

APPENDIX A

ESSEX REGION SOURCE PROTECTION PLAN POLICY DETAILS

Policy No.	TOOL	Sub-threat/Threat	Vulnerable Area	Policy Reference No.	Page No.
1	Prescribed Instrument (Environmental Compliance Approval)	Combined sewer discharge from a stormwater outlet to surface water	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-combinedsewer-1 (Prescribed Instrument)	App A-8
2	Prescribed Instrument (Environmental Compliance Approval)	Sewage treatment plant bypass discharge to surface water, Sewage treatment plant effluent discharges (includes lagoons), Storage of sewage	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WILIAI-bypass/effluent/storage-1 (Prescribed Instrument)	App A-11
3	Prescribed Instrument (Environmental Compliance Approval)	Storage of sewage	Windsor IPZ-1	WI-storage-1 (Prescribed Instrument)	App A-17
4	Prescribed Instrument (Environmental Compliance Approval)	Stormwater management	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-stormwater-1 (Prescribed Instrument)	App A-20
5	Prescribed Instrument (Environmental Compliance Approval)	Industrial effluent discharges	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-industrialeff-1 (Prescribed Instrument)	App A-25
6	Prescribed Instrument (Environmental Compliance Approval)	Industrial effluent discharges	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-industrialeff-2 (Prescribed Instrument)	App A-29
7	Prescribed Instrument (Environmental Compliance Approval)	Sewage treatment plant bypass discharge to surface water, Sewage treatment plant effluent discharges (includes lagoons)	Windsor IPZ-2	W2-bypass/effluent-1 (Prescribed Instrument)	App A-34
8	Prescribed Instrument (Environmental Compliance Approval)	Application of NonAgricultural Source Material (NASM)	Windsor IPZ-2	W2applNASM-1 (Prescribed Instrument)	App A-38

Policy No.	TOOL	Sub-threat/Threat	Vulnerable Area	Policy Reference No.	Page No.
9	Prescribed Instrument (Environmental Compliance Approval)	Storage of Non Agricultural Source Material (NASM)	Windsor IPZ-2	W2storageNASM-I (Prescribed Instrument)	App A-42
10	Prescribed Instrument (Environmental Compliance Approval)	Application of Non Agricultural Source Material (NASM)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	W1LIAI-applicationNASM-I (Prescribed Instrument)	App A-46
11	Prescribed Instrument (Environmental Compliance Approval)	Storage of Non Agricultural Source Material (NASM)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	W1LIAI-storageNASM-I (Prescribed Instrument)	App A-50
12	Prescribed Instrument (Environmental Compliance Approval)	Application of untreated septage to land	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-hauledsewage-I (Prescribed Instrument)	App A-54
13	Prescribed Instrument (Environmental Compliance Approval)	Storage, treatment and discharge of tailings from mines	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	W1LIAI-minetail-I (Prescribed Instrument)	App A-59
14	Prescribed Instrument (Environmental Compliance Approval)	Land disposal of petroleum refining waste, Land disposal of hazardous waste, Land disposal of municipal waste, Land disposal of industrial or commercial waste, Storage of hazardous waste at disposal sites	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	W1LIAI-waste-I (Prescribed Instrument)	App A-64
15	Prescribed Instrument (Pesticides Permits)	Application of pesticide	Windsor IPZ-1, Windsor IPZ-2, Lakeshore IPZ-1 and Amherstburg IPZ-1	WIW2LIAIapplPesticide-I (Prescribed Instrument)	App A-70
16	Prescribed Instrument (Municipal Drinking Water License and Permit)	Handling and storage of fuel - IPZ-1,2,3	All EBAs within IPZs in the Essex Region SPA	SLWAI23-handlestorefuel-I (Prescribed Instrument)	App A-74

Policy No.	TOOL	Sub-threat/Threat	Vulnerable Area	Policy Reference No.	Page No.
17	Prescribed Instrument (Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans)	Handling and storage of fuel - IPZ-1,2,3	All EBAs within IPZs in the Essex Region SPA	SLWA123-handlestorefuel-5 (Prescribed Instrument)	App A-79
18	O. Reg 287/07 Section 26 (Specify Action)	The transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides, fertilizers	All IPZ-1s, IPZ-2s and IPZ-3s	All123-transportcorridor-1 (Specify Action)	App A-84
19	O. Reg 287/07 Section 26 (Specify Action)	The transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides, fertilizers	i) All Events Based Areas (EBAs) for the transportation of fuel within the IPZs in the Essex Region Source Protection Area. ii) IPZ-1s and IPZ-2s for the transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), pesticides/herbicides, fertilizers	All123-transportcorridor-3(Specify Action)	App A-88
20	Clean Water Act Part IV Section 57 (prohibit)	The application of Agricultural Source Material (ASM)	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-applASM-1 (Clean Water Act)	App A-93
21	Clean Water Act Part IV Section 57 (prohibit)	The storage of Agricultural Source Material (ASM)	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WIW2LIAI-storageASM-1 (Clean Water Act)	App A-97
22	Clean Water Act Part IV Section 57 (prohibit)	The application of Non Agricultural Source Material (NASM)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WILIAI-appINASM-1 (Clean Water Act)	App A-101

