

# 2023 Risk Management Official Annual Progress Report

Prepared by:



## PART IV IMPLEMENTATION – RISK MANAGEMENT SERVICES

### INTRODUCTION

Source water is the water that supplies our drinking water treatment plants. Following the Walkerton Inquiry, the *Clean Water Act, 2006* became part of the Ontario government's commitment to protecting municipal drinking water systems from contamination and overuse, now and into the future. The *Clean Water Act* led to the creation of Source Protection Plans (SPPs) across Ontario. The [Essex Region SPP](#) came into effect on October 1, 2015 and the [Thames-Sydenham and Region SPP](#) came into effect on December 31, 2015.

The SPPs contain policies to ensure that [Significant Drinking Water Threat \(SDWT\) activities](#) identified in vulnerable areas near surface water intakes cease to be or never become a risk to source water. Municipalities are required to have a specially trained and certified Risk Management Official and Risk Management Inspector (RMO/I) to implement policies written under Part IV of the *Clean Water Act*. The municipalities in the Essex Region Source Protection Area (ERSPA) and the Municipality of Chatham-Kent in the Thames-Sydenham and Region Source Protection Region (TSRSPR) delegated these obligations to the Essex Region Conservation Authority (ERCA). This agreement began in 2015 and is renewed on a three-year cycle. The terms of the current agreement expire on December 31, 2024.

There are eight municipal surface water intake systems serving the municipalities in the ERSPA and the southernmost portion of the TSRSPR that have vulnerable areas where Part IV policies apply:

- Stoney Point Intake (Lake St. Clair)
- Lakeshore (Belle River) Intake (Lake St. Clair)
- Windsor (A.H) Weeks Intake (Detroit River)
- Amherstburg Intake (Detroit River)
- Harrow - Colchester Intake (Lake Erie)
- Union Intake (Lake Erie)
- Wheatley Intake (Lake Erie)
- Pelee Island (Lake Erie)

This annual progress report details the progress made by the RMO/I toward the implementation of Part IV policies in both the ERSPA and TSRSPR Source Protection Plans, as required annually by the *Clean Water Act* and its Regulations. The report includes actions taken by the RMO/I between October 1, 2015 and December 31, 2023, highlighting actions between January 1, 2023 and December 31, 2023.

### SIGNIFICANT DRINKING WATER THREATS

Activities on the land can pose threats to sources of municipal drinking water through spills and runoff. The above grade handling and storage of large volumes of liquid fuel was determined to be a SDWT in both the ERSPA and TSRSPR in an extensive vulnerable area (Event Based Area). There are additional SDWT activities identified in Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1. The land portion of these areas, however, are small and/or predominantly residential or municipal land use where the identified activities are not likely to exist.

## **PART IV POLICIES, *CLEAN WATER ACT***

Part IV policies can be used to prohibit (Section 57) or manage (Section 58) activities identified as SDWTs. These policies apply to both existing and future (new) SDWTs located within vulnerable areas identified as Intake Protections Zones (IPZs) or Event Based Areas (EBA). Policies written using restricted land uses (Section 59) are intended to act as a screening tool by municipal planning and building staff to identify any potential new SDWTs that would be subject to Section 57 or Section 58 policies. In the Essex Region Source Protection Area, activities are only prohibited if they do not currently occur in identified vulnerable areas and are not likely to occur in the future. Most of the policies written to address identified and future SDWTs in the SPPs use Section 58, which requires the development of a Risk Management Plan (RMP) to minimize the risks to sources of municipal drinking water.

### **PROHIBITION (SECTION 57, PART IV POLICIES)**

The Essex Region SPP contains six policies that prohibit specific SDWT activities using s.57 of the Clean Water Act. These prohibition policies currently only apply to Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1 where the designated land use precludes many of these activities. Prohibited activities include the following under specific circumstances as indicated in their relevant policies:

- The application and storage of Agricultural Source Material (ASM)
- The application and storage of Non-Agricultural Source Material (NASM)
- The storage of road salt (>5000 tonnes)
- The storage of snow (>1 ha)

There is no agriculturally zoned land in any of the subject vulnerable areas, therefore the application and storage of both ASM and NASM as defined in the policies cannot occur. In 2022, The RMO confirmed through a detailed review of aerial photography in ERCA's Georcortex, street view imagery from Google, and consultation with the City of Windsor that there are no existing storage structures for salt, nor large areas for snow storage in the subject vulnerable areas that meet the criteria to be a SDWT. The RMO is satisfied that there are no existing activities that are prohibited using s.57 policies. Municipalities have received training to screen for potential SDWTs that meet these criteria, and none have been identified since the Plan came into effect in 2015.

