin. Policy 7 manages the activity with an ECA in Windsor IPZ-2 to account for the existing outfall. Policies 2 and 7 have been **merged** into a single policy that distinguishes the areas where final effluent or overflow outfalls are prohibited or managed (sub-threat 2.8). Policy 3 has been **amended and partially combined** with Policy 2 to address all types of holding tanks (sub-threat 2.7 and 2.8) in a single prescribed instrument policy to either prohibit or manage the activity depending on the circumstance and vulnerable area.

There are also three Specify Action policies in the current SPP for sub-threat 2.8. Two policies specifically name the City of Windsor requiring them to adhere to their ECA and to add specifically named chemicals to their monitoring. These two policies have been **merged**, and the reference to specific chemicals has been removed to align with the new Rules. Language was also added to this policy to direct ERCA to support municipalities with the CLI-ECA process. The third polices names Lakeshore, Windsor and Amherstburg and requires that sewage treatment tanks be prohibited in IPZ-1s through a means that the Municipality finds appropriate such as Municipal Act By-law, with the exception of storage of stormwater and sewage (from combined sewers) in the Windsor IPZ-1. This policy has been **amended** to align with the new Rules.

Lastly, the current SPP contains two additional policies naming the City of Windsor as the Implementing Body. There is one Education and Outreach policy to provide a program to promote downspout disconnection, use of rain barrels, and, and other such initiatives that assist in educating the property owners, and one Stewarding/Incentive policy to seek funding assistance from the Ministry of the Environment, in order to undertake a stewardship/incentive program to assist in addressing the threats associated with CSOs, bypass and effluent discharges. The Education and Outreach policy has been **amended** to reflect the ongoing education that the City of Windsor provides on this subject and supports the ongoing need for this education program to help reduce CSOs. The Stewardship/Incentive policy is **removed** as there is no such funding available from the MECP. Other similar policies were also removed and one single generic stewardship/incentive policy is added to encourage implementing bodies to apply for funding should it become available.

Note that there may be some additional verbal information provided to the SPA on municipal wastewater following the Project Manager meeting June 3 and 4, 2024 and the SPC meeting on June 12, 2024 regarding the Consolidated Linear Infrastructure ECA process.

<u>Summary</u>

The table below summarizes the changes to the policies in the current SPP. There are 14 policies, nine policies are amended and five have been removed. Attached are the updated policies showing changes from the current policies. Text that has been struck through is deleted, text that is highlighted yellow is new or changed.

Threat ID	Policy	Threat	Policy Tool	Recommendation
2.6	Number 1	CSO/SSO/PSO	Prescribed Instrument - Prohibit	Amend
2.8	2	Effluent/storage	Prescribed Instrument - Prohibit	Amend and combine with Policy 3 and 7
2.7, 2.8 (storage)	3	Storage	Prescribed Instrument - Manage	Amend - combined with Policy 2 and added sub-threat 2.7
2.3 & 2.4	4	Stormwater	Prescribed Instrument - Manage	Amend
2.1	5	Industrial Effluent	Prescribed Instrument – Prohibit and/or manage	Amend
2.1	6	Industrial Effluent	Prescribed Instrument – manage	Remove and combine with Policy 5
2.8	7	Effluent	Prescribed Instrument - Manage	Remove and combine with Policy 2
2.8	34	Eluent	Specify Action	Amend
2.8	35	Effluent	Specify Action	Remove
2.6, 2.8	36	CSO	Specify Action	Amend
2.6	37	CSO	Govern Research	Remove
2.3, 2.4, 2.6, 2.8	38	CSO	Education and Outreach	Amend
2.6	39	CSO	Stewardship/ Incentive	Remove
2.7, 2.8 (storage)	40	Storage	Specify Action – prohibit through by-law	Amend

PA

Katie Stammler, PhD., Source Water Protection Program Manager

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Tom Fuerth, P.Eng, Chair, Essex Region Source Protection Committee

Attachments:

- Industrial Effluent Discharge policy
- Stormwater policy
- Wastewater policies

2.0 The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

2.1 Industrial Effluent Discharges; Non-contact cooling water

Chemical and Pathogen Existing and/or Future Activities Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 IPZ-1 of vulnerability score 9 and an IPZ-2 of vulnerability score 8.1 **Risk Level:** Significant **Approach:** Prohibit **and/or manage Policy Tool:** Prescribed Instrument **Implementing Body:** MECP **Legal Effect:** Must conform/comply with **Compliance Date:** When the Source Protection Plan or its amendments take effect

Current Significant Risk Circumstances – Chemical:

The primary function of the system is the collection, transmission or treatment of industrial sewage and the system discharges industrial effluent to surface water. The system is part of a facility required to report, as per the NPRI notice, for the chemical(s) of concern. There is no quantity threshold. This applies to an IPZ-1 of vulnerability score 9 for which there are 56 chemicals of concern, and also applies to an IPZ-2 of vulnerability score 8.1 for which there are 3 chemicals of concern.

New Significant Risk Circumstances – Chemical:

A wastewater system that discharges to surface water or land and has as its primary function the collection, transmission or treatment of industrial sewage. The system is part of a facility for which the NPRI Notice requires a person to report and the report must include information in relation to specific parameters (chemical).

Current Significant Risk Circumstances: Pathogen

The system discharges to surface water and its primary functions include conveying sewage from a meat plant. The discharge may result in the presence of pathogen(s) in surface water, for an IPZ-1 of vulnerability score 9 and an IPZ-2 of vulnerability score 8.1. There is no quantity threshold

The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats

New Significant Risk Circumstances – Pathogen:

The system discharges to surface water **or land** and its primary functions include conveying sewage from a meat plant. The discharge may result in the presence of pathogen(s) in surface water **or groundwater**. There is no quantity threshold.

Current Policy Text:

Policy 5:

No existing (none known to exist) and future systems that collect, transmit or treat industrial sewage and discharge industrial effluent to surface water in the Windsor IPZ-1, Windsor IPZ-2 and Lakeshore (Belle River) IPZ-1 shall be permitted, with one exception. That exception is non-contact cooling water, which should be allowed to be discharged.

No future systems that collect, transmit or treat industrial sewage and discharge industrial effluent to surface water in the Amherstburg IPZ-1 shall be permitted, with one exception. That exception is non-contact cooling water, which should be allowed to be discharged.

This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for these activities.

In the Amherstburg IPZ-1, the Ministry of Environment shall ensure that the existing and amended or updated Environmental Compliance Approvals (Certificates of Approval) include terms and conditions that manage the significant threat activity in order to protect sources of drinking water. For the purpose of this policy, in the Amherstburg IPZ-1, existing threat activities shall include activities related to a complete application made under the Planning Act or Condominium Act or the Building Code or for an Environmental Compliance Approval, if the application is made before the Source Protection Plan takes effect.

The date of compliance for prohibiting existing and future threats is when the Source Protection Plan takes effect.

For managing existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.

Policy 6:

In reviewing Environmental Compliance Approval (Certificate of Approval) applications for future systems and those for any existing systems that discharge non-contact cooling water to surface water in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1, the Ministry of Environment shall ensure that the Environmental Compliance Approvals (Certificates of Approval) include terms and conditions that manage the significant threat activity in order to protect sources of drinking water.

The above applies to the existing and future significant threat of industrial effluent discharges in the vulnerable areas mentioned above. The date of compliance for managing future threats is when the Source Protection Plan takes effect. For managing existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.

Policy Text:

No existing (none known to exist) and future systems that collect, transmit or treat industrial sewage and discharge industrial effluent to surface water in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1, and Amherstburg IPZ-1 shall be permitted, the exception of non-contact cooling water, which should be allowed to be discharged (see policy W1W2L1A1-industrialeff-2).

In reviewing Environmental Compliance Approval (Certificate of Approval), applications for future and existing systems that discharge non-contact cooling water to surface water in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1, the MECP shall ensure that the Environmental Compliance Approvals (Certificates of Approval) include terms and conditions that manage the significant threat activity in order to protect sources of drinking water.

This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of the Environment, Conservation and Parks (MECP) for these activities.

