



Essex Region Conservation Authority

Essex Region Source Protection Committee Meeting Agenda

Meeting Date: Wednesday, November 9, 2022

Time: 4:30 pm

Location and Details: via Zoom Video Conferencing

List of Business	Page Number
1. Land Acknowledgement	
2. Call to Order	
3. Chair's Welcome	
4. Declarations of Conflict of Interest	
5. Approval of Agenda	1-3
THAT the agenda for the Wednesday, November 9, 2022 meeting of the Essex Region Source Protection Committee (SPC) be approved.	
6. Adoption of Minutes	
A. Essex Region Source Protection Committee (SPC)	4-8
2022-11-09 Meeting Minutes	
THAT the minutes of the Source Protection Committee meeting held on Wednesday, June 8, 2022 be approved as presented.	

B. Essex Region Source Protection Authority (ERSPA) x-x

None

7. Correspondence

None.

8. MECP Liaison's Update

Presented by Beth Forrest

9. Presentations

None.

10. Reports

A. SPC 08/22 9-14

S.36 Update – New Storage of Hauled Sewage Policy

THAT the SPC approve the proposed new policy for hauled sewage to be submitted to the MECP for early engagement.

B. SPC 09/22 15-22

S.36 Update – Hazardous & Municipal Waste Policies

THAT the SPC approve the proposed amended policies and new policies for landfilling and storage of various categories of waste and that they be submitted to the MECP for early engagement.

C. SPC 10/22 23-29

S.36 Update – Stormwater Policy Amendments

THAT the SPC approve the proposed amended policies for stormwater management to be submitted to the MECP for early engagement.

D. SPC 11/22 30-37

S.36 Update – Pesticide Policy Amendments

THAT the SPC approve the proposed amended policies for application and storage of pesticide to be submitted to the MECP for early engagement.

E. SPC 12/22 38-50

S.36 Update – Policies with Minor Edits

THAT the SPC approve the proposed amended policies in SPC Report 12.22 to be submitted to the MECP for early engagement.

11. New Business

None.

12. Other Business

To be presented during the virtual meeting of the SPC.

13. Adjournment

THAT the November 9, 2022 meeting of the Essex Region Source Protection Committee be adjourned.

Next Meeting

The next meeting of the Essex Region Source Protection Committee is to be held on January 11, 2022.

6. Adoption of Minutes

A. Essex Region Source Protection Committee

Resolution SPC 10/22 Moved by Tim Mousseau
Seconded by Albert Dionne

That the minutes for the March 9, 2022 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

Resolution SPC 11/22 Moved by Albert Dionne
Seconded by Kevin Webb

THAT the minutes of the Source Protection Authority meeting held on Thursday, November 18, 2021 be received as presented.

7. Correspondence

None.

8. MECP Liaison's Update

No updates from the Ministry at this time.

9. Delegations

None.

10. Presentations

None.

11. Reports for Approval

A. Report SPC 03/22 – S.36 – New Policy Template

THAT the SPC receive Report 03/22 for information.

Resolution SPC 12/22 Moved by Ron Barrette
Seconded by John Barnett

Carried

B. Report SPC 04/22 – S.36 Update – Fuel and Transportation Policy Amendments

THAT the SPC approve the proposed amended policies as discussed to be submitted to the MECP for early engagement.

Resolution SPC 13/22 Moved by Ron Barrette
Seconded by Tim Mousseau

Carried

C. Report SPC 05/22 – S.36 Update – Hauled Sewage Policy Amendments

THAT the SPC approve the proposed amended policies for the application of hauled sewage to be submitted to the MECP for early engagement, and further;

THAT SPA staff prepare a new policy for the storage of hauled sewage to be presented to the SPC.

Resolution SPC 14/22 Moved by Nelson Santos
Seconded by Albert Dionne

Carried

D. Report SPC 06/22 – S.36 Update – Industrial Effluent Policy Amendments Recommendation

THAT the SPC approve the proposed amended policies to be submitted to the MECP for early engagement.

Resolution SPC 15/22 Moved by Albert Dionne
Seconded by Chris Snip

Carried

E. Report SPC 07/22 – S.36 Update – NASM and Processed Organic Waste Policy Amendments

THAT the SPC approve the proposed amended policies to be submitted to the MECP for early engagement.

Resolution SPC 16/22 Moved by Jim Drummond
Seconded by Chris Snip

Carried

Next Meeting

The next meeting of the Essex Region Source Protection Committee is to be held on September 14, 2022 or October 12, 2022 starting at 4:00 p.m. via Zoom web conferencing



Tom Fuerth
Chair



Katie Stammler
Water Quality Scientist/
Project Manager Source Water Protection



Essex Region Source Protection Committee

Report 08/22

From: Katie Stammler, Source Water Project Manager

Date: Friday, October 7, 2022

Subject: S.36 Update – New Storage of Hauled Sewage Policy

Recommendation

THAT the SPC approve the proposed new policy for hauled sewage to be submitted to the MECP for early engagement

Summary

- The Table of Drinking Water Threats was updated in 2021
- New SDWT circumstances for the storage of hauled sewage were added in this update
- A new policies is required in the Essex Region Source Protection Plan
- Amended and new policies will be included in the comprehensive s.36 update

Discussion

Definition from Ontario Regulation 347: General – waste management

“hauled sewage” means,

(a) domestic waste that is human body waste, toilet or other bathroom waste, waste from other showers or tubs, liquid or water borne culinary or sink waste or laundry waste, and

(b) other waste that is suitable for storage, treatment or disposal in a sewage system regulated under Part 8 of Division B of Ontario Regulation 332/12 (Building Code) made under the Building Code Act, 1992, if the waste is not fully disposed of at the site where it is produced, other than,

(i) waste that is,

(A) from a sewage works that is subject to an environmental compliance approval, and

(B) conveyed, by a sewer that is subject to an environmental compliance approval, away from the site where it is produced,

(ii) waste in a vehicle sewage holding tank, or

(iii) Greenhouse Nutrient Feedwater (GNF)

Storage of Hauled Sewage

The storage of hauled sewage is a new significant threat circumstance added to the 2021 Table of Drinking Water Threats to capture the risk associated with stationary storage where hauled sewage is stored temporarily by haulers where it is not generated or disposed. This sub-category does not include septic tanks or septic systems where the sewage is produced before hauling (from 2022 MECP Bulletin: Implementation of the 2021 Amendments to the Technical Rules under the Clean Water Act, 2006). Storage of waste produced onsite falls under the threat category of sewage.