Policy No.	TOOL	Sub-threat/Threat	Vulnerable Area	Policy Reference No.	Page No.
23	Clean Water Act Part IV Section 57 (prohibit)	The storage of Non Agricultural Source Material (NASM)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WILIAI-storageNASM-1 (Clean Water Act)	App A-105
24	Clean Water Act Part IV Section 57 (prohibit)	The storage of Road Salt	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WILIAI-storageroadsalt-1 (Clean Water Act)	App A-109
25	Clean Water Act Part IV Section 57 (prohibit)	The storage of Snow	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WILIAI-storage snow-1 (Clean Water Act)	App A-112
26	Clean Water Act Part IV Section 58 (risk management plan)	Storage of Hazardous or Liquid Industrial Waste	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	WILIAI-hazardouswaste (Clean Water Act)	App A-116
27	Clean Water Act Part IV Section 58 (risk management plan)	The application of Non Agricultural Source Material (NASM)	Windsor IPZ-2	W2-appINASM-1 (Clean Water Act)	App A-120
28	Clean Water Act Part IV Section 58 (risk management plan)	The storage of Non Agricultural Source Material (NASM)	Windsor IPZ-2	W2-storageNASM-1 (Clean Water Act)	App A-124
29	Clean Water Act Part IV Section 58 (risk management plan)	The application of Pesticide	Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore IPZ-1	WIW2AILIapplPesticide-1 (Clean Water Act)	App A-129
30	Clean Water Act Part IV Section 58 (risk management plan)	Storage of Pesticide	Windsor IPZ-1, Amherstburg IPZ-1, and Lakeshore (Belle River) IPZ-1	WIAILI-storagepesticide-1 (Clean Water Act)	App A-134
31	Clean Water Act Part IV Section 58 (risk management plan)	The handling and storage of Fuel	All EBAs within IPZs in the Essex Region SPA	SLWAI23-handlestorefuel-1 (Clean Water Act)	App A-138
32	Clean Water Act Part IV Section 59 (restricted land use)	The handling and storage of Fuel	All EBAs within IPZs in the Essex Region SPA	AI123-handlestorefuel-1 (Clean Water Act)	App A-143

Policy No.	TOOL	Sub-threat/Threat	Vulnerable Area	Policy Reference No.	Page No.
33	Clean Water Act Part IV Section 59 (restricted land use)	All activities that are subject to Sections 57 (Prohibition) or 58 (Risk Management Plan) policies	Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore (Belle River) IPZ-1	WIW2A1I1-allactivities-1 (Clean Water Act)	App A-147
34	O. Reg 287/07 Section 26 (Specify Action)	Sewage treatment plant bypass discharge to surface water	Windsor IPZ-2	W2bypass-1 (Specify Action)	App A-152
35	O. Reg 287/07 Section 26 (Specify Action)	Sewage treatment plant effluent discharges (includes lagoons)	Windsor IPZ-2	W2effluent-1 (Specify Action)	App A-155
36	O. Reg 287/07 Section 26 (Specify Action)	Combined Sewer Overflows (CSOs), bypass, effluent discharge	Windsor IPZ-1 and Windsor IPZ-2	WIW2-combinedsewerbypasseffluent-1 (Specify Action)	App A-159
37	O. Reg 287/07 Section 26 (Govern Research)	Combined Sewer Overflows (CSOs)	Windsor IPZ-1 and Windsor IPZ-2	WIW2-combinedsewer-2 (Govern Research)	App A-164
38	Clean Water Act Section 22(7) (Education and Outreach)	Combined Sewer Overflows (CSOs), Stormwater management	Windsor IPZ-1 and Windsor IPZ-2	WIW2-combinedsewerstorm-3 (E&O)	App A-167
39	O. Reg 287/07 Section 26 (Stewardship)/ Clean Water Act Section 22(7) (Incentive)	Combined Sewer Overflows (CSOs), bypass, effluent discharge	Windsor IPZ-1 and Windsor IPZ-2	WIW2-combinedsewerbypasseffluent-4 (Stewardship/ Incentive)	App A-171
40	O. Reg 287/07 Section 26 (Specify Action)	Storage of sewage (e.g.: treatment plant tanks)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1	W1L1A1storage-1 (Specify Action)	App A-176
41	O. Reg 287/07 Section 26 (Specify Action)	The handling and storage of fuel	All EBAs within IPZs in the Essex Region SPA	SLWA123-handlestorefuel-1 (Specify Action)	App A-181
42	Land Use Planning	Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Containment Area or Farm Animal Yard	Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1	WIW2A1-livgraz-1 (Planning)	App A-185

