

ESSEX REGION SOURCE PROTECTION AREA 2017 RISK MANAGEMENT SERVICES ANNUAL PROGRESS REPORT

Prepared by:



PART IV IMPLEMENTATION – RISK MANAGEMENT SERVICES

INTRODUCTION

Source water is the water that we take from lakes or rivers to supply people with drinking water. The *Clean Water Act* is part of the Ontario government's commitment to ensure access to safe drinking water. It requires the development and implementation of local watershed-based Source Protection Plans (SPP) to protect the source water that supplies municipal drinking water systems from contamination and overuse, now and into the future. Following an extensive process that included broad public input, 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. Both SPPs contain policies written under Part IV of the *Clean Water Act*, which municipalities are required to implement.

In 2015, all municipalities in the Essex Region delegated their Risk Management Services, required to meet the municipalities' obligations under Part IV of the *Clean Water Act, 2006*, to the Essex Region Conservation Authority. The Risk Management Official/Risk Management Inspector (RMO/I) provides these services on behalf of the municipalities in the Essex Region Source Protection Area (ERSPA), as well as the southernmost portion of the Thames-Sydenham and Region Source Protection Region (TSR), which includes parts of the Town of Lakeshore, the Municipality of Leamington, and the Municipality of Chatham-Kent. The Essex Region Risk Management Office collaborates with the Thames-Sydenham and Region Source Protection Authority to ensure consistent implementation of our similar policies. The terms of the agreement with the municipalities will expire on September 30, 2018. The process of renegotiation of this agreement will begin in the spring of 2018.

The following is a summary of progress made toward implementing the Essex Region Source Protection Plan Part IV policies between October 1, 2015 and December 31, 2017.

PART IV POLICIES

Policies written under Part IV of the *Clean Water Act* can be used to prohibit (Section 57) or manage (Section 58) activities identified as Significant Drinking Water Threats (SDWTs). These policies apply to both existing and future (new) SDWTs. In the Essex Region SPP, activities are only prohibited (Section 57) if they are not known to occur in identified vulnerable areas and are not likely to occur in the future. The majority of identified SDWTs will be managed with a Risk Management Plan (RMP) (Section 58). Policies written using section 59 of the *Clean Water Act, 2006*, are intended to act as a screening tool by municipal planning and building staff to identify any potential future (new) SDWTs that would be subject to Section 57 or Section 58 policies.

The above grade handling and storage of large volumes of liquid fuel was identified as a Significant Drinking Water Threat (SDWT) in the Essex Region SPP. Using the event based

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approach to model fuel spills, a large vulnerable area called the Event Based Area (EBA) was established. Fuel threats that fall within these areas that meet the criteria to be considered a drinking water threat are addressed with Section 58 policies requiring Risk Management Plans to mitigate the potential threat of a fuel spill.

There are additional SDWTs identified in Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1 that are addressed using either Section 57 or 58 policies. However, the land portion of these areas are typically small and/or dominated by residential or municipal land uses where the identified activities are not likely to exist. At the time of the implementation, 384 potential fuel SDWTs were identified in the Essex Region EBA and 33 in the TSR EBA, but there were no other existing threats identified in other vulnerable areas.

MUNICIPAL INTEGRATION

The RMO/I met with municipal planning and building staff in Essex Region and Chatham-Kent in 2016 and 2017. In these meetings, discussion took place about Source Water Protection in general, the Section 59 processes, the issued written direction, and possible scenarios for when a property might require a Risk Management Plan (RMP). Following the meetings, there has been marked improvements in the municipalities' understanding of the Source Water Protection policies. Positive feedback from these meetings has been received, and due to the increased knowledge of the Source Water Protection Program, RMO/Is are also responding to requests from developers doing pre-planning to ensure they are meeting the requirements of the SPP.

IMPLEMENTATION

In 2017, ERCA employed three individuals certified and appointed as Risk Management Officials/Inspectors (RMO/Is), including the Source Water Project Manager who provides administrative oversight and the Regulations Analyst, who is available on an as needed basis only. In August 2017, the lead RMO/I took on a new role at ERCA and continued part time until a new staff member could complete the required MOECC RMO/I training in February 2018. In October 2017, two Risk Management Assistants (RMAs) were hired to assist the Risk Management Services Office. The RMAs role is to conduct threat verification site visits to confirm the presence or absence of potential drinking water threats in the form of fuel threats identified in the Assessment Report.