Rationale:

Policy 2.1_PI.V8.ER combines two earlier polices in the Essex Region SPP (W1W2L1A1industrialeff-1(policy 5)/ W1W2L1A1-industrialeff-2)(policy 6) to address discharge of industrial effluent. This policy prohibits this activity with the exception of non-contact cooling water, which is managed. The implementation this policy will ensure that sources of drinking water are adequately protected, with regard to industrial effluent discharge in the IPZ's with a vulnerability score greater than 8, while allowing the discharge of non-contact cooling water.

Windsor IPZ-1 and Lakeshore IPZ-1 land uses preclude industrial land uses. Industrial land uses are allowed in the Amherstburg IPZ-1 and Windsor IPZ-2. It is understood that the direct discharge of industrial effluent to water bodies is not allowed through municipal sewer use By-law in the City of Windsor. The City's Property Standards By-law requires all sewage discharge to be directed to the municipal sanitary sewage system. There are no known direct industrial effluent discharges currently occurring in these subject vulnerable areas. Therefore, the prohibition of any existing (none known to exist) and future discharge of industrial effluent (with the exception of non-contact cooling water) is a reasonable approach, and the implementation of this policy is expected to have no negative effect.

Non-contact cooling water is water contained in pipes, sleeves or jackets, used for cooling purposes in industries, and does not come into direct contact with industrial equipment or processes. Based on discussions with municipal staff, non-contact cooling water discharge from an industry to surface water can be managed through Environmental Compliance Approvals (Certificates of Approval) under the legislation governing this activity. There are no known existing discharges of non-contact cooling water in these vulnerable areas and although unlikely, an industry outside the subject vulnerable areas could propose to discharge non-contact cooling water within these areas.

As of December 2018, all of the existing Provincial Instruments in Vulnerable Areas for which activities were identified as SDWTs were reviewed. Based on this review there are no existing activities that meet the criteria to be a SDWT as identified in this policy. In 2018, Ontario ministries implemented a screening mechanism for new applications to identify potential SDWTs. If an activity is deemed to be a SDWT, the PI is either amended or the activity is prohibited depending on the applicable Source Protection Plan policy(ies).

The City of Windsor and Town of Amherstburg have indicated that they intend to include information regarding this policy in their Official Plans and Zoning By-laws, in order to assist in informing property owners and others.

2.0 The establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage

Storm Water Management Facilities and Drainage Systems:

2.3 – Outfall from a Storm Water Management Facility or Storm Water Drainage System

2.4 – Storm Water Infiltration Facility

Chemical Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 Amherstburg IPZ-1 IPZs with vulnerability score of 8 or higher

Risk Level: Significant **Approach:** Manage **Policy Tool:** Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act

Implementing Body: MECP Legal Effect: Must conform/comply with Compliance Date: When the Source Protection Plan or its amendments take effect

Current Significant Risk Circumstances:

- The stormwater management facility discharges stormwater to land or surface water. The drainage area is more than 100 ha and the predominant land uses in the drainage area are rural, agricultural, low density residential or high density residential. This applies to an IPZ-1 of vulnerability score 9 for which there are 7 chemicals of concern where the predominant land uses (in the drainage area) are rural, agricultural, or low-density residential, and 9 chemicals of concern where the predominant land use (in the drainage area) is high-density residential.
- The stormwater management facility discharges stormwater to land or surface water. The drainage area is more than 10 ha and the predominant land uses in the drainage area are industrial or commercial. This applies to an IPZ-1 of vulnerability score 9 for

which there are 7 chemicals of concern for a drainage area of 10 to 100 ha, and 17 chemicals for a drainage area of more than 100 ha.

The stormwater management facility discharges stormwater to land or surface water. The drainage area is more than 100 ha and the predominant land uses in the drainage area are industrial or commercial. This applies to an IPZ-2 of vulnerability score 8.1 for which are 2 chemicals of concern.

The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats

New Significant Risk Circumstance – Chemical:

- 1. A storm water management facility outfall or a storm water drainage system outfall that serves land where:
 - the predominant land use is rural, agricultural, outdoor recreational, parkland or greenhouse. The impervious areas* of the lands served by the facility draining to the SWMF or storm water drainage system is >50% of the drainage area (IPZ with score higher than 9)
 - the predominant land use is residential or institutional, or community use. The impervious areas* of the lands served by the facility draining to the SWMF or storm water drainage system is >20% of the drainage area (IPZ with score higher than 9)
 - the predominant land use is commercial or industrial. The impervious area* of the lands served by the facility draining to the SWMF or storm water drainage system is >20% of the drainage area (IPZ with score higher than 9) or >50% of the drainage (IPZ with score higher than 8)
- A storm water infiltration facility that serves land where the predominant land use is commercial or industrial land uses. The sum of impervious areas* of the lands served by the facility draining to the storm water infiltration facilities in the site is >2000m².

* The impervious areas of the lands served by the facility draining to the storm water management facility includes roads, sidewalks and parking surfaces - aisles and driveways but excludes roofs

Current Policy Text:

In reviewing Environmental Compliance Approvals (Certificates of Approval) for stormwater management facilities which discharge to surface water bodies in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1, the Ministry of Environment shall ensure that the terms and conditions of the Environmental Compliance Approvals (Certificates of Approval) adequately manage existing and future storage of stormwater management facilities in order to protect sources of drinking water.

The MOE shall give due consideration to its document, 'Stormwater Management, Planning and Design Manual' (March 2003) in the review of stormwater management applications for the subject areas.

The above applies to the existing and future significant threat of stormwater management, in the vulnerable areas mentioned above.

For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.

The date of compliance for future threats is when the Source Protection Plan takes effect.

New Policy Text:

In reviewing Environmental Compliance Approvals (Certificates of Approval) for stormwater management facilities which meet the circumstances to be considered a SDWT, the Ministry of Environment shall ensure that the terms and conditions of the Environmental Compliance Approvals (Certificates of Approval) adequately manage existing and future activities in order to protect sources of drinking water.

The MECP shall give due consideration to its document, 'Stormwater Management, Planning and Design Manual' (March 2003) in the review of stormwater management applications for the subject areas.

Rationale:

Current land uses do not preclude these activities from happening. Based on discussions with City of Windsor staff when the SPP was first developed, there is a possibility of constructing stormwater management facilities in the Windsor IPZ-1 and Windsor IPZ-2. Such projects would be beneficial and should be encouraged. There are also substantial commercial/industrial areas in the Windsor IPZ-2 which may have stormwater management needs. The Amherstburg IPZ-1 and areas surrounding it also include industrial and commercial land uses.

Stormwater management facilities can be managed through Environmental Compliance Approvals (Certificates of Approval) under the legislation governing this activity. The MECP's

Guide for Applying for Approval of Sewage Works', April 2010

(https://dr6j45jk9xcmk.cloudfront.net/documents/962/5-8-2-eca-guide-en.pdf) must be used by applicants to ensure that their proposals meet the legislative requirements for an Environmental Compliance Approval (Certificate of Approval). The terms and conditions of the Environmental Compliance Approval (Certificate of Approval) generally address: criteria for operation and performance of the stormwater management facility, requirements for monitoring and recording of specific indicators of the environmental impact of the works (water quality, not quantity), reporting on incidents, and provision of contingencies to prevent and deal with accidental spills.

The MECP 'Guide for Applying for Approval of Sewage Works' requires that for applications involving stormwater management (i.e., quantity control or quality control or both), a stormwater management report must be prepared and submitted with the application. The MECP document, 'Stormwater Management, Planning and Design Manual' (March 2003), is used as a baseline reference document in the review of stormwater management applications for approval under legislation governing this activity as administered by the Ministry of the Environment. The manual provides technical and procedural guidance for the planning, design, and review of stormwater management practices.

As of December 2018, all of the existing Provincial Instruments in Vulnerable Areas for which activities were identified as SDWTs were reviewed. Based on this review there are no existing activities that meet the criteria to be a SDWT as identified in this policy. In 2018, Ontario ministries implemented a screening mechanism for new applications to identify potential SDWTs. If an activity is deemed to be a SDWT, the PI is either amended or the activity is prohibited depending on the applicable Source Protection Plan policy.

The MECP is normally the approval body for Environmental Compliance Approvals (Certificates of Approval) – sewage works, under the legislation governing this activity, and should take the lead, including monitoring. This is consistent with Provincial Direction under the Clean Water Act.