Policy No.	TOOL	Sub-threat/Threat	Vulnerable Area	Policy Reference No.	Page No.
43	Clean Water Act Section 22(7) (Education and Outreach)	Various	All IPZs	All IPZs (E&O)	App A-189
44	Clean Water Act Section 22(7) (Education and Outreach)	Various	HVAs and SGRAs and rural areas with private wells	HVAs, SGRAs, Wells -I (E&O)	App A-194
45	O. Reg 287/07 Section 26 (Stewardship)/ Clean Water Act Section 22(7) (Incentive)	The handling and storage of fuel	All EBAs within IPZs in the Essex Region SPA	SLWAI 23-handlestorefuel-I (Stewardship/ Incentive)	App A-199
46	O. Reg 287/07 Section 26 (Stewardship)/ Clean Water Act Section 22(7) (Incentive)	Various	All IPZs, HVAs and SGRAs and rural areas with private wells	All IPZs, HVAs, SGRAs, Wells –I (Stewardship/ Incentive)	App A-204
47	O. Reg 287/07 Section 26 (Specify Action)	Management of runoff that contains chemicals used in the de-icing of aircraft	Windsor IPZ- I, Amherstburg IPZ- I and Lakeshore (Belle River) IPZ- I	WIAI LI -deicair (Specify Action)	App A-210
48	Clean Water Act Section 22(7) (Education and Outreach)	Use of land as livestock grazing or pasturing land, an outdoor containment area or farm animal yard	Lakeshore (Belle River) IPZ- I	LI -livgraz- I (E&O)	App A-213
49	Clean Water Act Section 22(7) (Education and Outreach)	Issue: Microcystin-LR	Target Area: Essex Region Source Protection Area	ERSPA- microcystinLR- I (E&O)	App A-216
50	Clean Water Act Section 22(2)-7	Issue: Microcystin-LR	Target Area: Lake Erie drinking water intakes and tributaries	LE- microcystinLR- I (Clean Water Act)	App A-220

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
Policy Number	I
Policy Reference Number	WIW2L1A1-combinedsewer-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Combined sewer discharge from a stormwater outlet to surface water
Significant Risk Circumstances	<ul style="list-style-type: none"> The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m³ (annual basis). This applies to an <u>IPZ-1 of vulnerability score 9</u>, for which there are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 13 chemicals for a rate more than 50,000 m³. The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an <u>IPZ-2 of vulnerability score 8.1</u>, for which there are 2 chemicals of concern. The combined sewer may discharge sanitary sewage containing human waste to surface water, and the discharge may result in the presence of pathogen(s) in surface water, for an <u>IPZ-1 of vulnerability score 9</u> and an <u>IPZ-2 of vulnerability score 8.1</u>. There is no quantity threshold. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Future Activities
Current Land Use	Windsor IPZ-1 : Residential, municipal parks, minimal commercial Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional

	Amherstburg IPZ-1: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ-1: Marina and Municipal park
Approach	Through Prescribed Provincial Instrument, prohibit new combined sewers
Policy Text	<p>No new combined sewers shall be permitted in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p> <p>The above applies to the future significant threat of combined sewer discharge from a stormwater outlet to surface water, in the vulnerable areas mentioned above. This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
Rationale	<p>New combined sewers are not permitted by the MOE, as per the ‘Guidelines for the Design of Sanitary Sewer Systems’ (MOE, July 1985). The prohibiting of new combined sewers (by not approving Environmental Compliance Approvals (Certificates of Approval) for new combined sewers) is consistent with and complies with the decision that the MOE has already taken. Therefore no new combined sewers shall be permitted in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p> <p>Therefore the implementation of this policy is expected to have no negative effect, while ensuring that sources of drinking water are adequately protected.</p> <p>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 in implementing this policy, including monitoring. This is consistent with Provincial Direction under the Clean Water Act.</p>
Policy Tool	Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), under the governing legislation
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Monitoring Policy Number	IM
Monitoring Policy Reference Number	WIW2LIAI - combinedsewer-2 (Monitoring Policy)
Sub Threats	Combined sewer discharge from a stormwater outlet to surface water
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WIW2LIAI-combinedsewer-I (Prescribed Instrument).</p> <p>The above applies to the future significant threat of combined sewer discharge from a stormwater outlet to surface water, in the vulnerable areas:</p> <p>Windsor IPZ-I and IPZ-2 Lakeshore (Belle River) IPZ-I Amherstburg IPZ-I.</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>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 in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that no Environmental Compliance Approvals (Certificates of Approval) were issued for new combined sewers.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Status of Policy	Approved



Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I
Policy Number	2
Policy Reference Number	WILIAI-bypass/effluent/storage-I (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons) • Storage of sewage (e.g.: treatment plant tanks)
Significant Risk Circumstances	<p>The following significant threat circumstances apply to an IPZ-I of vulnerability score 9</p> <ul style="list-style-type: none"> • The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m³ (annual basis). There are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 13 chemicals for a rate more than 50,000 m³. • The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The discharge may result in the presence of pathogen(s) in surface water. There is no quantity threshold. • The wastewater treatment facility discharges treated sanitary sewage directly to land or surface water through a means other than a designed bypass. The facility is designed to discharge at an average daily rate of more than 17,500 m³ (annual basis). There are 7 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 22 chemicals for a rate more than 50,000 m³. • The wastewater treatment facility discharges to surface water through a means other than a designed bypass. The discharge may result in the presence of pathogen(s) in surface water. There is no quantity threshold. • The system is a sewage treatment tank, or a sewage treatment tank in either a wastewater collection or treatment facility. Any part of the tank is at or above grade. A spill from the tank may result in the presence of pathogen(s) in surface

	<p>water. There is no quantity threshold.</p> <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-I : Residential, municipal parks, minimal commercial</p> <p>Amherstburg IPZ-I : Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Lakeshore (Belle River) IPZ-I : Marina and Municipal park</p>
Approach	<p>Through Prescribed Provincial Instrument, prohibit existing (none known to exist) and future wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass and prohibit sewage treatment tanks in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I. The one exception is the storage, in the Windsor IPZ-I, of storm water and sewage from combined sewers, such as in a Retention Treatment Basin (RTB), for the purpose of reducing combined sewer overflows (CSOs). This exception is proposed to be managed through the policy: WI storage-I (Prescribed Instrument).</p>
Policy Text	<p>No wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I shall be permitted.</p> <p>No sewage treatment tanks in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I shall be permitted, with the exception of storage, in the Windsor IPZ-I, of future storm water and sewage from combined sewers, for the purpose of reducing combined sewer overflows (CSOs).</p> <p>The above applies to existing (none known to exist) and future significant threats of sewage treatment plant bypass to discharge to surface water, sewage treatment plant effluent discharges and the storage of sewage, in the vulnerable areas mentioned above.</p> <p>This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for these activities.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
Rationale	<p>These activities are not known to exist nor be proposed in these vulnerable areas. The existing and permitted land uses would likely preclude any consideration of these</p>

activities in the subject vulnerable areas. 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 sources of drinking water are adequately protected.

Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.

This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be 'existing' threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.

Note that an Environmental Compliance Approval (Certificate of Approval) under the governing legislation is required for storage tank only if the daily capacity is equal to or more than 10,000 L. The draft policy approach to prohibit storage tanks of less than this capacity was discussed with municipal staff. Since the Clean Water Act cannot be used for activities requiring an Environmental Compliance Approval (Certificate of Approval) under the governing legislation or for activities subject to the Building Code, the Municipal Act is the only means of prohibiting this activity. Refer to the policy WILIA|storage-1 (Specify Action) to prohibit storage tanks of capacity less than 10,000 L.

An exception to the above is the storage of storm water and sewage in the Windsor IPZ-1 in order to reduce combined sewer overflow, such as in a Retention Treatment Basin (RTB). This type of storage, although currently does not exist, may occur in the future and is proposed to be managed through the policy: W1 storage-1 (Prescribed Instrument).

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 in implementing this policy, including monitoring. This is consistent with Provincial Direction under the Clean Water Act.