SECTION 59 POLICIES (FUTURE THREATS)

Section 59 policies were effective when the Source Protection Plans took effect and were a priority for implementation because building permits and approvals under the *Planning Act* and the *Building Code Act* cannot be issued until it has been determined that a SDWT will not be created and/or has been managed as part of the proposed works.

In the spring of 2016, the RMO/I issued a written direction to assist municipalities in expediting the Section 59 screening process for proposed projects under the *Planning Act* in the identified Event Based Area (EBA). Municipal staff screen proposals and only require a notice from the RMO/I if the property is a vulnerable area, is non-residential, and the project includes an activity that could be a SDWT (i.e. handling and storage of fuel). Municipal Planning staff are including this screening information in their applications or in their review process.

Applications under the *Building Code Act* use a common provincially mandated building permit application form that cannot be altered. In May 2017, the RMO/I provided all municipalities with a "Building Information Sheet" that can be attached to these permit applications to screen the applications as described above. This sheet is meant to accompany the building permit application and does not alter the common application form.

Using the written direction and the Building Information Sheet, the Section 59 screening process has increased in efficiency, with twenty (20) Section 59 Notices being issued in 2016 and two (2) Section 59 Notices being issued in 2017. There are several potential outcomes from a Section 59 review that are determined by the RMO/I. The tables below summarize the actions taken by the RMO/I to address 'future threats' identified by municipalities for 2016 (**Table 1a**) and 2017 (**Table 1b**) using the section 59 screening process. These numbers are up to date as of December 31, 2017.

To date, Section 59 applications have only been received for new potential fuel threats. 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 RMO/I continues to work with municipalities affected by prohibition policies to determine if zoning by-laws can or are already prohibiting these uses. To date, no new applications have been received for any of these prohibited activities in the Essex Region Source Protection Area.

Table 1a. Summary of all actions taken by the RMO/I in 2016 as a result of the section 59 screening process in the Essex Region Source Protection Area and Thames-Sydenham and Region Source Protection Region.

| 2016 Risk Management Services Summary Future Threat Activities | Essex Region | Thames- Sydenham & Region | Total |
|---|-------------------------|--|--------------|
| Section 59 Activities | | | |
| s. 59 Application Site Visits | 4 | 1 | 5 |
| s. 59 Applications where s. 57 or s. 58 Did Not Apply (Notice Issued) | 14 | 1 | 15 |
| s. 59 Applications where s. 57 Applied | 0 | 0 | 0 |
| s. 59 Applications where s. 58 Applied | 4 | 1 | 5 |
| Total No. of s. 59 Applications | 18 | 2 | 20 |

Table 1b. Summary of all actions taken by the RMO/I in 2017 as a result of the section 59 screening process in the Essex Region Source Protection Area and Thames-Sydenham and Region Source Protection Region.

| 2017 Risk Management Services Summary Future Threat Activities | Essex Region | Thames- Sydenham & Region | Total |
|---|-------------------------|--|--------------|
| Section 59 Activities | | | |
| s. 59 Application Site Visits | 0 | 0 | 0 |
| s. 59 Applications where s. 57 or s. 58 Did Not Apply (Notice Issued) | 2 | 0 | 2 |
| s. 59 Applications where s. 57 Applied | 0 | 0 | 0 |
| s. 59 Applications where s. 58 Applied | 0 | 0 | 0 |
| Total No. of s. 59 Applications | 2 | 0 | 2 |

SECTION 57 AND 58 POLICIES (EXISTING THREATS)

During the preparation of the Assessment Report, 384 properties were identified in the Essex Region Assessment Report and 33 properties in the Thames–Sydenham and Region Assessment Report as potentially containing a volume of fuel that meets the criteria to be considered a SDWT in the Event Based Area. The policies written to address these threats use Section 58 (Risk Management Plans) of the *Clean Water Act*. All identified potential existing threats must be addressed by October 1, 2020 (within five years of the SPPs taking effect).