For brevity the changes to each of the significant risk circumstance for sub-threats 2.6 and 2.8 are included below and have been removed from the Change Highlights versions of the individual policies.

2.6 Wastewater Collection Facilities and Associated Parts: Outfall of a Combined Sewer Overflow (CSO)

Current Significant Risk Circumstances:

- The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m3 (annual basis). This applies to an IPZ-1 of vulnerability score 9, for which there are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m3, and 13 chemicals for a rate more than 50,000 m3.
- The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m3 (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 2 chemicals of concern.
- The combined sewer may discharge sanitary sewage containing human waste to surface water, and the discharge may result in the presence of pathogen(s) in surface water, for an IPZ-1 of vulnerability score 9 and an IPZ-2 of vulnerability score 8.1. There is no quantity threshold.

The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at:

https://www.ontario.ca/page/tables-drinking-water-threats

2.6 Wastewater Collection Facilities and Associated Parts: Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer Overflow (SSO) from a Manhole or Wet Well.

New Significant Risk Circumstance Chemical:

A combined sewer or partially separated sanitary sewer outfall that discharges combined sewer overflow (CSO), or a manhole that discharges sanitary sewer overflow or a wet well outfall that discharges sanitary pumping station overflow (PSO), and forms part of a wastewater collection facility that may discharge to land or surface water.

The wastewater collection facility is designed to convey 10,000 – 100,000m3/d (IPZ 9) or >100,000 m3/d (IPZ 8) of sewage

New Significant Risk Circumstance Pathogen:

A combined sewer or partially separated sanitary sewer outfall that discharges combined sewer overflow (CSO), or a manhole that discharges sanitary sewer overflow or a wet well outfall that discharges sanitary pumping station overflow (PSO), and forms part of a wastewater collection facility

The discharge may result in the presence of one or more pathogens in groundwater or surface water.

2.8 Wastewater Treatment Facilities and Associated Parts

Current Significant Risk Circumstances:

The following significant threat circumstances apply to an IPZ-1 of vulnerability score 9

- The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m3 (annual basis). There are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m3, and 13 chemicals for a rate more than 50,000 m3.
- The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The discharge may result in the presence of pathogen(s) in surface water. There is no quantity threshold.
- The wastewater treatment facility discharges treated sanitary sewage directly to land or surface water through a means other than a designed bypass. The facility is designed to discharge at an average daily rate of more than 17,500 m3 (annual basis). There are 7 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m3, and 22 chemicals for a rate more than 50,000 m3.
- The wastewater treatment facility discharges to surface water through a means other than a designed bypass. The discharge may result in the presence of pathogen(s) in surface water. There is no quantity threshold.
- The system is a sewage treatment tank, or a sewage treatment tank in either a wastewater collection or treatment facility. Any part of the tank is at or above grade. A spill from the tank may result in the presence of pathogen(s) in surface water. There is no quantity threshold.

New Significant Risk Circumstance Chemical:

A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility, where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is >17,500m³/d (vulnerability score 9) or >50,000m³/d (vulnerability score 8)

New Significant Risk Circumstance Pathogen:

A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility, where a discharge may result in the presence of one or more pathogens in groundwater or surface water (vulnerability score 8 or higher)

A sewage treatment plant process tank or a sewage treatment plant holding tank, or a sewage lagoon that does not discharges to surface water, and that forms part of a wastewater treatment facility, where a spill may result in the presence of one or more pathogens in groundwater or surface water. (vulnerability score 9 or higher)

The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

2.6 Wastewater Collection Facilities and Associated Parts: Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer Overflow (SSO) from a Manhole or Wet Well.
Chemical and/or Pathogen
Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 IPZs with vulnerability score of 8 or higher

Risk Level: Significant **Approach:** Prohibit **Policy Tool:** Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act

Implementing Body: MECP

Legal Effect: Must conform/comply with **Compliance Date:** when the Source Protection Plan or its amendments take effect

Current Policy Text:

No new combined sewers shall be permitted in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.

The above applies to the future significant threat of combined sewer discharge from a stormwater outlet to surface water, in the vulnerable areas mentioned above. This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.

The date of compliance is when Source Protection Plan takes effect.

New Policy Text:

No new combined sewers or partially separated sanitary sewer outfall that discharge combined sewer overflow (CSO), or a manhole that discharges sanitary sewer overflow or a wet well outfall that discharges sanitary pumping station overflow (PSO) shall be permitted where they are considered to be a significant drinking water threat (IPZ's with vulnerability score of 8 or more).

The establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage

Current:

- Sewage treatment plant bypass discharge to surface water
- Sewage treatment plant effluent discharges (includes lagoons)
- Storage of sewage (e.g.: treatment plant tanks)

New 2.8 Wastewater Treatment Facilities and Associated Parts Chemical and/or Pathogen Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 Amherstburg IPZ-1 IPZs with vulnerability score of 8 or higher

Risk Level: Significant

Approach: Prohibit or Manage

Policy Tool: Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act

Implementing Body: MECP Legal Effect: Must conform/comply with Compliance Date: when the Source Protection Plan or its amendments take effect

New Significant Risk Circumstance Chemical: (see above for current circumstances) A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility, where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is >17,500m³/d (vulnerability score 9) or >50,000m³/d (vulnerability score 8)

New Significant Risk Circumstance Pathogen:

A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility, where a discharge may result in the presence of one or more pathogens in groundwater or surface water (vulnerability score 8 or higher)

Current Policy Text:

Policy 2:

No wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1 shall be permitted.

No sewage treatment tanks in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1 shall be permitted, with the exception of storage, in the Windsor IPZ-1, of future storm water and sewage from combined sewers, for the purpose of reducing combined sewer overflows (CSOs). (moved to a different policy)

The above applies to existing (none known to exist) and future significant threats of sewage treatment plant bypass to discharge to surface water, sewage treatment plant effluent discharges and the storage of sewage, in the vulnerable areas mentioned above.

This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for these activities.

The date of compliance is when Source Protection Plan takes effect.

Policy 7:

In reviewing Environmental Compliance Approvals (Certificates of Approval) for expanded or new wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass in the Windsor IPZ-2, the Ministry of Environment shall ensure that the Environmental Compliance Approvals (Certificates of Approval) adequately manage these activities in order to adequately protect future sources of drinking water. The above applies to the future significant threat of sewage treatment plant bypass discharge to surface water and sewage treatment plant effluent discharges, in the vulnerable area mentioned above. The date of compliance for future threats is when Source Protection Plan takes place.

New Policy Text:

No new <mark>final effluent outfall or sewage treatment plant overflow outfall that is part of a</mark> wastewater treatment facility shall be permitted in IPZ's with vulnerability score of 9 or more.

In reviewing Environmental Compliance Approvals (Certificates of Approval) for wastewater treatment facilities with a final effluent outfall or sewage treatment plant overflow outfall within vulnerable areas with a score of 8 or 8.1 (i.e. Windsor IPZ-2), the Ministry of Environment shall ensure that the Environmental Compliance Approvals (Certificates of Approval) adequately manage these activities in order to adequately protect future sources of drinking water.

The establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage

2.7 Wastewater Collection Facilities and Associated Parts: Sewage Pumping Station or Lift Station Wet Well, a Holding Tank or a Tunnel

2.8 Wastewater Treatment Facilities and Associated Parts

Pathogen Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1 IPZs with vulnerability score of 9 or higher

Risk Level: Significant

Approach: Prohibit or Manage

Policy Tool: Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act

Implementing Body: MECP Legal Effect: Must conform/comply with

Compliance Date: when the Source Protection Plan or its amendments take effect

Significant Risk Circumstance Pathogen: (see above for change in circumstance)

- A wet well, a holding tank or a tunnel that forms part of a wastewater collection facility as part of a sanitary sewage pumping station or lift station and stores sanitary sewage containing human waste. (new sub-threat 2.7)
- 2. A sewage treatment plant process tank or a sewage treatment plant holding tank that forms part of a wastewater treatment facility.

A spill may result in the presence of one or more pathogens in groundwater or surface water.

Current Policy Text:

Policy 2:

No wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1 shall be permitted.