Significant Risk Circumstance Chemical:

The hauled sewage is stored in a lagoon at a site in a stationary means of containment for hauled sewage, not including a site where it is produced before its collection by a hauled sewage system.

Significant Risk Circumstance Pathogen:

The hauled sewage is stored in a tank or in a lagoon on site in a stationary means of containment for hauled sewage.

The storage of hauled sewage is subject to an Environment Compliance Approval under Part V of the Environmental Protection Act as a waste disposal site. Therefore, the Source Protection Plan need only include a Prescribed Instrument policy (implemented by the MECP). Municipal representatives in Lakeshore, Amherstburg and Windsor were provided with information prior to receiving SPC report 05.22 in order to facilitate discussion regarding whether this activity should be prohibited or managed in the affected Vulnerable Areas, which include Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1. Typically, an activity is prohibited if it is not known to exist nor is it likely to exist in the future given restrictions to land use in the municipality's Official Plan.

Amherstburg and Lakeshore have both confirmed that this activity does not exist in their IPZ-1s. SPA staff have completed a review of aerial photography and are satisfied that this activity does not occur in Windsor IPZ-1. However, given the larger area of Windsor IPZ-2, it is difficult to determine whether hauled sewage is stored at any location in this vulnerable area. Therefore, a new policy has been drafted with the recommendation that existing and future storage of hauled sewage be prohibited in Lakeshore, Amherstburg and Windsor IPZ-1, that existing threats in Windsor IPZ-2 should be managed, if they exist, and that future activities in Windsor IPZ-2 should be prohibited. This policy uses a Prescribed Instrument, which will be implemented by the MECP. Implementing this policy will include a comprehensive review of existing Environmental Compliance Approvals, which will determine if there are any existing threats. This policy will be reviewed by the MECP during Early Engagement and the City of Windsor will have opportunity to comment on it during the consultation phase. Note that the rationale statement is combined with that of the policy for the application of hauled sewage.

RECOMMENDATION

THAT the SPC approve the proposed new policy for hauled sewage to be submitted to the MECP for early engagement



Katie Stammler, PhD
Project Manager, Source Water Protection/
Water Quality Scientist

Attachment:

1. 2022 New policy for the application of hauled sewage

The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act

Hauled Sewage

Chemical and/or Pathogen

Existing and/or Future Activities

Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 I

IPZ of vulnerability score 9 or higher (chemical)

IPZ of vulnerability score 8 or higher (pathogen)

Risk Level: Significant

Approach: Prohibit and/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 Chemical:

The hauled sewage is stored in a lagoon at a site in a stationary means of containment for hauled sewage, not including a site where it is produced before its collection by a hauled sewage system. (IPZ of vulnerability score 9 or higher)

Significant Risk Circumstance Pathogen:

The hauled sewage is stored in a tank or in a lagoon on site in a stationary means of containment for hauled sewage. The storage may result in the presence of one or more pathogens in groundwater or surface water. (IPZ of vulnerability score 8 or higher)

Policy Text:

No existing (none known to exist) or future storage of hauled sewage shall be permitted in IPZ's with vulnerability scores of 9 or higher (Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1).

In reviewing existing Environmental Compliance Approvals (Certificates of Approval) for the storage of hauled sewage in IPZ's with vulnerability scores of 8 or higher (Windsor IPZ-2), 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. No future storage of hauled sewage shall be permitted in IPZ's with vulnerability scores of 8 or higher (Windsor IPZ-2).

Rationale:

The application and storage of hauled sewage is not known to exist nor be proposed in the subject vulnerable areas. Therefore, the prohibition of these activities in these areas is a reasonable approach. The exemption is the storage of hauled sewage in Windsor IPZ-2, which allows for existing threats, if they occur, to be managed. The implementation of this policy is expected to have no negative effect, while ensuring that the sources of drinking water are adequately protected.

Existing threats are activities that are already confirmed (known to exist). The Clean Water Act requires policies to address all types of 'existing' significant threats, even where there is little or no possibility that they actually could exist. At the time the policies were developed, none of these activities were known or suspected to be in existence. This policy prohibits future occurrences of significant threat activities which are not now known to exist or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. The prohibition of the particular type of would be 'existing' threat activity was deemed to be a reasonable approach.

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 ECAs for the application of hauled sewage that meet the criteria to be a SDWT as identified in policy 12. 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 will be required to review ECAs for hauled sewage in the subject vulnerable areas.

The MECP is normally the approval body under the Environmental Protection Act, and should take the lead in implementing this policy, including monitoring. This is consistent with Provincial Direction under the Clean Water Act



Essex Region Source Protection Committee

Report 09/22

From: Katie Stammler, Source Water Project Manager

Date: Tuesday, October 18, 2022

Subject: S.36 Update – amended and new policies for land disposal and storage of hazardous, industrial, municipal or petroleum refining waste

Recommendation

THAT the SPC approve the proposed amended and new policies for landfilling and storage of various categories of waste be submitted to the MECP for early engagement

Summary

- The Table of Drinking Water Threats was updated in 2021
- The threat circumstances for the land disposal and storage of hazardous, industrial, municipal or petroleum refining waste were changed in this update
- Amended and/or new policies are required in the Essex Region Source Protection Plan
- Amended policies will be included in the comprehensive s.36 update

Discussion

Land disposal of hazardous, municipal and/or petroleum refining waste

The Table of Drinking Water Threats includes circumstances under which the above activities are considered to be a significant drinking water threat in Lakeshore, Windsor and Amherstburg IPZ-1s. These circumstances were not changed in the updated 2021 Director Technical Rules, so only minor edits are required for the associated policy.

The SPC previously opted to include all three sets of circumstances in a single Prescribed Instrument policy, which uses Environmental Compliance Approvals to prohibit existing and future activities where they are a significant drinking water threat, with one exemption. The original policy allows for existing threats, if they exist, to be managed in Amherstburg IPZ-1. Given that the MECP has reported that

there are no existing activities through their review of ECAs, this exemption has been removed in the edited policy.

SPA staff note that the policy indicates that Amherstburg and Windsor should reflect this policy in their Official Plans and will inquire about this action during the consultation phase when policies are reviewed.