Risk Management staff (RMO/Is or RMAs) determine whether the identified activities are SDWTs by conducting a site visit. During the site visit, Risk Management staff gather information regarding fuel handling and storage on the property (size, location and contents of tanks). Based on the information gathered during their site visit, Risk Management staff confirm whether or not these threats meet the criteria to be considered a SDWT (i.e. meet the fuel volume thresholds and are located within the EBA). If the Risk Management staff determine that the identified threat does not meet the criteria, no further action will be necessary and a letter is issued to that effect (i.e. s. 57 or s. 58 of Part IV of the *Clean Water Act, 2006* do not apply). If a threat does meet the criteria, the landowner and/ or person engaged in the activity is notified in writing and the RMO/I will work with them to develop a Risk Management Plan (RMP). The RMPs are intended to document all existing safety measures, as well as those that are required to prevent a fuel spill and/ or contain one should it occur.

Risk Management staff also provide education and outreach to landowners through these threat verification site visits. A Source Water Protection package is provided to the landowner with maps of the property within the Event Based Area, a copy of the threat verification site visit letter, a spill reporting form, and an updated contact information sheet for spill reporting, cleanup, tank removal and inspection resources that are local to the region. The package also contains a sticker to be placed on the fuel tanks indicating that the tank is in a vulnerable area and includes the number for Spills Action Center, as well as general information about the Source Water Protection Program. These site visits have not only increased landowner awareness, but also improved sources of communication and strengthened relationships with persons engaging in the activity.

As the Risk Management program has been refined, there has been marked increase in progress towards addressing the existing threats identified in the Assessment Report. With the addition of two RMAs, the number of threats addressed on the ground has increased significantly. The tables below include details of the progress made towards addressing existing threats by municipality for 2016 (**Table 2a**) and 2017 (**Table 2b**). These numbers are up to date as of December 31, 2017. Threats that have been addressed include those where either no RMP is required or a RMP has been established. Remaining threats are those that require further investigation, have a RMP in progress, require a RMP or where site visits have not yet been conducted.

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Table 2a - Detailed results of all actions taken by the RMO/I from January 1 to December 31, 2016 for each municipality with threats identified in the Essex Region and Thames-Sydenham and Region Assessment Reports.

| 2016 Risk Management Services Summary (Existing Threats) | | | | | | | | | | | |
|---|-------------|-------|------------|---------|-------|----------|---------|-----------|------------|--------------|-------|
| | Amherstburg | Essex | Kingsville | LaSalle | Pelee | Tecumseh | Windsor | Lakeshore | Leamington | Chatham-Kent | Total |
| Essex Region | | | | | | | | | | | |
| Total Identified threats in the AR | 16 | 31 | 93 | 3 | 3 | 12 | 33 | 29 | 164 | - | 384 |
| Threat verification site visits | 0 | 7 | 14 | 0 | 3 | 0 | 5 | 0 | 35 | - | 64 |
| No RMP required | 0 | 7 | 13 | 0 | 1 | 0 | 5 | 0 | 29 | - | 55 |
| RMPs in progress | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 6 | - | 8 |
| Thames-Sydenham and Region | | | | | | | | | | | |
| Total Identified threats in the AR | - | - | - | - | - | - | - | 6 | 9 | 18 | 33 |
| Threat verification site visits | - | - | - | - | - | - | - | 0 | 1 | 0 | 2 |
| No RMP required | - | - | - | - | - | - | - | 0 | 0 | 0 | 0 |
| RMPs in progress | - | - | - | - | - | - | - | 0 | 1 | 0 | 1 |
| ¹ Total threats addressed | 0 | 7 | 13 | 0 | 1 | 0 | 5 | 0 | 29 | 0 | 55 |
| ² Total threats remaining | 16 | 24 | 80 | 3 | 2 | 12 | 28 | 35 | 144 | 18 | 362 |

¹Threats that have been addressed include those where either no RMP is required or a RMP has been established.

²Remaining threats are those that require further investigation, have a RMP in progress, require a RMP or where site visits have not yet been conducted.