Policy Tool	Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), under the governing legislation
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Monitoring Policy Number	2M
Monitoring Policy Reference Number	WILIAI-bypass/effluent/storage-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons) • Storage of sewage (e.g.: treatment plant tanks)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI- bypass/effluent/storage-I (Prescribed Instrument) and WI-storage-I (Prescribed Instrument).</p> <p>The above applies to the existing (none known to exist) and future significant threats of sewage treatment plant bypass discharge to surface water, sewage treatment plant effluent discharges and the storage of sewage, in the vulnerable areas:</p> <p>Windsor IPZ-I Lakeshore (Belle River) IPZ-I Amherstburg IPZ-I</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>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 in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that no Environmental Compliance Approvals (Certificates of Approval) were issued for wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass (effluent discharge) and sewage treatment tanks (in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I) with the exception of storage in the Windsor IPZ-I which is specifically meant to reduce combined sewer overflow.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>

Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Status of Policy	Approved

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-2
Policy Number	7
Policy Reference Number	W2-bypass/effluent-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons)
Significant Risk Circumstances	<p>The following significant threat circumstances apply to an IPZ-2 of vulnerability score 8.1:</p> <ul style="list-style-type: none"> • The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 2 chemicals of concern: mercury or one or more of its compounds, and one or more PCBs (polychlorinated biphenyls) • The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The discharge may result in the presence of pathogen(s) in surface water, in an IPZ-2 of vulnerability score 8.1. There is no quantity threshold • The wastewater treatment facility discharges treated sanitary sewage directly to land or surface water through a means other than a designed bypass. The facility is designed to discharge at an average daily rate of more than 50,000 m³ (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 4 chemicals of concern: antimony or one or more of its compounds, arsenic or one or more of its compounds, MCPA (2-methyl-4-chlorophenoxyacetic acid) and mercury or one or more of its compounds. • The wastewater treatment facility discharges to surface water through a means other than a designed bypass. The discharge may result in the presence of pathogen(s) in surface water, for an IPZ-2 of vulnerability score 8.1. There is no quantity threshold. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While</p>

	<p>every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Future Activities
Current Land Use	Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Through Prescribed Provincial Instrument, manage wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass in the Windsor IPZ-2.
Policy Text	<p>In reviewing Environmental Compliance Approvals (Certificates of Approval) for expanded or new wastewater treatment facilities that discharge to surface water by means of designed bypass or other than designed bypass in the Windsor IPZ-2, the Ministry of Environment shall ensure that the Environmental Compliance Approvals (Certificates of Approval) adequately manage these activities in order to adequately protect future sources of drinking water. The above applies to the future significant threat of sewage treatment plant bypass discharge to surface water and sewage treatment plant effluent discharges, in the vulnerable area mentioned above.</p> <p>The date of compliance for future threats is when Source Protection Plan takes place.</p>
Rationale	<p>These activities exist in the Windsor IPZ-2, and are regulated through Environmental Compliance Approvals (Certificates of Approval) under the Ontario Water Resources Act. It is proposed that any future Environmental Compliance Approval (Certificate of Approval) for expanded or new wastewater treatment facilities be issued such that the significant threat activities are adequately managed to protect sources of drinking water, and be followed in conjunction with policies W2bypass-1 (SpecifyAction) and W2effluent-1 (SpecifyAction).</p> <p>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 in implementing this policy, including monitoring. This is consistent with Provincial Direction under the Clean Water Act.</p>
Policy Tool	Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), under the governing legislation
Municipality Policy Applies to	City of Windsor
Implementing Body	MOE
Legal Effect	Must conform/comply with



Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Monitoring Policy Number	7M
Monitoring Policy Reference Number	W2-bypass/effluent-3 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy W2-bypass/effluent-1 (Prescribed Instrument).</p> <p>The above applies to the future significant threat of sewage treatment plant bypass discharge to surface water and sewage treatment plant effluent discharges, in the vulnerable area:</p> <p>Windsor IPZ-2.</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the MOE shall confirm that sewage effluent discharge and bypass in the Windsor IPZ-2 are managed such that the requirements of the Environmental Compliance Approval (Certificate of Approval) for new/expanded facilities, which include measures to protect sources of drinking water, are met.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the MOE will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor
Implementing Body	MOE
Status of Policy	Approved



Threat	The application of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ-2
Policy Number	8
Policy Reference Number	W2applNASM-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Application of Non Agricultural Source Material (NASM)
Significant Risk Circumstances	<ul style="list-style-type: none"> The application of NASM (no volume threshold) that contains material generated by a meat plant or sewage works and the application could result in pathogen(s) in the surface water (IPZ-2 of vulnerability score 8.1) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing (none identified) and Future Activities
Current Land Use	Windsor IPZ-2: Residential, Commercial, Industrial, Parks, Public Works, Institutional
Approach	Through Prescribed Provincial Instrument, manage existing (none currently identified) and future application of non-agricultural source material (NASM) in the Windsor IPZ-2.
Policy Text	<p>In reviewing Environmental Compliance Approvals (Certificates of Approval) applications under the Environmental Protection Act for the application of non-agricultural source material (NASM) in the 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.</p> <p>The Source Protection Committee recommends that the terms and conditions include setbacks to watercourses, timing restrictions (including consideration of weather events), spills/runoff management and other measures necessary to manage the significant threat activity in order to protect sources of drinking water.</p> <p>The above applies to the existing and future significant threat of the application of Non Agricultural Source Material (NASM) in the vulnerable areas mentioned above.</p>