No sewage treatment tanks in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1 shall be permitted, with the exception of storage, in the Windsor IPZ-1, of future storm water and sewage from combined sewers, for the purpose of reducing combined sewer overflows (CSOs). (moved to a different policy)

The above applies to existing (none known to exist) and future significant threats of sewage treatment plant bypass to discharge to surface water, sewage treatment plant effluent discharges and the storage of sewage, in the vulnerable areas mentioned above.

This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for these activities. The date of compliance is when Source Protection Plan takes effect.

Policy 3

In reviewing applications for Environmental Compliance Approvals (Certificates of Approval) under the legislation governing this activity, for in the Windsor IPZ-1, the Ministry of Environment shall allow the establishment of systems that store combined storm water and sewage, where such systems are specifically for the purpose of reducing combined sewer overflow.

The Environmental Compliance Approval (Certificate of Approval) shall require that, through terms and conditions specified in the Environmental Compliance Approval (Certificate of Approval), the future storage of stormwater and sewage is managed in order to protect sources of drinking water. The above applies to the future significant threat of the storage of sewage, in the vulnerable areas mentioned above. The date of compliance for future threats is when Source Protection Plan takes effect.

Policy Text:

No wet well, holding tank or tunnel that forms part of a wastewater collection facility as part of a sanitary sewage pumping station or lift station and stores sanitary sewage containing human waste, nor sewage treatment plant process tank or a sewage treatment plant holding tank that forms part of a wastewater treatment facility shall be permitted in IPZ's with vulnerability score of 9 or more, with the exception of storage, in the Windsor IPZ-1, of future storm water and sewage from combined sewers, for the purpose of reducing combined sewer overflows (CSOs).

In reviewing applications for Environmental Compliance Approvals (Certificates of Approval) under the legislation governing this activity, in the Windsor IPZ-1, the Ministry of Environment shall allow the establishment of systems that store combined storm water and sewage, where such systems are specifically for the purpose of reducing combined sewer overflow. The Environmental Compliance Approval (Certificate of Approval) shall require that, through terms and conditions specified in the Environmental Compliance Approval (Certificate of Approval) shall require that, through terms and conditions specified in the Environmental Compliance Approval (Certificate of Approval) water.

The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

2.6 Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer Overflow (SSO) from a Manhole or Wet Well.

2.8 Wastewater Treatment Facilities and Associated Parts Chemical and/or Pathogen Existing and/or Future Activities

Windsor IPZ-1, Windsor IPZ-2

Risk Level: Significant Approach: Manage Policy Tool: Specify Action

Implementing Body: City of WindsorLegal Effect: Must conform/comply withCompliance Date: when the Source Protection Plan or its amendments take effect

Current Policy Text:

The City of Windsor will initiate the development of a sewer and storm management plan when the Source Protection Plan takes effect. The sewer and storm management plan will include plans for further sewer separation in the sewersheds of the combined sewer overflows and the Little River Pollution Control Plant. The management plan will also consider storm water retention structures such as deep tunnel storage to reduce combined sewer overflow. The development of the management plan will be targeted for completion in 2016. The City of Windsor will also continue its current sewer separation program.

The above applies to the existing significant threat of Combined Sewer Overflows (CSOs), bypass and effluent discharges in the vulnerable areas: Windsor IPZ-1 and IPZ-2

New Policy Text:

The City of Windsor will ensure that all future Sewer Master Plans include consideration the above named significant drinking water threats (CSO, SSO, PSO, sewage outfalls). Actions that reduce the potential for contamination of sources of drinking water should be included in all future Sewer Master Plans. This could include plans for further sewer separation in the sewersheds of existing combined sewers, storm water retention structures such as deep tunnel

storage to reduce combined sewer overflow, mandatory downspout disconnection, backflow protection, pump station improvements, sewer rehabilitation, sealing maintenance holes, etc.

2.0 The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

2.8 Wastewater Treatment Facilities and Associated Parts

Chemical and/or Pathogen Existing and/or Future Activities

Windsor IPZ-2

Risk Level: Significant Approach: Manage Policy Tool: Specify Action

Implementing Body: City of Windsor; Essex Region Source Protection Authority **Legal Effect:** Must conform/comply with **Compliance Date:** when the Source Protection Plan or its amendments take effect

New Significant Risk Circumstance Chemical:

A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility. Discharge of treated sanitary sewage is >50,000 m³/d (IPZ 8)

New Significant Risk Circumstance Pathogen:

A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility. A discharge may result in the presence of one or more pathogens in surface water. (IPZ with score greater than 8)

Current Policy Text:

Policy 34:

The City of Windsor will continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval) (or any updates or replacements to it) under the Ontario Water Resources Act for the Little River Pollution Control Plant (LRPCP) and continue its current monitoring scheme which includes the testing of mercury and PCBs in the raw wastewater and E. coli in the bypass. The City of Windsor will also give due consideration to the reduction of the frequency and volumes of bypasses through sewer separation and downspout disconnection programs, and other such measures while developing plans or strategies to manage storm water and sewers. The City of Windsor will initiate the development of plans or strategies, to manage storm water and sewers, when the Source Protection Plan takes effect. The above applies to the existing and future significant threat of sewage treatment plant bypass discharge to surface water, in the vulnerable area: Windsor IPZ-2

Policy 35

The City of Windsor will continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval), and will add to its current monitoring scheme the testing of 2-methyl-4-chlorophenoxyacetic acid (MCPA) in the effluent discharge, such that MCPA is tested at least once a year at the same sampling point and in the same manner as is done for other pesticides. The City of Windsor will set up a testing schedule when the Source Protection Plan takes effect.

The above applies to the existing and future significant threat of sewage treatment plant effluent discharges in the vulnerable area: Windsor IPZ-2

Policy Text:

The City of Windsor will continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval) (or any updates or replacements to it) under the Ontario Water Resources Act for the Little River Pollution Control Plant (LRPCP) including annual reporting. The City of Windsor will continue its current monitoring scheme and will also give due consideration to the reduction of the frequency and volumes of bypasses through sewer separation and downspout disconnection programs, and other such measures while developing plans or strategies to manage storm water and sewers.

The Essex Region Source Protection Authority will provide assistance to the City of Windsor in the completion of annual reports under the new Consolidated Linear Model for ECAs, which includes a requirement to report on Source Water Protection.

2.0 The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

2.8 Wastewater Treatment Facilities and Associated Parts Chemical and/or Pathogen Existing and/or Future Activities

Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 IPZs with vulnerability score of 9 or higher

Risk Level: Significant **Approach:** Prohibit **Policy Tool:** Specify Action

Implementing Body: City of Windsor, Town of Lakeshore, Town of Amherstburg **Legal Effect:** Must conform/comply with **Compliance Date:** when the Source Protection Plan or its amendments take effect

New Significant Risk Circumstance Pathogen:

A sewage treatment plant process tank or a sewage treatment plant holding tank that forms part of a wastewater treatment facility. A spill may result in the presence of one or more pathogens in groundwater or surface water. (IPZ 9)

Current Policy Text:

The Municipality will prohibit sewage treatment tanks in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1, with the exception of storage of stormwater and sewage (from combined sewers) in the Windsor IPZ-1, through a means that the Municipality finds appropriate such as Municipal Act By-law.

The above applies to existing (none known to exist) and future significant threats of the storage of sewage in the vulnerable areas mentioned above. The date of compliance is when the Source Protection Plan takes effect.

New Policy Text:

The Municipality will prohibit sewage treatment tanks where the activity is a significant drinking water threat (i.e. vulnerable areas with a score of 9 or higher), with the exception of storage of stormwater and sewage (from combined sewers) in the Windsor IPZ-1, through a means that the Municipality finds appropriate such as Municipal Act By-law.

2.0 The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

Combined sewer discharge from a stormwater outlet to surface water

 Stormwater management (including systems with or with-out ponds or other retention facilities)

2.3 Outfall from a Storm Water Management Facility or Storm Water Drainage System

2.4 Storm Water Infiltration Facility

2.6 Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer

Overflow (SSO) from a Manhole or Wet Well.