### **RISK MANAGEMENT PLANS (SECTION 58, PART IV POLICIES)**

Risk Management Plans (RMPs) are agreements between the RMO and the person engaged in the activity, typically the landowner or business operator, to prescribe how a SDWT activity is managed on a specific property using appropriate risk management measures (RMMs). RMPs outline existing RMMs and identify additional RMMs required to prevent spills and contain one should it occur. RMPs may be straightforward in circumstances where persons are already implementing RMMs. RMPs are meant to be flexible and allow the activity to continue to occur, provided that RMMs agreed upon are followed. The person engaged in the activity is responsible for maintaining RMMs on site. The RMO/I monitors the implementation of RMPs once they are established and conducts compliance inspections. RMPs can be amended at any time following the effective to date to accurately reflect any changes on the site or to the SDWT activity.

The RMO/I provides guidance and assistance in the development of RMPs through site visits, emails, phone calls and additional meetings. Resources and templates were developed by Risk Management staff and are provided to the proponent during the negotiation of the RMP. The following risk management measures are typically included in RMPs: documentation of regular fuel tank inspections, an updated spill prevention and containment plan, spill emergency response plan and training for staff, and documentation that fuel storage tanks adhere to applicable fuel regulations and remain safe for refueling and storage.

The total number of RMPs established for existing and new significant drinking water threats, and the number of RMPs issued by Order in each municipality in the ERSPA and TSRSPR are reported in Table 1a and Table 1b. Table 2 provides a detailed annual accounting of the activities the RMO/I is required to report to the MECP in compliance with Section 81 of the *Clean Water Act* for the ERSPA. The RMO/I provides responses to the TSRSPR for inclusion in their report to the MECP.

There are three Part IV policies that remain in progress. These policies address the storage of hazardous waste and pesticide in Lakeshore, Windsor and Amherstburg IPZ-1 and the application of pesticide in Lakeshore, Windsor and Amherstburg IPZ-1 and Windsor IPZ-2. The RMO has conducted a thorough review of available information and did not find any existing SDWTs. The RMO is now working with municipalities to confirm that these activities do not currently exist and that new activities are being identified through s.59 screening. The specific pesticides identified are typically only used for agriculture. Importantly, these policies will be updated to align with the 2021 Director Technical Rules.

#### **EXISTING ENUMERATED SIGNIFICANT DRINKING WATER THREAT ACTIVITIES**

There were 384 potential SDWTS identified in the ERSPA Source Protection Plan and 33 potential SDWTS identified in the TSRSPR Source Protection Plan when the Plans were written. Threat verification inspections were completed to determine whether the fuel tanks installed on site met the criteria to be considered a SDWT (e.g. capacity, location in relation to the Event Based Area and contents of the fuel tanks). These threat verification inspections and windshield surveys confirmed that there were 96 existing SDWTS in the ERSPA and 9 existing SDWTS in the TSRSPR that required a RMP. As of October 2022, RMPs have been established for all existing SDWTS in both Source Protection Areas.

Of the existing SDWTS, six RMPs were issued by Order in the ERSPA and six in the TSRSPR. Eight of these properties are owned and operated by a corporation that oversees crude oil and brine operations. There was a breakdown in communication that necessitated the completion of the RMPs by Order. The remaining four RMPs issued by Order were for absentee owners of greenhouse cannabis operations.

#### **RESTRICTED LAND USES AND THE WRITTEN DIRECTION (SECTION 59, PART IV POLICIES)**

Section 59 (Restricted Land Use) policies serve as a screening process to identify new potential SDWTS through incoming municipal building and planning applications before they are established. If a project meets the criteria outlined in the Written Direction, proponents are notified that they must complete and submit a [Section 59 Application](#) to the RMO/I for review. Building or planning applications cannot proceed until the applicant has demonstrated that a SDWT activity will not pose a risk to drinking water sources (e.g. RMP established) and a written notice to proceed from the RMO/I has been issued.

Between October 1, 2015 and December 31, 2022, the RMO has received 55 applications in the ERSPA and 4 applications in the TSRSPR through Section 59 screening for new potential fuel threats in the Event Based Area. Of these, there were 21 instances in the ERSPA and 2 instances in the TSRSPR where an application met the criteria to be considered a SDWT, triggering the need for a RMP. In these cases, the process for developing a RMP was expedited and a notice to proceed was issued once the RMP was finalized and agreed to. In 2023, three RMPs in the ERSPA was established through the s.59 screening process. To date, all of the RMPs established for new fuel tanks have been for greenhouse construction and crude oil and brine operations. There have not been any applications reviewed for the other Part IV policies applicable to Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1.

## COMPLIANCE MONITORING

The RMO began working with individuals with existing Risk Management Plans to ensure compliance. A compliance checklist was circulated to all individuals who were issued a s.58 notice to proceed (existing threats) with a Risk Management Plan established. The compliance check is a self-assessment that allows the RMO to ensure that all documents are up to date and that properties with significant drinking water threat activities continue to implement appropriate Risk Management Measures.

The checklist includes the following items: Proof of adherence to the applicable fuel regulations (ensuring fuel tanks are certified to obtain fuel and/or installed by a TSSA technician), proof of fuel tank inspections, updates to the spill prevention and containment plan, updates to the spill and emergency response plan, and proof of employee training. Unfortunately, due to staffing shortage, compliance monitoring was put on hold for 2023.