	<p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
<p>Rationale</p>	<p>This activity may exist now (none known to exist) or in the future in the Windsor IPZ-2, given large areas of commercial and industrial lands, and if so, it should be able to be managed through the Prescribed Instrument or Clean Water Act, whichever is applicable. At the time the policies were developed, none of these activities were known or suspected to be in existence; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>An Environmental Compliance Approval (Certificate of Approval) issued by the MOE under Part V of the Environmental Protection Act is required in order to apply NASM to land. A separate Environmental Compliance Approval (Certificate of Approval) is required for each specific site (Waste disposal site, Organic Soil Conditioning Site) and for the hauler/spreader (Organic Waste Management System).</p> <p>For NASM application on agricultural property, a NASM plan under the Nutrient Management Act (NMA) is required; however there are no agricultural lands in the subject vulnerable area. For application of NASM that may not fall under the EPA or NMA, the Clean Water Act may be used to regulate the threat.</p> <p>There are standards for waste disposal sites specified in the O. Reg. 347 under the EPA including prohibiting the discharge of drainage that may cause pollution. An Environmental Compliance Approval (Certificate of Approval) under the EPA, for the storage and application of NASM, may contain conditions including the applicable service area, control measures/inspections, maximum volume of waste allowed per day and per year, any necessary conditions for design and operation of a site, environmental monitoring conditions for the site, including leachate, surface water, groundwater, biomonitoring and weather conditions, and the treatment of contaminated surface water. According to Section 15 of O. Reg. 347, an organic soil conditioning site (where NASM could be stored and applied) must be at least 300 feet away from an individual dwelling, and 1500 feet away from a residential development, and an “adequate” distance away from watercourses, besides other setback requirements (source of information:</p> <p>http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900347_e.htm).</p> <p>The MOE has published a “Guide for Applying for Approval of a Hauled Sewage (Septage) or Processed Organic Waste (Biosolids) Waste Disposal Site” (November 1999) that outlines the extensive documentation required to support an application for an Environmental Compliance Approval (Certificate of Approval). The supporting</p>

	<p>information includes, but is not limited to: source and type of material to be applied, waste analysis report, soil analysis report, terrain description, surface physiology and geology, depth to water table, water wells, separation distances, application areas, crops, schedule of use, notification to adjacent landowners, and confirmation from the municipality that NASM can be applied (i.e. no municipal restrictions).</p> <p>As described above, the Environmental Protection Act and its regulations have requirements that relate to the protection of water, and further the Environmental Compliance Approval (Certificate of Approval) may contain conditions that prevent the pollution of water.</p> <p>The implementation of this policy is expected to have no negative effect, while ensuring that sources of drinking water are adequately protected from the application of NASM in the Windsor IPZ-2.</p> <p>The MOE 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.</p>
Policy Tool	Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act
Municipality Policy Applies to	City of Windsor
Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	<p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The application of Non Agricultural Source Material (NASM)
Monitoring Policy Number	8M
Monitoring Policy Reference Number	W2appINASM-2 (Monitoring Policy)
Sub Threats	Application of Non Agricultural Source Material (NASM)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy W2appINASM-I (Prescribed Instrument).</p> <p>The above applies to the existing and future significant threat of the application of Non Agricultural Source Material (NASM), in the vulnerable areas:</p> <p>Windsor IPZ-2.</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body under the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that the Environmental Compliance Approvals (Certificates of Approval) issued for the application of non-agricultural source material in the Windsor IPZ-2 ensure the protection of sources of drinking water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor
Implementing Body	MOE
Status of Policy	Approved