Storage of hazardous waste

Storage of Waste, previously defined in the 2017 TRs as Waste Disposal Site – Storage of Hazardous Waste at Disposal Sites and Waste Disposal Site of PQRSTU sites, has been fully revamped and replaced with four types of Waste Storages:

- 1.10 Transfer/Processing Sites approved to receive Hazardous Waste or Liquid Industrial Waste.
- 1.11 Transfer/Processing Site approved to receive only Municipal Waste under Part V of the Environmental Protection Act
- 1.12 Storage of Subject Waste at a Waste Generation Facility: site requires generator registration under Section 3 of O. Reg. 347.
- 1.13 Storage of Waste at a Waste Generation Facility: site that is exempt or excluded from generator registration requirements.

Sub-Threat 1.10 Transfer/processing sites approved to receive hazardous Waste or liquid industrial Waste

Under this category, sites are approved to receive and store hazardous waste or liquid industrial waste under Part V of the EPA. All subject wastes stored at a waste generation facility must be registered with the Ministry (transfer stations are also considered waste generators). Where the storage of the subject waste is less than two years, and the waste management is a primary function of the activity (on-site storage), an ECA is required. In addition, any storage of these wastes for more than two years (including the initial generation of the waste and transfer stations) requires an ECA. Therefore, the Waste storage under this sub-category does not need a Risk Management Plan and will be addressed using a Prescribed Instrument policy.

Sub-Threat 1.11 Transfer/processing sites approved to receive only Municipal Waste

Under this category, sites are approved under Part V of the EPA to accept municipal Waste only, including residential, commercial, institutional, and industrial non-hazardous wastes. Formerly known as storage of the PQRSTU, which is no longer considered a risk under the 2021 DTRs as their risk at the generating site or facility is negligible. Instead, their cumulative risk at the Municipal Waste site is recognised under this sub-threat category (municipal Waste). Therefore, the Waste storage under this sub-category does not need a Risk Management Plan and will be addressed using a Prescribed Instrument policy.

Sub-Threat 1.12 and Sub-Threat 1.13

These sub-threats are not considered to be a SDWT in the vulnerable areas in the Essex Region, therefore, no policies are required.

Sub-threat 1.10 Transfer/Processing Sites approved to receive Hazardous Waste or Liquid Industrial Waste

The circumstances for the above named activity under which it is a SDWT have changed substantially in the 2021 Director Technical Rules, see Table 1. Previously, the circumstance for hazardous or liquid industrial waste did not specify the types of facilities to which the circumstances applied. Given that this activity is currently a SDWT at any volume in any type of facility, this created an implementation challenge. The new circumstance provides greater clarity and specifies the type of storage facilities to which the circumstances apply. The vulnerable area to which this circumstance applies has also changed. Previously, the storage of hazardous or liquid industrial waste was a SDWT in IPZs with vulnerability scores of 9 or higher (Lakeshore, Windsor and Amherstburg IPZ-1s). This activity is now considered to be a SDWT in vulnerable areas of score 8 or higher, which includes Windsor IPZ-2.

Given the nature of this threat activity and that it is unlikely to occur in our IPZ-1s, it is proposed that this activity be prohibited in these areas using a Prescribed Instrument (Environmental Compliance Approval). It is proposed that the activity be managed using a Prescribed Instrument (Environmental Compliance Approval) in Windsor IPZ-2 given that the area is larger and does include some commercial and industrial zones where the activity could already be occurring. Because the circumstance specifies storage at approved transfer/processing sites, there is no need for an accompanying s.57 or s.58 policy.

Table 1 – Comparison of significant drinking water threat circumstances between the 2013 and 2021 version of the Director Technical Rules

2013 Circumstance	2021 Circumstance	Areas of SDWT
Storage of hazardous waste or liquid industrial waste at, above, or partially below grade at waste disposal sites.	The hazardous waste or liquid industrial waste is stored above, partially below or below grade at a transfer/processing site approved to receive hazardous waste or liquid industrial waste .	Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1, Windsor IPZ-2 *previously not W IPZ-2

Sub-threat 1.11 Transfer/Processing Site approved to receive only Municipal Waste

The 2021 Director Technical Rules included a significant change to storage of a specific type of waste as described above and in Table 2. Previously, the circumstance was written to capture the storage of wastes that were not captured under other threat categories. The language was cumbersome and difficult to interpret. The new circumstance simplifies the language and specifies the types of storage facilities to which the circumstances apply. The vulnerable area to which this circumstance applies has also changed. Previously, the storage of these wastes was a SDWT in IPZs with vulnerability scores of 10, which do not occur in the Essex Region. The activity is now considered to be a SDWT in IPZs with vulnerability score of 9 or higher (Lakeshore, Windsor and Amhersburg IPZ-1s). Thus, a new policy is required.

Given the nature of this threat activity and that it is unlikely to occur in our IPZ-1s, it is proposed that this activity be prohibited in these areas using a Prescribed Instrument (Environmental Compliance

Approval). This policy will be combined with the prohibition policy described above. Because the circumstance specifies storage at approved transfer/processing sites, there is no need for an accompanying s.57 or s.58 policy.

Table 2 – Comparison of significant drinking water threat circumstances between the 2013 and 2021 version of the Director Technical Rules

2013 Circumstance	2021 Circumstance	Areas of SDWT
A site that is not approved to accept hazardous waste or liquid industrial waste but accepts a waste described in clause (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste as defined in Regulation 347 (General - Waste Management) made under the Environmental Protection Act, or in clause (d) of the definition of liquid industrial waste in that regulation, and the waste is stored at, above, or partially below grade.	The municipal waste is stored at, above or partially below grade at a transfer/processing site approved to receive only municipal waste	Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1, *previously, circumstance was not a threat in the Essex Region

The SPC will discuss these proposed policy approaches, and, once they are satisfied, the policies will be included for review by the MECP during the early engagement phase of review.

