

2024 Risk Management Official Annual Progress Report

Prepared by: The Essex Region Conservation Authority

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* (CWA) became part of the Ontario government's commitment to protect municipal drinking water systems from contamination and overuse, now and into the future. The CWA led to the creation of Source Protection Plans (SPPs) across Ontario. The [Essex Region SPP](#) came into effect on Oct 1, 2015 and the [Thames-Sydenham and Region SPP](#) on Dec 31, 2015.

The SPPs contain policies to ensure that [Significant Drinking Water Threat \(SDWT\) activities](#) in vulnerable areas near surface water intakes cease to be or never become a threat 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 CWA. 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 was renewed on a three-year cycle until December 31, 2024 when a new perpetual agreement was struck. This reduces the administrative burden of renewals but still allows for amendments and/or withdrawals for any party to the agreement.

There are eight municipal surface water intake systems serving the municipalities in the ERSOA 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 ERSOA 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, 2024, highlighting actions between January 1 and December 31, 2024.

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 fuel was determined to be a SDWT in both the ERSPA and TSPR in the modelled Event Based Areas. There are additional SDWT activities in Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1. The land portion of these areas are small and permitted land uses preclude the existence of the identified activities.

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 new SDWTs located within vulnerable areas identified as Intake Protections Zones (IPZs) or Event Based Areas (EBAs). Policies using restricted land uses (Section 59) provide a screening tool for municipal planning and building staff to identify any potential new SDWTs that would be subject to s.57 or s.58 policies. In the ERSPA, 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 use s.58, which requires the development of a Risk Management Plan 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. Prohibited activities include the following:

- 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. The RMO has confirmed 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 would be prohibited. Municipalities have received training to screen for potential SDWTs that meet these criteria, and none have been identified since the Plan came into effect.

RISK MANAGEMENT PLANS (SECTION 58, PART IV POLICIES)

Risk Management Plans (RMPs) are agreements between the RMO and the landowner or business operator that allow the activity to continue to occur on the property provided the appropriate risk management measures (RMMs) that have been agreed upon are followed. RMPs include existing RMMs and identify additional RMMs required to prevent spills and contain one should it occur. The person engaged in the activity is responsible for maintaining RMMs on site. The RMO/I monitors the implementation of established RMPs and conducts occasional compliance inspections. RMPs can be amended at any time 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, and phone calls. Resources and templates were developed and are maintained by the RMO/I 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, a 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.

RESTRICTED LAND USE (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 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.

RISK MANAGEMENT PLAN ENUMERATION

Existing threats are any SDWT activity that was present prior to the SPPs coming into effect. There were 384 potential existing SDWTs identified in the ERSPA Assessment Report (AR) and 33 in the TSRSPR AR when the Plans were written. Threat verification inspections confirmed that 96 existing SDWTs in the ERSPA and 9 in the TSRSPR required RMPs (e.g. capacity, location in relation to the EBA and contents of the fuel tanks). In addition, several other existing fuel SDWTs were identified during these early surveys and RMPs were developed as required (designated as AR+ in the tables below). Of the existing SDWTs, six RMPs were issued by Order in the ERSPA and six in the TSRSPR in either 2021 or 2022. Eight of these properties are owned and operated by a corporation that oversees crude oil and brine operations. The remaining four RMPs issued by Order were for absentee owners of greenhouse cannabis operations. No further Orders have been necessary to date. As of October 2022, RMPs have been established for all existing SDWTs in the TSRSPR and ERSPA.

New or future threats are any SDWT activity established after the SPPs came into effect. Between October 1, 2015, and December 31, 2024, the RMO has received 59 applications in the ERSPA and 4 in the TSRSPR through s.59 screening for new SDWTs. Of these, there were 21 instances in the ERSPA and 2 in the TSRSPR where an application required an RMP. In these cases, the development of the RMP is expedited and a notice to proceed issued once the RMP is finalized and agreed to. Four (4) s.59 applications were reviewed in 2024 resulting in one (1) RMP established for a new fuel threat, one (1) RMP was in progress as of December 31, 2024, which was completed early in 2025. The remaining applications were issued a Notice to Proceed because there were no proposed SDWT activities. To date, 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.

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 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.

COMPLIANCE MONITORING

No compliance checks were completed in 2024 due to staffing restrictions. ERCA has now hired a second certified RMO/I who will address this gap in 2025. A self-assessment compliance checklist was developed that allows the RMO to ensure that all documents are up to date and that appropriate Risk Management Measures continue to be implemented. 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.

MUNICIPAL INTEGRATION

The RMO will be providing refresher training to Planning and Building staff for municipalities in 2025 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 2025

Continuing actions and next steps for Risk Management Services in 2025 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

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. These policies remain 'in progress' to highlight implementation challenges posed by specified volumes and/or materials in the Technical Rules. Importantly, these policies will be updated to align with the 2021 Director Technical Rules.

Table 1a – Total number of Risk Management Plans established for existing threats (AR and AR+) and new (s.59) significant drinking water threats in each municipality in the ERSPA since October 1, 2015. 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	-	-	19	-	-	-	22
Number of RMPs Issued by Order under Part IV of the CWA	-	-	3	-	-	3	-	-	-	6
Total RMPs established	0	4	39	3	0	64	2	2	4	118

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

Thames Sydenham and Region Source Protection Region (TSRSPR)				
	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	9
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	-	3	3	6
Total RMPs established	1	5	5	11

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.

Additional Part IV Reportables under Section 81 of the <i>Clean Water Act</i> (ERSPA)	2016	2017	2018	2019	2020	2021	2022	2023	2024
RMPs established for existing threats (s.58)	0	1	14	34	38	7	2	0	0
RMPs established for new threats (s.59)	4	0	1	1	2	8	1	3	1
Total RMPs agreed to or established	4	1	15	35	40	15	3	3	1
s.59 Applications Received	18	2	2	4	7	12	9	4	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	2
s.59 notices issued for activities to which a s.58 policy applied	4	0	1	1	2	8	1	2	2
Total s.59 notices issued	18	2	2	4	7	12	7	4	4
Inspections* carried out for activities that are prohibited under s.57	0	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	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	0
Total number of inspections	69	192	129	70	35	0	3	0	0
Notices issued where there were cases of contraventions and/or non-compliance with s.57	0	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	0
Orders issued for contraventions and/or non-compliance found with s.57	0	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	0
Total number of notices and/or orders issued under Part IV of the CWA	0	0	0	0	0	4	8	0	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.