2.8 Wastewater Treatment Facilities and Associated Parts

Chemical and/or Pathogen Existing and/or Future Activities

Windsor IPZ-1, Windsor IPZ-2

Risk Level: Significant Approach: Manage Policy Tool: Education and Outreach

Implementing Body: City of WindsorLegal Effect: Must conform/comply withCompliance Date: when the Source Protection Plan or its amendments take effect

Significant Risk Circumstance Chemical and Pathogen: All Significant Drinking Water Threat circumstances for the above named threat sub-categories

Current Policy Text:

The City of Windsor will initiate and lead Education and Outreach when the Source Protection Plan takes effect. The Education and Outreach will educate property owners within the sewershed areas of the subject vulnerable areas where existing CSOs are significant threats, and where future stormwater management could be significant threats. The Education and Outreach will promote downspout disconnection, use of rain barrels, and will provide information on what not to dispose of down the drain and the spills action centre in case of spills, and other such initiatives that assist in educating the property owners about combined sewer overflow, as well as stormwater management. The delivery of the Education and Outreach will be targeted for completion in 2014, and will be continued as needed based on review at that time.

The above applies to the future significant threat of Combined Sewer Overflows (CSOs) and stormwater management in the vulnerable areas: Windsor IPZ-1 and IPZ-2

Policy Text:

The City of Windsor will continue to provide Education and Outreach programs to property owners within the sewershed areas of the subject vulnerable areas where existing Combined Sewers and stormwater management could be significant threats. The Education and Outreach will promote such actions as downspout disconnection, use of rain barrels, low impact design and green infrastructure. The Education and Outreach program will provide information on what not to dispose of down the drain and the information about the Spills Action Centre in case of spills, and other such initiatives that assist in educating the property owners about combined sewer overflow, as well as stormwater management. the place for life





vation Authority

Essex Region Source Protection Authority

ERSPA 05/24

From: Katie Stammler, Project Manager, Source Water Protection

Date: Thursday, May 30, 2024

Subject: s.36 Amendments – Other policies

Recommendation: That the SPA endorse the policy amendments as described in SPA Report 05/24 to be submitted to the MECP for early engagement.

Summary

• This report summarizes changes to remaining policies not captured in other SPA reports

Discussion

Policies with Minor Edits SPC Report 12.22

Upon review, some policies were edited to improve and/or streamline implementation.

Education and Outreach

The SPP previously contained two policies for general Education and Outreach directed to ERCA as the implementing body. These policies have been merged into a single E&O policy.

Stewardship and Incentive

Similarly, there were previously three policies for Stewardship/Incentive. One policy was specifically targeted at applying for funds to mitigate threats associated with fuel tanks, one was for the City of Windsor specifically to apply for funds, and the other for all moderate/low threats. All policies directed implementing bodies to apply for funds from the MECP, however such funds were never available. The three policies have been merged into one generic Stewardship/Incentive policy that directs ERCA and municipalities to apply for funding if/when it is available to address any type of SDWT identified in the ERSPA. This policy would provide a mechanism to justify applying for such funds should they become available. ERCA continues to seek out funds for agricultural stewardship and restoration projects.

Restricted Land Use (s.59) policies SPC Report 06.24

There have been a number of changes to policies that use the tools available in Part IV of the Clean Water Act (s.57 and s.58), including deletions and additions of policies. All s.57 and s.58 policies must be accompanied by a s.59 Restricted Land Use policy, which provides the necessary tools for screening new applications at the Planning and/or Building Permit phase. This screening is conducted by municipal staff following the Written Direction issued by the Risk Management Official. The existing Source Protection Plan has one s.59 policy that applies only to the Handling and Storage of Fuel as this is the only SDWT that applies to the large Event Based Area. This policy has just been edited to align with the 2021 Director Technical Rules and was included with the other policies related to the Handling and Storage of Fuel in SPA Report 03.24. There is a second s.59 that applies to all other SDWTs that are addressed with s.57 or s.58 policies. This policy required only minor edits as it was already written in a way that will capture all s.57 and s.58 policies. For reference, below is a list of all Part IV policies to be implemented by the Risk Management Official that are proposed for the s.36 update to the Source Protection Plan. Once the policies are approved, the RMO will issue an updated Written Direction to accompany each of the s.59 policies.

Section 57 Prohibition Policies

- 03_s.57.V8.ER (Application of Agricultural Source Material)
- 04_s.57.V8.ER (Storage of Agricultural Source Material)

Section 58 Risk Management Plan Policies

- 10_s.58.V8.1.ER (Application of Pesticide)*
- 11_s.58.V9.ER (Storage of Pesticide)*
- 12_s.58.V9.ER (Application of Road Salt)**
- 13.1_s.58.V9.ER (Storage of Road Salt)*
- 14_s.58.V8.ER (Storage of Snow)*
- 15_s.58.V9.EBA.ER (Handling and Storage of Fuel)*
- 16_s.58_V9_ER (Handling and Storage of DNAPL)**

Section 59 Restricted Land Use Policies

- 15_s.59.V9.EBA.ER (Handling and Storage of Fuel)*
- All_s.59.V8.ER (various threats)*

* Indicates an amendment to an existing policy (e.g. change in circumstance, change in applicable vulnerable area)

** Indicates a new policy

Monitoring Policies SPC Report 09.20

The Clean Water Act requires source protection plans to include monitoring policies for each policy that addresses significant drinking water threats, per section 22(2)(4), to help gauge implementation progress and policy effectiveness. Section 45 of the Act indicates that provincial ministries must comply with the requirements/obligations set out in these monitoring policies. Section 81 of the Act requires that each Risk Management Official prepare an annual report that summarize the actions taken by the RMO/I and that the report adhere to Section 65 of O.Reg 287/07.

Originally, this was interpreted as needing a separate monitoring policy for each significant drinking water threat policy. However, this resulted in a substantial amount of repetition in the SPP. In order to simplify the SPP and facilitate completion of Annual Reports, the individual monitoring policies will be eliminated and will be replaced with the following:

- one monitoring policy for all policies that use Provincial Instruments
- one monitoring policy for all policies that use Part IV of the Clean Water Act
- one monitoring policy for all policies implemented by Municipalities
- two monitoring policies for all policies implemented by ERCA. The ERCA policies will be separated into legally binding and non-legally binding policies.

Road Sign Policy

The last remaining policy for review is the Specify Action policy that calls for the installation and maintenance of road signs in areas. This policy has only been edited to remove the instruction that road signs be designed.

Monitoring Policies

The *Clean Water Act* requires source protection plans to include monitoring policies for each policy that addresses significant drinking water threats (per section 22(2)(4)), to help gauge implementation progress and policy effectiveness. Section 45 of the Act indicates that provincial ministries must comply with the requirements/obligations set out in these monitoring policies. Section 81 of the Act requires that each Risk Management Official prepare an annual report that summarize the actions taken by the RMO/I and that the report adhere to Section 65 of O.Reg 287/07.

Originally, this was interpreted as needing a separate monitoring policy for each significant drinking water threat policy. However, this results in a substantial amount of repetition in the

SPP. In order to simplify the SPP and facilitate completion of Annual Reports, we propose eliminating individual monitoring policies and replacing them with the following:

- one monitoring policy for all policies that use Provincial Instruments
- one monitoring policy for all policies that use Part IV of the Clean Water Act
- one monitoring policy for all policies implemented by Municipalities
- two monitoring policies for all policies implemented by ERCA. The ERCA policies will be separated into legally binding and non-legally binding policies.

This change results in the elimination of 41 monitoring policies, but will not change the reporting product that the ERSPA receives from these Implementing Bodies.

<u>Summary</u>

The SPC has completed their review of all of the current policies in the Essex Region Source Protection Plan to align them with the 2021 Director Technical Rules. Of the 50 policies in the current SPP:

- 30 policies have been amended
- 4 policies have been edited
- 16 policies have been removed

In addition, 15 new policies have been written. The number of Monitoring policies has been reduced from 45 to 5. The SPC is to be congratulated for their time and attention to these policies.