RECOMMENDATION

THAT the SPC approve the proposed amended and new policies for landfilling and storage of various categories of waste be submitted to the MECP for early engagement



Katie Stammler, PhD
 Project Manager, Source Water Protection/
 Water Quality Scientist

Attachment:

1. 2022 amended and new policies for landfilling and storage of various categories of waste

The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act

- Land disposal of petroleum refining waste (TDWT 1.3)
- Land disposal of hazardous waste (TDWT 1.4)
- Land disposal of municipal waste (TDWT 1.5)

Chemical

Existing and/or Future Activities

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

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

Significant Risk Circumstance:

The land disposal of any of the following where the land disposal is undertaken on more than 10 hectares:

- Petroleum refining waste within the meaning of clause (d) of the definition of "land disposal" in section 1 of Regulation 347 (General - Waste Management) R.R.O. 1990 made under the Environmental Protection Act
- Hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General - Waste Management) made under the Environmental Protection Act
- Municipal waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347 (General - Waste Management) made under the Environmental Protection Act

Policy Text:

No waste disposal sites at which the land filling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste could take place shall be permitted to be established where these activities are identified as a SDWT (IPZ with vulnerability score 9 or greater). This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.

This policy will be reflected in the Official Plans for the City of Windsor and Town of Amherstburg at the time of the next Official Plan five year review exercise as per Section 26(1) of the Planning Act, and in Zoning By-laws within 3 years following the Official Plan update.

The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act

- Transfer/Processing Sites approved to receive Hazardous Waste or Liquid Industrial Waste (TWDT 1.10)
- Transfer/Processing Site approved to receive only Municipal Waste under Part V of the Environmental Protection Act (TWDT 1.11)

Chemical

Existing and/or Future Activities

Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 IPZ with vulnerability score 8.1 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/conform with

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

Significant Risk Circumstance Chemical:

The hazardous waste or liquid industrial waste is stored above, partially below or below grade at a transfer/processing site approved to receive hazardous waste or liquid industrial waste.

The municipal waste is stored at, above or partially below grade at a transfer/processing site approved to receive only municipal waste

Policy Text:

No storage of hazardous, liquid industrial or municipal waste at transfer/processing sites shall be permitted in IPZs in the Essex Region with vulnerability score 9 or greater. This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.

In reviewing Environmental Compliance Approvals (Certificates of Approval) for the storage of hazardous or liquid industrial waste at transfer/processing sites in IPZs in the Essex Region with vulnerability score 8.1 (Windsor IPZ-2), 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.

Rationale:

The application and/or storage of hazardous, liquid industrial, municipal and/or petroleum refining waste at approved sites are all activities regulated directly by the Ministry of the Environment via environmental compliance approvals. Therefore, it is appropriate to use a Prescribed Instrument policy to address these potential Significant Drinking Water Threats. It is not necessary to include an accompanying s.57 or s.58 policy.

This policy prohibits future occurrences of these significant threat activities which are not known to exist now or highly unlikely to exist in the future in IPZ-1s with vulnerability score of 9 or higher in the Essex Region, mainly due to current and zoned land uses in the subject vulnerable areas. Given the relatively small area of the IPZ-1s, it should be feasible to direct any such sites to the portions of the lands (e.g. industrial lands) outside the IPZ-1s. Therefore, the prohibition of these activities in the future in the subject vulnerable areas is a reasonable approach. The storage of hazardous or liquid industrial waste in IPZ-2s with vulnerability 8 or higher (Windsor IPZ-2) will be managed through the use of appropriate measures in an approved ECA for both existing and future threats. The implementation of these policies is expected to have no negative effect, while ensuring that the sources of drinking water are adequately protected, in regard to waste disposal sites.

The terms and conditions of the Environmental Compliance Approval (Certificate of Approval) generally address: criteria for operation and performance of the system, 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.

Although the policy will be reflected in the Official Plans for the City of Windsor and Town of Amherstburg, there is no benefit in Lakeshore providing land use planning measures to complement this Prescribed Instrument policy, given the unique nature of this particular IPZ-1. The land based portion of the IPZ-1 affects only a very narrow protrusion into Lake St. Clair, including a municipal marina and small portion of a municipal park.

This policy previously allowed potential existing threats in Amherstburg IPZ-1 to be managed rather than prohibited. 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. Given that no existing SDWT activities have been identified, the clause to allow existing threats to be managed in Amherstburg IPZ-1 has been removed.



Essex Region Source Protection Committee

Report 10/22

From: Katie Stammler, Source Water Project Manager

Date: Monday, August 29, 2022

Subject: S.36 Update – Stormwater Management Policy Amendments

Recommendation

THAT the SPC approve the proposed amended policy for stormwater management to be submitted to the MECP for early engagement

Summary

- The Table of Drinking Water Threats was updated in 2021
- The threat circumstances for stormwater management were changed in this update
- Amended and/or new policies are required in the Essex Region Source Protection Plan
- Amended policies will be included in the comprehensive s.36 update

Discussion

Definitions from Ontario Regulation 347: 525/98 – Ontario Water Resources Act and/or the 2021 Director Technical Rules

“storm water” means rainwater runoff, water runoff from roofs, snowmelt and surface runoff;

“storm water management facility” means a facility for the treatment, retention, infiltration or control of storm water;

“outfall” means the discharge point of a structure designed and built to direct storm water, snow meltwater, sanitary sewage, sewage treatment plant final effluent or overflow, industrial sewage and cooling water into surface water for dispersion and dilution;

“storm water drainage system” means a system designed for the collection and transmission of “storm water” or snow meltwater from a “snow disposal facility”, including a “storm sewer”, a ditch or a swale;

“storm water drainage system outfall” means the discharge point to a surface water body from a storm water drainage system; e.g. storm sewer pipe outfall.

“storm water management facility outfall” means the discharge point at which “storm water” is discharged to a surface water body from a “storm water management facility”, including where storm water is discharged from a spillway, a perforated riser, or a weir; e.g. storm water retention pond outfall

“storm water infiltration facility” means a “storm water management facility” that is designed to exfiltrate or infiltrate part or all of the “storm water” into the ground to reduce runoff, including a greenway terrace, a soak way, an infiltration trench, an infiltration chamber, a bioretention structure, a vegetated filter strip, a permeable pavement, a grass swale, a dry swale, a perforated pipe system or pervious pipe, a pervious catch basin, an infiltration basin, an infiltration gallery;

2021 Director Technical Rules

In the latest version of the Director Technical Rules, the circumstances under which storm water activities can be a SDWT were 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’. All storm water activities require an Environmental Compliance Approval issued by the MECP. Storm water activities were previously managed through a Prescribed Instrument in the SPP and it is recommended that this approach remain in place. No other policies for this activity are required.