Threat	The handling and storage of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ-2
Policy Number	9
Policy Reference Number	W2storageNASM-I (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Storage of Non Agricultural Source Material (NASM)
Significant Risk Circumstances	<ul style="list-style-type: none"> The NASM (no volume threshold) contains material generated by a meat plant (e.g. slaughter plant, meat packaging, defined as per O. Reg. 31/05 under the Food Safety and Quality Act) when any portion of NASM is stored at or above grade, and a spill or runoff could result in pathogen/s in the surface water (for an IPZ-2 of vulnerability score 8.1). <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing (none identified) and Future Activities
Current Land Use	Windsor IPZ-2: Residential, Commercial, Industrial, Parks, Public Works, Institutional
Approach	Through Prescribed Provincial Instrument, manage existing (none currently identified) and future storage of non-agricultural source material (NASM) in the Windsor IPZ-2.
Policy Text	<p>In reviewing Environmental Compliance Approvals (Certificates of Approval) applications under the Environmental Protection Act for the storage of non-agricultural source material (NASM) in the 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.</p> <p>The Source Protection Committee recommends that the terms and conditions in the Environmental Compliance Approvals (Certificates of Approval) include design and construction requirements, setbacks to watercourses, spills/runoff management and other measures necessary to manage the significant threat activity in order to protect sources of drinking water.</p>

	<p>The above applies to the existing and future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable areas mentioned above.</p> <p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
<p>Rationale</p>	<p>This activity may exist now (none known to exist) or in the future in the Windsor IPZ-2, given large areas of commercial and industrial lands, and if so, it should be able to be managed through the Prescribed Instrument or Clean Water Act, whichever is applicable. At the time the policies were developed, none of these activities were known or suspected to be in existence; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>The Environmental Compliance Approval (Certificate of Approval) under the Environmental Protection Act (EPA) is required for the storage of NASM at waste disposal and organic soil conditioning sites. For NASM storage on agricultural property, a NASM plan under the Nutrient Management Act (NMA) is required; however there are no agricultural lands in the subject vulnerable area. For storage of NASM that may not fall under the EPA or NMA, the Clean Water Act may be used to regulate the threat.</p> <p>There are standards for waste disposal sites specified in the O. Reg. 347 under the EPA including prohibiting the discharge of drainage that may cause pollution. An Environmental Compliance Approval (Certificate of Approval) under the EPA, for the storage and application of NASM, may contain conditions including the applicable service area, control measures/inspections, maximum volume of waste allowed per day and per year, any necessary conditions for design and operation of a site, environmental monitoring conditions for the site, including leachate, surface water, groundwater, biomonitoring and weather conditions, and the treatment of contaminated surface water. According to Section 15 of O. Reg. 347, an organic soil conditioning site (where NASM could be stored and applied) must be at least 300 feet away from an individual dwelling, and 1500 feet away from a residential development, and an “adequate” distance away from watercourses, besides other setback requirements (source of information:</p> <p>http://www.elaws.gov.on.ca/html/regs/english/elaws_regs_900347_e.htm).</p> <p>As described above, the Environmental Protection Act and its regulations have requirements that relate to the protection of water, and further the Environmental Compliance Approval (Certificate of Approval) may contain conditions that prevent the pollution of water.</p>

	<p>The implementation of this policy is expected to have no negative effect, while ensuring that the sources of drinking water are adequately protected from storage of NASM in the Windsor IPZ-2.</p> <p>The MOE 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.</p>
Policy Tool	Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act
Municipality Policy Applies to	City of Windsor
Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	<p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of Non Agricultural Source Material (NASM)
Monitoring Policy Number	9M
Monitoring Policy Reference Number	W2storageNASM-2 (Monitoring Policy)
Sub Threats	Storage of Non Agricultural Source Material (NASM)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy W2storageNASM-1 (Prescribed Instrument).</p> <p>The above applies to the existing and future significant threat of the storage of Non Agricultural Source Material (NASM) in the vulnerable area:</p> <p>Windsor IPZ-2.</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body under the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that the Environmental Compliance Approvals (Certificates of Approval) issued for the storage of non-agricultural source material in the Windsor IPZ-2 ensure the protection of sources of drinking water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor
Implementing Body	MOE
Status of Policy	Approved

Threat	The handling and storage of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I
Policy Number	11
Policy Reference Number	WILIAI-storageNASM-I (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Storage of Non Agricultural Source Material (NASM)
Significant Risk Circumstances	<ul style="list-style-type: none"> • The mass of nitrogen in NASM >5 tonnes, chemicals of concern being nitrogen or phosphorus (total), for NASM stored at or above grade in a permanent/temporary facility or a portion of NASM is stored above grade in permanent facility and a spill or runoff could result in the chemical of concern in the surface water (for an IPZ-I of vulnerability score 9) • The NASM (no volume threshold) contains material generated by a meat plant (e.g. slaughter plant, meat packaging, defined as per O. Reg. 31/05 under the Food Safety and Quality Act) when any portion of NASM is stored at or above grade, and a spill or runoff could result in pathogen/s in the surface water (for an IPZ-I of vulnerability score 9). <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ-I : Residential, municipal parks, minimal commercial Amherstburg IPZ-I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ-I: Marina and Municipal park
Approach	Through Prescribed Provincial Instrument, prohibit existing (none known to exist) and future storage of non-agricultural source material (NASM) in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I.