Katie Stammler, PhD., Source Water Protection Program Manager

Tom Fuerth, P.Eng, Chair, Essex Region Source Protection Committee

Attachments:

- Education and Outreach policy
- Stewardship/Incentive policy
- Restricted Land Use policy
- Monitoring policies

Current – Includes list of each threat/sub-threat New All Threats and Sub-threats

Chemical and/or Pathogen Existing and/or Future Activities

Current – Policy 43: All IPZs within the Essex Region Source Protection Area Policy 44: All HVAs and SGRAs and rural areas with private wells within the Essex Region Source Protection Area New All Vulnerable Areas in the Essex Region Source Protection Area

Current Risk Level: Moderate to Low New Risk Level: Significant, Moderate, and/or Low Approach: Education and Outreach, pursuant to s. 22(7) of the Clean Water Act Policy Tool: Education and Outreach

Implementing Body: ERCA to be the leadLegal Effect: Non-Legally Binding (Strategic Action)Compliance Date: When the Source Protection Plan or its amendments take effect.

Significant Risk Circumstance:

N/A

Current Policy Text:

Policy 43: The Essex Region Conservation Authority will initiate and lead Education and Outreach when the Source Protection Plan takes effect, by building on existing Education and Outreach programs to promote best management practices to protect drinking water sources for moderate and low drinking water threats. Implementation will be conditional on availability of funding. The E & O will be targeted for implementation within three to five years after the Plan takes effect, and will continue as needed based on a review at that time.

The above applies to the existing and future, moderate and low, various threats (listed below) in all IPZs within the Essex Region Source Protection Area (lists all threatst)

Policy 44: The Essex Region Conservation Authority will initiate and lead Education and Outreach, when the Source Protection Plan takes effect, directed to all landowners and residents with private wells in HVAs, SGRAs and other rural areas, to promote best management practices

to help address various potential threats to groundwater sources of drinking water, raise awareness of drinking water threats, and provide education on the vulnerability of HVAs, SGRAs and abandoned or poorly maintained wells as transport pathways of contamination to sources of groundwater. Implementation will be conditional on availability of funding. The E & O will be targeted for implementation within three to five years of the Plan taking effect, and will continue as needed based on a review at that time.

The above applies to the existing and future, moderate and low, various threats (listed below) in all HVAs and SGRAs and rural areas with private wells in the Essex Region Source Protection Area (lists all policies)

New Policy Text:

The Essex Region Conservation Authority will initiate and lead a broad Education and Outreach program when the Source Protection Plan or its amendments take effect, by building on existing Education and Outreach programs. The program will raise awareness of source water protection in general and help to promote best practices to protect drinking water sources. Implementation will be conditional on availability of funding.

Rationale:

Education and outreach (E&O) policies complement and enhance the implementation of other corresponding significant threat policies. E&O approaches are intended to increase awareness on the benefits of drinking water source protection and encourage positive changes in behavior by promoting best management practices. BMPs apply to a range of measures from operational procedures to administrative processes. E&O approaches provide cost-effective opportunities to assist in helping address low, moderate and significant drinking water threats across all vulnerable areas. This policy approach also provides a unique opportunity to provide E&O to benefit users of private wells in HVAs, SGRAs, and in other rural areas, including those in the vicinity of septic systems. Public education and outreach are some of the most important actions a community can take to protect their water supply. It is the purpose of this policy to provide landowners with private wells the necessary awareness of BMPs for the protection of groundwater sources, which for many landowners, is a source of drinking water. Groundwater and surface water interact as well, and therefore the contamination of one affects the other.

The Essex Region Conservation Authority will implement the broad E & O policy for consistent messaging on drinking water source protection across the Essex Region Source Protection Area. The implementation of this policy in this manner builds on the strengths and efficiencies of the Conservation Authority. The Conservation Authority has existing E & O programs that could be tailored or enhanced to include the suggested messaging.

Current (policy 45): The handling and storage of fuel Current (policy 46): Lists all SDWT categories that apply to the Essex

Region New: All identified Significant Drinking Water Threats in the Essex Region

Chemical and/or Pathogen Existing and/or Future Activities

Current applicable area (policy 46): All IPZs, HVAs and SGRAs and rural areas with private wells within the Essex Region Source Protection Area

Current applicable area (policy 45): Stoney Point EBA; Lakeshore EBA; Windsor EBA, 15,000L; Amherstburg EBA, 15,000L; Harrow-Colchester EBA; Union EBA, 15,000L; Union EBA, 34,000L; Pelee EBA; Wheatley EBA

New applicable area: All Vulnerable Areas in the ERSPA with identified SDWTs

Current Risk Level: Moderate to Low (policy 46), Significant (policy 45)
New Risk Level: Significant
Approach: Stewardship/Incentive
Policy Tool: Clean Water Act O.Reg. 287/07 Section 26 (1.i.) - Establish stewardship programs

Implementing Body: ERCA and Municipalities in the Essex Region with identified significant drinking water threats

Legal Effect: Non-legally binding (strategic action) **Compliance Date:** when the Source Protection Plan or its amendments take effect.

Current Significant Risk Circumstance:

Lists specific volume limits for fuel SDWTs in each vulnerable area (policy 45) Various (Policy 46)

New Significant Risk Circumstance: Various

Current Policy Text (Policy 45)

The Essex Region Conservation Authority (ERCA) will apply for funding assistance from the Ministry of the Environment, when the Source Protection Plan takes effect, in order to undertake a stewardship and incentive program, funded by the Province, to encourage and assist the owners of above grade liquid fuel storage facilities, in replacing single walled tanks with double walled tanks, where not required by TSSA standards. Implementation will be conditional on availability of funding.

The above applies to the existing and future significant threat of the handling and storage of fuel, in the vulnerable areas (lists areas)

Current Policy Text (Policy 46)

The Essex Region Conservation Authority (ERCA) will apply for funding assistance from the Ministry of the Environment, when Source Protection Plan takes effect, in order to undertake a stewardship and incentive program, funded by the Province, to encourage the use of risk mitigation practices and assist with the implementation costs of these practices for moderate and low threats to drinking water sources. Implementation will be conditional on availability of funding.

The above applies to the existing and future, moderate and low, various threats (listed below) in all IPZs, HVAs and SGRAs and rural areas with private wells in the Essex Region Source Protection Area. (lists all SDWT categories)

New Policy Text:

The Essex Region Conservation Authority (ERCA) will apply for funding assistance if/when such funding is available, in order to undertake a stewardship and incentive program to encourage the use of risk mitigation practices and assist with the implementation costs of these practices for significant threats to drinking water sources. Implementation will be conditional on availability of funding.

New Rationale:

Stewardship/Incentive policies are intended to promote or encourage specific action or behaviours and are complementary to the 'Specify Actions' and 'Education and Outreach' tools. These could include community recognition programs or awards, financial incentives or cost-share programs. Stewardship/Incentive programs provide assistance for the development of educational materials, incentives for infrastructure upgrades, or to maintain a monitoring and information network. The implementation of Stewardship/Incentive programs for vulnerable areas would be in conjunction with other established programs

The Essex Region Conservation Authority has a long history of providing stewardship programs. This policy is intended to provide a mechanism to apply for additional sources of funding, if/when they are available, that would enable actions to mitigate and/or eliminate SDWTs. Such funding to date has not been available. Examples of activities that could be undertaken with additional funding are:

The Essex Region Conservation Authority will strengthen the focus of stewardship programs to address priority drinking water threats in vulnerable areas by including the following best management practice projects:

- Sealing and capping of old abandoned water wells;
- Upgrade/maintenance of water wells currently in use as a non-municipal drinking water system (not listed in the Terms of Reference);
- Repairing, upgrading, or replacing faulty septic systems
- Constructing and restoring buffer strips and riparian zones along watercourses

Stewardship/Incentive would complement the Education & Outreach policies HVAs, SGRAs, Wells -1(E&O) and All IPZ s (E&O), through informing potentially affected parties of the requirements of the significant threat policies, the rationale for these policies, as well as 'best management practices', assisting in reducing the threats to drinking water sources.

The implementation of Stewardship/Incentive programs for vulnerable areas will be in conjunction with other established programs. ERCA has a comprehensive Clean Water - Green Spaces program aimed at improving regional water quality and enhancing natural areas and biodiversity. Grants of up to 90% of project costs are available to qualifying landowners to implement projects which will help improve local water quality, reduce soil erosion, and increase natural areas cover.