Consequence of policy update

The policy update itself is relatively straightforward and required in order for the ERSPA SPP to be in compliance with the 2021 Director Technical Rules. At this time, it is not known whether or how many properties may be affected by this change. However, to date, the MECP has not identified any SDWTs that meet the previous set of circumstances. The MECP will be required to review all existing and future ECAs in light of the new risk circumstances. Previously, the risk circumstances were dependant on total drainage area, whereas the current risk circumstances use the percentage of impervious area of the land *servicing the storm water management facility*. Any proposed storm water management facility will need to provide this information when completing their Environmental Compliance Approval following the instructions provided for the [application process](#). This may have the biggest impact in Windsor IPZ-2.

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.

Table 1 – Comparison of significant drinking water threat circumstances for stormwater outfalls between the 2013 and 2021 version of the Director Technical Rules

2013 TDWT	2021 TDWT	Areas of SDWT
A storm water management facility designed to discharge storm water to groundwater (through infiltration) or surface water where:	A storm water management facility outfall or a storm water drainage system outfall that serves land where:	
The drainage area is >100 ha and the predominant land use is rural, agricultural, or low density residential	the predominant land use is rural, agricultural, outdoor recreational, parkland or greenhouses 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.	Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1
The drainage area is >100 ha and the predominant land use is high density residential	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.	Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1
The drainage area is >10 ha and the predominant land use is Industrial/Commercial	the predominant land use is commercial or industrial land uses. 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) or > 50% of the drainage (IPZ with score higher than 8)	Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1 Windsor IPZ-2
	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.	Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1

* 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

RECOMMENDATION

THAT the SPC approve the proposed amended policy for stormwater management to be submitted to the MECP for early engagement



Katie Stammler, PhD
Project Manager, Source Water Protection/
Water Quality Scientist

Attachment:

1. 2022 amended policy for storm water management facilities

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

Storm Water Management Facilities and Drainage Systems:

1. Outfall from a Storm Water Management Facility or Storm Water Drainage System
2. 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

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)

2. 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

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 MOE '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 MOE '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 MOE 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 MOE 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.



Essex Region Source Protection Committee

Report 11/22

From: Katie Stammler, Source Water Project Manager

Date: Tuesday, September 13, 2022

Subject: S.36 Update – Pesticide Policy Amendments

Recommendation

THAT the SPC approve the proposed amended policies for application and storage of pesticide to be submitted to the MECP for early engagement

Summary

- The Table of Drinking Water Threats was updated in 2021
- The threat circumstances for the application and storage of pesticide were changed in this update
- Amended and/or new policies are required in the Essex Region Source Protection Plan
- Amended policies will be included in the comprehensive s.36 update

Discussion

The circumstances under which the application and storage of pesticide is considered to be a Significant Drinking Water Threat (SDWT) were updated in the 2021 Table of Drinking Water Threats (Table 1). Previously, the circumstances named specific types of pesticide as a SDWT (e.g. Mecoprop, MCPA, atrazine, dicamba, 2,4-D, dichloropropene-1, 3, MCPB and metalaxyl). References to specific types of pesticide have now been removed. The inference is that the circumstances apply to all pesticides. In addition, the storage of pesticide circumstance previously specified that the pesticide was stored for retail sale for use in extermination, excluding where it is manufactured or processed. The new circumstance does not include this specification. The inference is that the storage of pesticide for any reason could be a SDWT.

Table 1 – Comparison of significant drinking water threat circumstances between the 2013 and 2021 version of the Director Technical Rules

2013 Circumstance	2021 Circumstance	Areas of SDWT
<p>The total pesticide application area is > 1ha, chemicals of concern being MCPA and mecoprop</p> <p>The total pesticide application area is > 10ha, chemicals of concern being atrazine, dicamba, 2,4-D, dichloropropene-1, 3, MCPB and metalaxyl</p>	<p>Pesticide is applied to land and the disposal area is > 1ha</p>	<p>Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1</p>
<p>The total pesticide application area is > 10ha, chemical of concern being MCPA</p>	<p>Pesticide is applied to land and the disposal area is > 10ha</p>	<p>Windsor IPZ-2</p>
<p>A pesticide (MCPA (2-methyl-4-chlorophenoxyacetic acid) or Mecoprop) is stored for retail sale or for use in extermination, excluding where it is manufactured or processed where the quantity stored is > 2500 kg</p>	<p>The storage of > 2500 kg of pesticide on a site</p>	<p>Lakeshore IPZ-1, Windsor IPZ-1, Amherstburg IPZ-1</p>

There are currently three policies in the Essex Region SPP to address the application and storage of pesticide as a SDWT. The application of pesticide is managed through the use of a Prescribed Instrument policy and a Risk Management Plan policy. This activity requires a Pesticide Permit under the Pesticide Act, therefore, Risk Management Plans should not be necessary however, this policy is included to capture any potential circumstances where a Pesticide Permit may not be necessary. As the storage of pesticide does not have an associated prescribed instrument, this activity is managed through the use of a Risk Management Plan policy.

The policy text has been updated to reflect the new language in the 2021 Table of Drinking Water Threats and it is recommended that the policy approach remain ‘manage’ as opposed to ‘prohibit’ given that the list of pesticides is now more encompassing. The policy language leaves it to the discretion of the MECP and/or the RMO to determine the measures appropriate to prevent these activities from causing a threat to our sources of drinking water.

As of December 2018, all of the existing Prescribed Instruments in Vulnerable Areas for which activities were identified as SDWTs were reviewed. Based on this review there are no existing Pesticide Permits that meet the criteria to be a SDWT. 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 RMO has not generate any RMPs for either the application or storage of pesticide.

Under the new circumstances, the MECP will be required to rescreen all Pesticide Permits, as these were previously screened for specific pesticides. They will also be required to adjust their screening tool to capture all potential future SDWTs. The RMO will work with municipalities to adjust their screening mechanism through s.59 policies. At this time, it is expected that the impact of this change will not have a significant impact in Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1. There could be significant impact in Windsor IPZ-2 where the application of all pesticides could be a SDWT, however, there are few locations where pesticide might be applied to an area greater than 10 hectares (25 acres, or ~19 football fields). The overall impact of this change is expected to be minimal in the subject vulnerable areas.