Table 2b - Detailed results of all actions taken by the RMO/I from January 1 to December 31, 2017 for each municipality with threats identified in the Essex Region and Thames-Sydenham and Region Assessment Reports.

| 2017 Risk Management Services Summary (Existing Threats) | | | | | | | | | | | |
|---|-------------|-------|------------|---------|-------|----------|---------|-----------|------------|--------------|-------|
| | Amherstburg | Essex | Kingsville | LaSalle | Peele | Tecumseh | Windsor | Lakeshore | Leamington | Chatham-Kent | Total |
| Essex Region | | | | | | | | | | | |
| Total Identified threats in the AR | 16 | 31 | 93 | 3 | 3 | 12 | 33 | 29 | 164 | - | 384 |
| Threat verification site visits | 10 | 22 | 41 | 3 | 0 | 10 | 19 | 28 | 59 | - | 192 |
| No RMP required | 8 | 19 | 29 | 3 | 0 | 8 | 14 | 22 | 41 | - | 144 |
| RMP established | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | - | 1 |
| Further investigation required | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 7 | - | 14 |
| RMPs in progress | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | - | 2 |
| RMP required | 0 | 2 | 12 | 0 | 0 | 1 | 4 | 2 | 11 | - | 32 |
| Thames-Sydenham and Region | | | | | | | | | | | |
| Total identified threats in the AR | - | - | - | - | - | - | - | 6 | 9 | 18 | 33 |
| Threat verification site visits | - | - | - | - | - | - | - | 3 | 5 | 12 | 20 |
| No RMP required | - | - | - | - | - | - | - | 2 | 5 | 11 | 18 |
| RMP established | - | - | - | - | - | - | - | 0 | 0 | 0 | 0 |
| Further investigation required | - | - | - | - | - | - | - | 0 | 0 | 0 | 0 |
| RMP in progress | - | - | - | - | - | - | - | 0 | 0 | 0 | 0 |
| RMP required | - | - | - | - | - | - | - | 1 | 0 | 1 | 2 |
| ¹ Total threats addressed | 8 | 26 | 42 | 3 | 2 | 8 | 19 | 24 | 75 | 11 | 218 |
| ² Total threats remaining | 8 | 5 | 51 | 0 | 1 | 4 | 14 | 11 | 98 | 7 | 199 |

Note: Total threats addressed are cumulative and include those completed in 2016

¹Threats that have been addressed include those where either no RMP is required or a RMP has been established.

²Remaining threats are those that require further investigation, have a RMP in progress, require a RMP or where site visits have not yet been conducted.

CHALLENGES FACED AND NEXT STEPS FOR PART IV IMPLEMENTATION

There remained some significant challenges for Risk Management staff in this second year of implementation. Landowners require a substantial amount of time to gather information for their RMPs, specifically, obtaining a certification for the fuel tank(s) located in the Event Based Area to ensure they have been installed according to applicable code. New (large) fuel tanks are certified when they are installed, however, there are several situations in Kingsville and Leamington in particular where landowners that require RMPs have fuel tanks that were installed several years ago and no longer have the necessary documentation. Alternatives to this certification can be provided, but these can also take time to procure. This can delay the finalization of a Risk Management Plan.

As a result of the threat verification site visit process, Risk Management staff have been able to expand our means of contact with landowners in 2017. However, there have been several situations where landowners have sold their property since the approval of the Assessment Report and no longer look over the operations. It can be challenging to find accurate contact information for the new persons engaging in the activity and it takes a significant amount of time to set up additional site visits (no contact information, company name may not be listed, not yet established on the property, etc.). New landowners are often unfamiliar with the Source Water Protection Program, are wary as to why we are contacting them, and do not always return the effort of communication. As a result of this, the RMAs sent out another series of threat verification letters, accompanied by additional information on Source Water Protection, and site visits have now been completed for the majority of these properties.

The RMAs have completed several threat verification site visits since December 2017, and are consistently conducting up to 20 site visits per week. All threat verification site visits are expected to be completed in the spring of 2018. Due to staffing changes, negotiation of RMPs for existing threats has been delayed and the new RMO/I will resume the RMP negotiation process in 2018. We anticipate that the majority of the RMPs will be established by December 2018 and are on track to complete all required RMPs for identified existing threats by the October 1, 2020 deadline.