The Essex Region Conservation Authority will implement the Stewardship/Incentive policy as Conservation Authorities have the strongest link to municipalities, technical information and the source protection planning process itself and is a logical choice for coordinating and delivering Stewardship/Incentives to potentially affected parties. . The Conservation Authority also has existing Stewardship programs that could be used in cross promotion of all available programs

Current Lists all SDWT activities

New All Significant Drinking Water Threats in the Essex Region with Associated Part IV Policies with the exception of the Handling and Storage of Fuel

Chemical and pathogen Existing and Future Activities

Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 IPZ with vulnerability score 8 or higher

Risk Level: Significant Approach: Manage Policy Tool: Clean Water Act, Section 59 Restricted Land Use

Implementing Body: Risk Management Official
Legal Effect: Legally binding
Compliance Date: The date of compliance for future threats is when the Source Protection
Plan and/or its amendments take effect.

Current Significant Risk Circumstances

All activities that are subject to Sections 57 (Prohibition) or 58 (Risk Management Plan) policies

The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats

New Significant Risk Circumstance:

All activities that are subject to Sections 57 (Prohibition) or 58 (Risk Management Plan) policies

Policy Text (No significant change)

All land uses identified within the Official Plan and/or Zoning By-Laws where significant drinking water threat activities have been designated for the purpose of Sections 57 or 58 of the Clean Water Act, are hereby designated as Restricted Land Uses, with the exception of residential uses.

Within these designated land uses and areas, a written notice from the Risk Management Official in accordance with Section 59(2) of the Clean Water Act shall be required prior to approval of any Building Permit, Planning Act or Condominium Act application.

Despite the above policy, a Risk Management Official may issue written direction specifying the circumstances under which a Planning Act Approval Authority or building official may be permitted to make the determination that a site-specific land use is not designated for the purposes of Section 59. Where such direction has been issued, a site-specific land use that is the subject of an application for approval under the Planning Act, Condominium Act, or for a permit under the Building Code Act is not designated for the purposes of Section 59, provided that the Planning Act Approval Authority or building official, as the case may be, is satisfied that:

- The application complies with the circumstances specified in the written direction from the Risk Management Official; and
- The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of Section 57 or 58 will not be engaged in, or will not be affected by the application.

The date of compliance is when Source Protection Plan takes effect.

Rationale

Restricted land use policies require municipalities to screen Planning Act, Condominium Act and application under the Building Code Act to determine if the proposed activities are subject to Section 57 (Prohibition) or Section 58 (Risk Management Plan) policies. The purpose is to help municipalities comply with Source Protection Plan policies in advance of approving an application. Restricted Land Use policies reference the land use types and vulnerable areas where applications need to be screened. If an application is made for an activity that is prohibited by the Source Protection Plan, then the application cannot be approved. If an application is made for an activity that is subject to a Risk Management Plan, then the proponent must first work with the Risk Management Official to establish a Risk Management Plan before the application can proceed. There is a separate Restricted Land Use policy for the Handling and Storage of Fuel.

Chemical and/or Pathogen Existing and/or Future Activities

All vulnerable areas to which the named policies in the Monitoring Policy Text apply. **Risk Level:** Significant **Approach:** Monitoring Policy

Implementing Body: MECP, MNRF, MTO Legal Effect:_Must conform/Comply With Compliance Date:_When the Source Protection Plan or its amendments take effect

Significant Risk Circumstance:

Refer to named policies in Monitoring Policy Text

Monitoring Policy Text:

Provincial Ministries shall, by February 1 of each year, prepare and submit a report to the Source Protection Authority on the actions taken in the previous calendar year to achieve the outcomes of the following source protection policies as applicable.

MECP – Wastewater/Sewage Works

- 2.1_PI.V8.ER (Industrial Effluent)
- 2.3&2.4_PI.V8.ER (Stormwater)
- 2.6_PI.V8.1.ER (Combined Sewers)
- 2.8_PI.V8.1.ER (Outfalls)
- 2.7&2.8_PI.V9.ER (storage of sewage)

MECP – WDS – Hauled Sewage, Biosolids

- 1.1_PI.V8.ER (Hauled Sewage)
- 1.2&1.9_PI.V9.ER (POW)
- 1.2&1.9_PI.V8.ER (POW)
- 1.8_PI.V8.ER (Hauled Sewage)

MECP – WDS – Landfilling and Storage

- 1.3-1.5_PI.V9.ER (Waste)
- 1.14_PI.V9.ER (Mine Tailing)
- 1.10-1.11_PI.V9.ER (Transfer/Processing Site)
- 1.10_PI_V8.1_ER (Hazardous waste)

MECP – Pesticides

- 10_PI.V8.1.ER

MECP - MRDWS - Fuel Handling & Storage

- 15_PI(SDWA).V9.EBA.ER

MNRF – Aggregate License/Permit; Wayside Permit

- 15_PI(ARA).V9.EBA.ER

MTO – Fuel and Road Signs

- Transport_SpecAct.All.ER
- RoadSign_SpecAct.All.ER

<u>MECP – General</u>

- 14_SpecAct.V8.ER
- microcystin_monitoring.All.ER

Chemical and/or Pathogen Existing and/or Future Activities

All vulnerable areas to which the named policies in the Monitoring Policy Text apply

Risk Level: Significant **Approach:** Monitoring Policy

Implementing Body: RMOLegal Effect: Must conform/Comply WithCompliance Date: When the Source Protection Plan or its amendments take effect

Significant Risk Circumstance:

Refer to named policies in Monitoring Policy Text

Monitoring Policy Text:

In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority annually by February 1. This report will summarize the actions taken to comply with the following policies (i.e., information required in section 65 of Regulation 287/07) that use Section 58, Section 57 and Section 59 of the Clean Water Act implemented by the RMO in the Source Protection Plan:

Section 57 Prohibition Policies

- 03_s.57.V8.ER (Application of Agricultural Source Material)
- 04_s.57.V8.ER (Storage of Agricultural Source Material)

Section 58 Risk Management Plan Policies

- 10_s.58.V8.1.ER (Application of Pesticide)
- 11_s.58.V9.ER (Storage of Pesticide)
- 12_s.58.V9.ER (Application of Road Salt)
- 13.1_s.58.V9.ER (Storage of Road Salt)
- 14_s.58.V8.ER (Storage of Snow)
- 15_s.58.V9.EBA.ER (Handling and Storage of Fuel)
- 16_s.58_V9_ER (Handling and Storage of DNAPL)

Section 59 Restricted Land Use Policies

- 15_s.59.V9.EBA.ER (Handling and Storage of Fuel)
- All_s.59.V8.ER (various threats)

Existing and/or Future Activities <u>All vulnerable areas to which the named policies in the Monitoring Policy Text apply</u>

Risk Level: Significant **Approach:** Monitoring Policy

Implementing Body: All municipalities in the Essex Region as named in the affected policiesLegal Effect: Must conform/Comply WithCompliance Date: When the Source Protection Plan or its amendments take effect

Significant Risk Circumstance:

Refer to named policies in Monitoring Policy Text

Monitoring Policy Text:

Municipalities shall prepare a report annually by February 1 documenting the actions taken to comply with the following policies:

City of Windsor

- 2.0_E&O.V9.ER (E&O)
- 2.6&2.8_SpecAct.V9.ER (CSO)
- 2.8_SpecAct.V9.ER

Town of Lakeshore

- 16_SpecAct_LIPZ1_ER

City of Windsor, Town of Lakeshore and Town of Amherstburg

- 2.8_SpecAct.V8.1.ER
- 12_SpecAct_V9.ER
- 12-14_E&O.V8.ER
- 14_SpecAct.V8.ER
- 16_E&O_V9_ER
- 21_LandUse_V8.1_ER

All Municipalities in the Essex Region

- Transport_SpecAct.All.ER
- RoadSign_SpecAct.All.ER
- All_Stewardship.ER
- microcystin_monitoring.All.ER

Chemical and/or Pathogen Existing and/or Future Activities

All vulnerable areas to which the named policies in the Monitoring Policy Text apply

Risk Level: Significant **Approach:** Monitoring Policy

Implementing Body: ERCALegal Effect: Must conform/Comply WithCompliance Date: When the Source Protection Plan or its amendments take effect

Significant Risk Circumstance:

Refer to named policies in Monitoring Policy Text

Monitoring Policy Text:

The Essex Region Conservation Authority will prepare and submit a report to the Source Protection Authority annually by February 1 that summarizes the actions taken to comply with the following legally binding policies:

- 12-14_E&O.V8.ER
- 15_SpecAct.V9.EBA.ER
- 16_E&O_V9_ER
- 18_SpecAct_V9_ER
- All_Stewardship.ER

Rationale:

The implementation of this policy in this manner builds on the strengths and efficiencies of the Conservation Authority.