RECOMMENDATION

THAT the SPC approve the proposed amended policies for application and storage of pesticide to be submitted to the MECP for early engagement



Katie Stammler, PhD
Project Manager, Source Water Protection/
Water Quality Scientist

Attachment:

1. 2022 amended policies for the application and storage of pesticide

Application of Pesticide

Chemical

Existing and/or Future Activities

Windsor IPZ-1, Windsor IPZ-2, Lakeshore IPZ-1 and Amherstburg IPZ-1

IPZs with vulnerability score > 8.1

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

Significant Risk Circumstance:

Pesticide is applied to land and the disposal area is > 1ha (IPZs with vulnerability score > 9)

Pesticide is applied to land and the disposal area is > 10ha (IPZs with vulnerability score > 8.1)

Policy Text:

In reviewing applications for Pesticides Permits under the Pesticides Act for the application of pesticides in IPZs with vulnerability score > 8.1, the MECP shall ensure that conditions in the Permit adequately protect the sources of drinking water.

The Source Protection Committee recommends that the terms and conditions include setbacks to watercourses, timing restrictions (including consideration of weather events) and spills/runoff management and other measures necessary to manage the significant threat activity in order to protect sources of drinking water.

Application of Pesticide

Chemical

Existing and/or Future Activities

Windsor IPZ-1, Windsor IPZ-2, Lakeshore IPZ-1 and Amherstburg IPZ-1

IPZs with vulnerability score > 8.1

Risk Level: Significant

Approach: Manage

Policy Tool: Clean Water Act, Section 58 Risk Management Plan

Implementing Body: RMO/I

Legal Effect: Must conform/comply with

Compliance Date:

For future threats - when the Source Protection Plan or its amendments take effect.

For existing threats - within 5 years from the date the plan or its amendments take effect

Significant Risk Circumstance:

Pesticide is applied to land and the disposal area is > 1ha (IPZs with vulnerability score > 9)

Pesticide is applied to land and the disposal area is > 10ha (IPZs with vulnerability score > 8.1)

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 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 require that the Pesticides Act requirements be fulfilled and include measures necessary to protect the water such as setbacks from watercourses or drainage systems, timing restrictions (including consideration of weather events) and spills/runoff management. The RMP should also require that the Pesticide Label be followed.

The Risk Management Official will obtain documentation from the property owner to indicate that the Pesticides Act requirements and any other conditions in the RMP are followed. A form may be prescribed for this purpose.

Handling and Storage of Pesticide

Chemical

Existing and/or Future Activities

Windsor IPZ-1, Lakeshore IPZ-1 and Amherstburg IPZ-1
IPZs with vulnerability score > 9

Risk Level: Significant

Approach: Manage

Policy Tool: Clean Water Act, Section 58 Risk Management Plan

Implementing Body: RMO/I

Legal Effect: Must conform/comply with

Compliance Date:

For future threats - when the Source Protection Plan or its amendments take effect.

For existing threats - within 5 years from the date the plan or its amendments take effect

Significant Risk Circumstance:

The storage of > 2500 kg of pesticide on a site

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 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 require that the Pesticides Act requirements for the storage of pesticides be fulfilled and include measures necessary to protect the water such as setbacks from watercourses or drainage systems, timing restrictions (including consideration of weather events) and spills/runoff management. The RMP should also require that the Pesticide Label be followed.

The Risk Management Official will obtain documentation from the property owner to indicate that the Pesticides Act requirements and any other conditions in the RMP are followed. A form may be prescribed for this purpose.

Policy Nos. 15, 29, 30

Policy IDs:

W1W2L1A1applPesticide-1 (Prescribed Instrument)

W1W2A1L1applPesticide-1 (Clean Water Act)

W1A1L1-storagepesticide-1 (Clean Water Act)

Rationale:

A Pesticide Permit under the Pesticides Act is the Prescribed Instrument as per the Clean Water Act to address the application of pesticide to land. In most cases, the Pesticides Act will apply, and the use of the accompanying Section 58 Policy will be extremely unlikely. Where a Risk Management Plan is required, it should include the requirements of the Pesticides Act and conditions similar to those in typically Pesticide Permits for the application of pesticides.

There is no Prescribed Instrument to address the storage of pesticides, therefore Risk Management Plans will be required for these activities if they meet the circumstances to be a significant drinking water threat. The Section 58 policies are complemented by a Section 59 policy to ensure that landowners and the municipality are aware, at the onset of a development application process, that the proposed activity requires a Risk Management Plan.

The Pesticides Act bans the use and sale of pesticides for cosmetic purposes on lawns, vegetable and ornamental gardens, patios, driveways, cemeteries, and in parks and school yards. There are exemptions to this ban (e.g. golf courses, controlling plants of human health concern, etc.), however, pesticide permits are still required for those exempt from the cosmetic pesticide ban.

The current land uses and zoning in vulnerable areas where the application and storage of pesticides are a significant drinking water threat do not preclude these activities, and it is recognized that the application of pesticides may be necessary to control nuisance, and sometimes, poisonous plants and insects. Managing pesticide application and storage through Pesticide Permits and/or Risk Management Plans, such that the target plant or insect is controlled, without being detrimental to watercourses is considered a reasonable approach. As described below, the Pesticides Permits can contain conditions that prevent the pollution of water during the application of pesticides. Given that pesticide application already requires a Pesticide Permit, these policies should have no negative impact. The storage of pesticide is very unlikely to occur nor be proposed in the subject area and therefore implementation of this policy should have no negative impact.

Application of pesticide and Pesticide permits

Under the Pesticides Act, pesticide permits are required for land, structural and water exterminations to destroy, prevent or control pests using a pesticide. The terms and conditions outlined in a permit are site specific and include the maximum quantities of use, treatment area location and dimensions, timing restrictions, notification requirements, reporting requirements to the ministry and proper storage, transportation and disposal. The Pesticides Permits can

contain conditions that prevent the pollution of water during the storage of pesticides, including setbacks from water courses, considerations for weather events, etc. In accordance with section 12 of O. Reg. 63/09 under the Pesticides Act, appropriate measures must be taken to prevent the backflow of pesticides into a lake, river, or other body of surface water. In addition, equipment must not be washed in or near a well or in or near a lake, river, or other body of surface water in a manner that causes or may cause a pesticide to be directly or indirectly discharged into the well, or into the lake, river or other body of surface water.

In addition to the terms and/or conditions included on a permit, any person who uses a pesticide is also required, under provincial and federal legislation, to comply with all label requirements. The federally approved pesticide label specifies how to use a product safely and effectively and contains information related to the use precautions to minimize any potential risks to human health or the environment.

Storage of Pesticide

Risk Management Plans should rely on the requirements of O. Reg. 63/09 under the Pesticides Act, and other conditions that the Risk Management Official requires to be fulfilled to protect water, such as setbacks and/or runoff control.