## MUNICIPAL INTEGRATION

The Risk Management Official will be providing refresher training to Planning and Building staff for municipalities in 2024 at their request. In addition, [training was recorded](#) that applies to all municipalities and is available on YouTube for new municipal staff or those wishing a refresher.

## MOVING FORWARD IN 2024

Continuing actions and next steps for Risk Management Services in 2024 include:

- Continue monitoring established risk management plans to ensure compliance
- Review Section 59 Applications circulated to riskmanagement@erca.org as a result of incoming municipal building and planning applications for new developments
- Deliver municipal training sessions on Section 59 processes and Source Protection Plan policies
- Respond to requests from developers, consultants and municipal staff during pre-planning for sites identified through the Section 59 process
- Continue working with local businesses and landowners on negotiating and establishing Risk Management Plans; continue to assist and provide guidance to those affected by Part IV policies
- Renegotiate agreements with municipalities to continue providing Risk Management Services

March 2024

Table 1a – Total number of Risk Management Plans established for existing and future (new) significant drinking water threats in each municipality in the ERSPA since October 1, 2015 for existing threats (AR+) and new threats (s.59). The table also indicates the number of those RMPs that were issued by Order.

Essex Region Source Protection Area (ERSPA)										
	Amherstburg	Essex	Kingsville	Lakeshore	LaSalle	Leamington	Pelee	Tecumseh	Windsor	Total
Total Identified threats in the AR	16	31	93	29	3	164	3	12	33	384
No RMP required (AR)	16	28	62	26	3	121	1	10	29	296
RMPs Required (AR)	-	3	31	3	-	43	2	2	4	88
Threats identified after the AR through field verification (AR +)	-	-	6	-	-	2	-	-	-	8
RMPs established (AR +)	-	3	37	3	-	45	2	2	4	96
RMPs established (s.59)	-	1	2	-	-	18	-	-	-	18
Number of RMPs Issued by Order under Part IV of the CWA	-	-	3	-	-	3	-	-	-	6
<b>Total RMPs established</b>		<b>3</b>	<b>39</b>	<b>3</b>		<b>63</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>117</b>

Table 1b – Total number of Risk Management Plans established for existing and future (new) significant drinking water threats in each municipality in the TSRSR since October 1, 2015 for existing threats (AR+) and new threats (s.59). The table also indicates the number of those RMPs that were issued by Order.

Thames Sydenham and Region Source Protection Region (ERSR)				
	Lakeshore	Leamington	Chatham Kent	Total
Total Identified threats in the AR	6	9	18	33
No RMP required (AR)	5	6	13	23
RMPs Required (AR)	1	3	5	10
Total threats identified after the AR through field verification (AR +)	-	-	-	-
RMPs established (AR)	1	3	5	9
RMPs established (s.59)	-	2	-	2
Number of Orders Issued Under Part IV of the CWA	-	<b>3</b>	<b>3</b>	<b>6</b>
<b>Total RMPs established</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>11</b>

March 2024

Table 2 – Detailed activity report for the ERSPA provided by the RMO/I to the MECP to comply with Section 81 of the *Clean Water Act*. The RMO/I provides responses to TSRSPR for inclusion in their report to the MECP.

Essex Region Source Protection Area (ERSPA)								
Additional Part IV Reportables under Section 81 of the <i>Clean Water Act</i> (ERSPA)	2016	2017	2018	2019	2020	2021	2022	2023
RMPs established for existing threats (s.58)	0	1	14	34	38	7	2	0
RMPs established for new threats (s.59)	4	0	1	1	2	8	1	3
Total RMPs agreed to or established	4	1	15	35	40	15	3	3
s.59 Applications Received	18	2	2	4	7	12	9	4
S. 59 notices issued for activities to which neither S. 57 nor S.58 policies applied	14	2	1	3	5	4	6	2
S. 59 notices issued for activities to which a S.58 policy applied	4	0	1	1	2	8	1	2
Total S. 59 notices issued	18	2	2	4	7	12	7	4
Inspections* carried out for activities that are prohibited under S. 57	0	0	0	0	0	0	0	0
Inspections* carried out for activities that require a RMP under S. 58	14	32	47	63	32	0	2	0
Inspections* carried out for activities that were determined not to require a RMP under S.58	55	160	82	7	3	0	1	0
Total number of inspections	69	192	129	70	35	0	3	0
Notices issued where there were cases of contraventions and/or non-compliance with S.57	0	0	0	0	0	0	0	0
Notices issued where there were cases of contraventions and/or non-compliance S.58	0	0	0	0	0	0	0	0
Orders issued for contraventions and/or non-compliance found with S. 57	0	0	0	0	0	0	0	0
Orders issued for contraventions and/or non-compliance found with S.58	0	0	0	0	0	4	8	0
Total number of notices and/or orders issued under Part IV of the CWA	0	0	0	0	0	4	8	0

\*Inspections imply that the RMO/I had a physical presence on the site, including follow-up site visits, e.g., threats verification visit, including drive-bys, if applicable. Phone calls and emails are not considered to be an inspection.