A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Programs Branch, MECP has the formal legislative authority to prescribe a form for use for the SPA.

Chemical and/or Pathogen Existing and/or Future Activities

All vulnerable areas to which the named policies in the Monitoring Policy Text apply

Risk Level: Various **Approach:** Monitoring Policy

Implementing Body: ERCALegal Effect: Non-Legally BindingCompliance Date: When the Source Protection Plan or its amendments take effect

Significant Risk Circumstance:

Refer to named policies in Monitoring Policy Text

Policy Text:

The Essex Region Conservation Authority will prepare and submit a report to the Source Protection Authority annually by February 1 that summarizes the actions taken to comply with the following non-legally binding policies:

- Transport_SpecAct.All.ER
- All_E&O.ER
- All_Stewardship.ER
- microcystin_E&O.All.ER
- microcystin_monitoring.All.ER

Rationale:

The monitoring policy ensures that the monitoring of the effectiveness of the policies to address the significant threats.

MON1-PI Under the Clean Water Act, provincial ministries are responsible for implementing significant threat policies set out in this plan that affect prescribed instrument decisions, and must comply with the monitoring requirements set out in the monitoring policy. A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Programs Branch, MECP has the formal legislative authority to prescribe a form for use for the SPA.

MON2-RMO The RMO is required through the Clean Water Act to report their activities to the Source Protection Authority annually.

MON 4/5 – ERCA - The implementation of the policies in this manner builds on the strengths and efficiencies of the Conservation Authority.

A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Programs Branch, MECP has the formal legislative authority to prescribe a form for use for the SPA.

Long Point Region Conservation Authority 4 Elm Street, Tillsonburg, Ontario N4G 0C4



Phone: 519-842-4242 Fax: 519-842-7123 Toll free: 1-888-231-5408 conservation@lprca.on.ca www.lprca.on.ca

May 2, 2024

Sent Via Email

The Honourable Sylvia Jones Minister of Health sylvia.jones@ontario.ca

Re: Recommended phase out of free well water testing in the 2023 Auditor General's Report

Dear Minister Jones;

The Long Point Region Conservation Authority is concerned with the Public Health Ontario's recommendation of phasing out free water testing.

The Long Point Region watershed has a total population of approximately 100,000 people. Of those, approximately one-third rely on private water sources for their drinking water supply. These private water sources include personal wells and sand points which are not actively monitored. With the recommendation to discontinue free water testing, we fear many residents will not undertake regular testing and will be put at risk.

At the May 1st meeting of the Long Point Region Board of Directors, the following resolution was unanimously approved:

Motion No.: A-69/24

Moved By: Chris Van Paassen Seconded By: Tom Masschaele

WHEREAS: private water systems (e.g., wells) are not protected through legislated requirements under The Safe Drinking Water Act 2002 and The Clean Water Act 2006, but are more likely to contribute to cases of gastrointestinal illness than municipal systems;

AND WHEREAS: the 2023 Ontario Auditor General's value-for-money audit of Public Health Ontario (PHO) recommended that PHO, in conjunction with the Ontario Ministry of Health, begin the gradual discontinuance of free private drinking water testing;

AND WHEREAS: in the jurisdiction of LPRCA, many households do not receive water from municipal systems, with many relying on a private drinking water system, including wells;

AND WHEREAS: the Walkerton Inquiry Report Part II, concluded the privatization of laboratory testing of drinking water samples contributed directly to the E. coli outbreak in Walkerton, Ontario in May 2000;

AND WHEREAS: all Ontarians deserve safe, clean water, and free well-water testing is a way to help ensure that residents on private wells continue to have barrier-free access to well water testing.

Long Point Region Conservation Authority 4 Elm Street, Tillsonburg, Ontario N4G 0C4



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THEREFORE, BE IT RESOLVED THAT: the Board of Directors calls on the Province to not phase out free well-water testing as part of the proposed streamlining efforts of public health laboratory operations in the province;

AND FURTHER THAT: this resolution be circulated to the Hon. Sylvia Jones, Minister of Health; Hon. Lisa Thompson, Minister of Agriculture, Food and Rural Affairs; Hon. Andrea Khanjin, Minister of the Environment, Conservation and Parks; local MPPs; and Conservation Ontario and Ontario's conservation authorities.

Thank you for your consideration of this request.

Sincerely,

Robert Chambers Chair

cc. The Honourable Lisa Thompson, Minister of Agriculture, Food and Rural Affairs The Honourable Andrea Khanjin, Minister of the Environment Conservation and Parks Ms. Bobbi Ann Brady, Member of Provincial Parliament, Haldimand-Norfolk Mr. Ernie Hardeman, Member of Provincial Parliament, Oxford Mr. Will Bouma, Member of Provincial Parliament, Brant Mr. Rob Flack, Member of Provincial Parliament, Elgin, Middlesex, London Conservation Ontario Ontario's 36 Conservation Authorities

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Member of Conservation Ontario

Member Municipalities: Central Elgin, City of London, City of St. Thomas, Middlesex Centre, Thames Centre, Malahide Township, Southwold Township

May 16, 2024

The Honourable Sylvia Jones Minister of Health 5th Floor 777 Bay St. Toronto, ON M7A 2J3 sylvia.jones@ontario.ca Sent by Email

Re: Recommended phase-out of free well-water testing in the 2023 Auditor General's Report

Dear Minister Jones,

The Kettle Creek Conservation Authority (KCCA) is concerned with Public Health Ontario's recommendation of phasing out free water testing.

While you have indicated that the Ministry has not made any decisions about changes to the provincial well water testing program and that individuals will continue to be able to get their private well water tested, members wanted to express their resolve in ensuring testing will continue and will continue to be free.

Consequently, at the May 15, 2024 Full Authority meeting, the following motion was passed:

FA78/2024 Moved By: Lori Baldwin-Sands Seconded By: Todd Noble

WHEREAS: private water systems (e.g., wells) are not protected through legislated requirements under The Safe Drinking Water Act 2002 and The Clean Water Act 2006, but are more likely to contribute to cases of gastrointestinal illness than municipal systems;

AND WHEREAS: the 2023 Ontario Auditor General's value-for-money audit of Public Health Ontario (PHO) recommended that PHO, in conjunction with the Ontario Ministry of Health, begin the gradual discontinuance of free private drinking water testing;

AND WHEREAS: in the jurisdiction of KCCA, many households do not receive water from municipal systems, with many relying on a private drinking water system, including wells;

AND WHEREAS: the Walkerton Inquiry Report Part II, concluded the privatization of laboratory testing of drinking water samples contributed directly to the E. coli outbreak in Walkerton, Ontario in May 2000;

AND WHEREAS: all Ontarians deserve safe, clean water, and free well-water testing is a way to help ensure that residents on private wells continue to have barrier-free access to well water testing.

THEREFORE, BE IT RESOLVED THAT: the Board of Directors calls on the Province to not phase out free well-water testing as part of the proposed streamlining efforts of public health laboratory operations in the province;

AND FURTHER THAT: this resolution be circulated to the Hon. Sylvia Jones, Minister of Health; Hon. Lisa Thompson, Minister of Agriculture, Food and Rural Affairs; Hon. Andrea Khanjin, Minister of the Environment, Conservation and Parks; local MPPs; and Conservation Ontario and Ontario's conservation authorities.

Carried

Thank you for your consideration.

Sincerely,

m

Grant Jones Chair

сс:

The Honourable Lisa Thompson, Minister of Agriculture, Food and Rural Affairs The Honourable Andrea Khanjin, Minister of the Environment, Conservation and Parks Mr. Rob Flack, Member of Provincial Parliament, Elgin - Middlesex - London Conservation Ontario Ontario's 36 Conservation Authorities