O. Reg. 63/09 sets out requirements related to pesticide storage, mixing and loading, washing of pesticide equipment, safe and secure transportation, proper disposal of empty and damaged pesticide containers, and spill cleanup. It is illegal to store pesticides under unsafe conditions. Sections 107 to 112 of the O. Reg. 63/09 sets out storage requirements to ensure that the pesticides are not likely to impair the health or safety of any person nor come into contact with food or drink intended for human or animal consumption; the storage area is maintained in good repair with precautions to prevent contamination of the environment; the storage area is properly secured and posted with warning signs and emergency telephone numbers; pesticides stored in an unsupervised vehicle must be inaccessible to the public or in a locked compartment and the vehicle must display the required warning sign; Class 1, 2 and 3 pesticides must be stored in areas that are inaccessible to the public, ventilated to the outdoor atmosphere, do not have floor drains leading to a watercourse, and with emergency response equipment; licensed vendors, licensed operators, manufacturers, and persons storing Class 1 pesticides are required to provide written notice annually to their local fire department.



Essex Region Source Protection Committee

Report 12/22

From: Katie Stammler, Source Water Project Manager

Date: Tuesday, September 13, 2022

Subject: S.36 Update – Other Policy Amendments

Recommendation

THAT the SPC approve the proposed amended policies in SPC Report 12.22 to be submitted to the MECP for early engagement

Summary

- The Table of Drinking Water Threats was updated in 2021
- There are several threat categories for which the SDWT circumstances did not change, but the associated policies either require minor updates for ease of implementation or simply to align with the new AODA policy format

Discussion

The circumstances for many drinking water threat categories did not change in the 2021 Director Technical Rules. The existing policies were still reviewed and edited to adhere to the new policy template and/or to address implementation challenges. Upon review, some policies were edited to improve and/or streamline implementation. In some cases, minor edits were made to the policies, but the intent behind them will not change.

Policies with no change

There are also policies in the Essex Region SPP that do not require any significant change either due to updates to the Table of Drinking Water Threats or to implementation challenges identified in the s.36 Workplan or elsewhere. These policies were reviewed in their entirety and reformatted using the new policy template. The intent of edits to these policies was to simplify and clarify policy text, reduce redundancies and improve accessibility. These include policies for Mine Tailings and Application and Storage of Agricultural Source Material.

Policies with Minor Edits

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 two policies for Stewardship/Incentive. One policy was specifically targeted at applying for funds to mitigate threats associated with fuel tanks and the other for all moderate/low threats. Both policies directed ERCA to apply for funds from the MECP, however such funds were never available. The two policies have been merged into one generic Stewardship/Incentive policy that directs ERCA 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.

Aircraft de-icing

The policy for aircraft de-icing chemicals has been edited to reflect a minor change in the Table of Drinking Water Threats. Previously, specific chemicals were named (dioxane-1, 4 and ethylene glycol), whereas the current circumstances do not name specific chemicals. The policy text was also edited to read that ERCA will inform the Airport Authority of its responsibility to manage runoff *in the event that* an airport is proposed in the vulnerable areas (which is unlikely).

Livestock grazing

Livestock grazing is identified as a SDWT in Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1. Because agriculture is not a permitted land use in these areas, the SPC previously took the approach to include a Land Use Planning policy that prohibits changes to the Official Plan in Windsor and Amherstburg that would allow for livestock grazing. Because the land area of Lakeshore IPZ-1 is small, the SPC determined that this approach was not necessary and instead a policy was included that required ERCA to inform Lakeshore (or subsequent owners) annually that livestock grazing is not a permitted land use. This policy is burdensome and has been removed. Instead, Lakeshore IPZ-1 is included in the Land Use Planning policy.

RECOMMENDATION

THAT the SPC approve the proposed amended policies in SPC Report 12.22 to be submitted to the MECP for early engagement



Katie Stammler, PhD
Project Manager, Source Water Protection/
Water Quality Scientist

Attachment:

1. 2022 amended policies with minor or no changes

The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act

Storage, treatment and discharge of tailings from mines

Chemical

Existing and/or Future Activities

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

Risk Level: Significant

Approach: Prohibit

Policy Tool: Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval)

Implementing Body: MECP

Legal Effect: Must conform/comply with

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

Significant Risk Circumstance Chemical:

The storage of mine tailings in an impoundment structure on the surface where the site is part of a facility required to report as per an NPRI notice in an IPZ with vulnerability score 9 or higher

Policy Text:

No storage, treatment or discharge of mine tailings shall be permitted in IPZs with vulnerability scores of 9 or higher. This includes Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.

Rationale:

These activities are not known to exist nor be proposed in the subject vulnerable areas, mainly due to current and zoned land uses in the subject vulnerable areas, which are small. Therefore, the prohibition of these activities is a reasonable approach. The implementation of this policy is expected to have no negative effect, while ensuring that the sources of drinking water are adequately protected.

As part of the comprehensive s.36 update, this policy was reviewed in its entirety and reformatted using the new policy template. The intent of edits to this policy was to simplify and clarify policy text, reduce redundancies and improve accessibility.

The application of Agricultural Source Material (ASM)

Chemical and/or 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 or higher; IPZ-2 of vulnerability score 8 or higher (Pathogen only)

Risk Level: Significant

Approach: Prohibit

Policy Tool: Clean Water Act, Section 57 Prohibit

Implementing Body: RMO

Legal Effect: Must conform/comply with

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

Significant Risk Circumstance Chemical:

ASM is applied to land with >40% managed lands percent, with livestock density such that ASM can be applied annually at a rate of more than 1 NU/acre (for an IPZ-1 of vulnerability score 9)

ASM is applied to land with >80% managed lands, with livestock density such that ASM can be applied annually at a rate of more than 0.5NU/acre (for an IPZ-1 of vulnerability score 9)

Significant Risk Circumstance Pathogen:

ASM is applied to land (no volume threshold) and the application may result in the presence of one or more pathogens in groundwater or surface water. (for an IPZ-1 of vulnerability score 9 and an IPZ-2 of vulnerability score 8.1)

Policy Text:

No application of agricultural source material shall be permitted in IPZ-1s with vulnerability scores of 9 or higher, nor in IPZ-2s with vulnerability score 8 or higher. This includes Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.

The storage of Agricultural Source Material (ASM)

Chemical and/or 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 or higher; IPZ-2 of vulnerability score 8 or higher (Pathogen only)

Risk Level: Significant

Approach: Prohibit

Policy Tool: Clean Water Act, Section 57 Prohibit

Implementing Body: RMO

Legal Effect: Must conform/comply with

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

Significant Risk Circumstance Chemical:

The ASM stored at or above grade at a permanent or temporary nutrient storage facility, or ASM stored partially below grade in a permanent nutrient storage facility, and the weight or volume of manure stored annually on a farm unit is sufficient to land apply ASM annually at a rate that is more than 1 NU/acre of the farm units (for an IPZ-1 of vulnerability score 9)

Significant Risk Circumstance Pathogen:

Any portion of ASM (no volume threshold) is stored at or above grade in or on a permanent nutrient storage facility, or ASM is stored at a temporary field nutrient storage site and a spill or runoff could result in pathogen/s in the surface water (for an IPZ-1 of vulnerability score 9 and an IPZ-2 of vulnerability score 8.1)

Policy Text:

No storage of agricultural source material shall be permitted in IPZ-1s with vulnerability scores of 9 or higher, nor in IPZ-2s with vulnerability score 8 or higher. This includes Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.

Rationale:

In the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1, the livestock density is less than 0.5 NU/acre due to current land uses, and there are no agricultural properties, thus not meeting the significant chemical threat circumstances for the application or storage of ASM. At the time the policies were developed, none of these activities were known or suspected to be in existence. These activities are highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas.

The instrument prescribed by the Clean Water Act to manage this threat is a nutrient management plan under the Nutrient Management Act (NMA), which is required for application or storage of agricultural source material (ASM) on agricultural property. However, there are no current nor planned agricultural lands in the subject vulnerable areas. As these Prescribed Instruments apply only to agricultural lands, the Clean Water Act is used as the main policy tool to address this significant threat activity.

Through the Clean Water Act Section 57, no application nor storage of ASM will be permitted where these activities are a significant drinking water threat. Since the activity is very unlikely to occur or be proposed in these areas, the implementation of this policy has no negative impact. This policy maintains status quo while not allowing future significant threats related to the application of ASM to occur.

This Section 57 policy is complemented by a Section 59 policy (No.33). The use of Section 59 may help to ensure that landowners and the municipality are aware, at the onset of a development application process, that the proposed activity is prohibited.

As part of the comprehensive s.36 update, these policies were reviewed in their entirety and reformatted using the new policy template. The intent of edits to these policies was to simplify and clarify policy text, reduce redundancies and improve accessibility.

All Threats and Sub-threats

Chemical and/or Pathogen
Existing and/or Future Activities

All Vulnerable Areas in the Essex Region Source Protection Area

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 lead

Legal Effect: Non-Legally Binding (Strategic Action)

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

Significant Risk Circumstance:

N/A

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 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.

All identified Significant Drinking Water Threats in the Essex Region

Chemical and/or Pathogen

Existing and/or Future Activities

All Vulnerable Areas in the ERSPA with identified SDWTs

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

Legal Effect: Non-legally binding (strategic action)

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

Significant Risk Circumstance:

Various

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.

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:

- 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

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.

Aircrafts – De-icing Runoff

Chemical
Future Activities

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

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: ERCA

Legal Effect: Must conform/comply with

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

Significant Risk Circumstance:

Runoff originating at a national airport where de-icing materials discharge to land or water

Policy Text:

Should the Airport Authority plan to build a new national airport in the subject vulnerable areas, the Essex Region Conservation Authority will request their consideration to include appropriate design standards and management practices to manage the significant drinking water threat activity of run-off generated from airport de-icing facilities.

Rationale:

Airports and related activities are regulated by the Federal government. The current “built-out” density of the land uses within the IPZ-1s (as well as the relatively small areas of the IPZ-1s), would preclude the opportunity to locate an airport in these areas. The significant threat circumstance applies only to national airports.

In general, provincial legislation cannot be imposed on Federal lands. Therefore, this approach of specifying an action of request to the Airport Authority, has been used.

Implementation will have no negative impact. There is no anticipated economic impact on landowners or the community.

Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Containment Area or Farm Animal Yard

Chemical and/or Pathogen
Existing and/or Future Activities

Lakeshore IPZ-1, Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1
IPZ with vulnerability score >8

Risk Level: Significant

Approach: Land Use Planning

Policy Tool: Land Use Planning - Planning Act, Section 26(1)(Official Plan monitoring) Section 26(9) (Zoning By-law monitoring)

Implementing Body: City of Windsor, Town of Amherstburg, Town of Lakeshore

Legal Effect: Must conform/comply with

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

Significant Risk Circumstance Chemical:

The use of land as livestock grazing or pasturing land. Where livestock density in the farm unit is >1.0 Nutrient Units per acre. (IPZ = 9)

Significant Risk Circumstance Pathogen:

The use of land as livestock grazing or pasturing land for one or more animals. The land use may result in the presence of one or more pathogens in groundwater or surface water. (IPZ > 8)

Policy Text:

Changes in use to permit use of the land for agricultural livestock operations (which would be a significant threat within the subject IPZs) will not be permitted.

Agricultural livestock operation will not be included as a permitted use in the Official Plan designations and zoning By-law zones which apply to the vulnerable areas. Changes in use to permit use of the land agricultural livestock operation (which would be a significant threat within the subject IPZs) will not be permitted

This policy will be reflected in the Official Plans at the time of the next Official Plan five year review exercise as per Section 26(1) of the Planning Act, and in Zoning By-laws within 3 years following the Official Plan update.

Rationale:

Current land uses and zoning would preclude the subject activities. Feedback from the MECP indicates that urban 'livestock' such as hens (not currently permitted) or pigeons, would not be considered relevant in terms of significant threat circumstances. Significant threat is not possible without agricultural livestock. Implementation will have no negative impact, while ensuring that there is no future occurrence of the subject activity. There is no anticipated economic impact on landowners or the community.

This policy prohibits future occurrences of significant threat activities which are not known to exist now or are highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas.

As the land based portion of the Lakeshore IPZ-1 affects only a very narrow protrusion into Lake St. Clair, including a municipal marina and small portion of a municipal park, it is inconceivable that agricultural livestock operations could occur in this IPZ-1. However, as the Clean Water Act requires policies for all significant threats, this area is included in this policy.