<p>Policy Text</p>	<p>No storages of non-agricultural source material (NASM) shall be permitted in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I.</p> <p>This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable areas mentioned above.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>This activity is not known to exist nor be proposed in the subject vulnerable areas. Therefore the prohibition of these activities in the future in the respective subject vulnerable areas 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, in regard to the storage of NASM.</p> <p>Existing threats are activities that already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>The MOE 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.</p>
<p>Policy Tool</p>	<p>Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act</p>
<p>Municipality Policy Applies to</p>	<p>City of Windsor, Town of Amherstburg, Town of Lakeshore</p>

Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of Non Agricultural Source Material (NASM)
Monitoring Policy Number	IIM
Monitoring Policy Reference Number	WILIAI-storageNASM-2 (Monitoring Policy)
Sub Threats	Storage of Non Agricultural Source Material (NASM)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-applicationNASM-1 (Prescribed Instrument).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable areas:</p> <p>Windsor IPZ-1</p> <p>Lakeshore (Belle River) IPZ-1</p> <p>Amherstburg IPZ – 1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body under the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that no storages of non-agricultural source material occur in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Status of Policy	Approved



Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
Policy Number	12
Policy Reference Number	WIW2LIA1-hauledsewage-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Application of septage to land
Significant Risk Circumstances	<ul style="list-style-type: none"> • The application of hauled sewage to an area of more than 10 ha (chemicals of concern: nitrogen or phosphorus) in an <u>IPZ-1 of V Score 9</u>. • The application of hauled sewage in any amount in an <u>IPZ-1 of V Score 9</u> and an <u>IPZ-2 of V score 8.1</u>. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-1 : Residential, municipal parks, minimal commercial</p> <p>Amherstburg IPZ-1: Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional</p> <p>Lakeshore (Belle River) IPZ-1: Marina and Municipal park</p>
Approach	Through Prescribed Provincial Instrument, prohibit existing (none known to exist) and future applications of hauled sewage in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.
Policy Text	No application of hauled sewage shall be permitted in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.

	<p>This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.</p> <p>The above applies to the existing (none known to exist) and future significant threat of land disposal of hauled sewage, in the vulnerable areas mentioned above.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>This activity is not known to exist nor be proposed in the subject vulnerable areas. Therefore the prohibition of these activities in the respective subject vulnerable areas 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, in regard to waste disposal sites.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>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. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>The MOE 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.</p>
<p>Policy Tool</p>	<p>Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act</p>
<p>Municipality Policy Applies to</p>	<p>City of Windsor, Town of Amherstburg, Town of Lakeshore</p>
<p>Implementing Body</p>	<p>MOE</p>



Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Monitoring Policy Number	I2M
Monitoring Policy Reference Number	WIW2LIAI-hauledsewage-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Application of septage to land
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WIW2LIAI-hauledsewage-1 (Prescribed Instrument).</p> <p>The above applies to the existing (none known to exist) and future significant threat of land disposal of petroleum refining waste, land disposal of hazardous waste, land disposal of municipal waste, land disposal of industrial or commercial waste and the storage of hazardous waste at disposal sites, in the vulnerable areas:</p> <p>Windsor IPZ-1 Lakeshore (Belle River) IPZ-1 Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body under the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that no Environmental Compliance Approvals (Certificates of Approval) are issued for hauled sewage disposal sites in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.

Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Status of Policy	Approved

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Vulnerable Area	Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I
Policy Number	13
Policy Reference Number	WILIAI-minetail-I (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Storage, treatment and discharge of tailings from mines
Significant Risk Circumstances	<ul style="list-style-type: none"> 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 (chemicals of concern: arsenic, cadmium, lead, mercury or any of their compounds, chromium VI) in an <u>IPZ-I of V Score 9</u>. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-I : Residential, municipal parks, minimal commercial</p> <p>Amherstburg IPZ-I: Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Lakeshore (Belle River) IPZ-I: Marina and Municipal park</p>
Approach	Through Prescribed Provincial Instrument, prohibit existing (none known to exist) and future storage, treatment and discharge of mine tailings in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I.
Policy Text	<p>No storage, treatment or discharge of mine tailings shall be permitted to be established in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I.</p> <p>This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.</p>

	<p>The above applies to the existing (none known to exist) and future significant threat of the storage, treatment and discharge of tailings from mines, in the vulnerable areas mentioned above.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>These activities are not known to exist nor be proposed in the subject vulnerable areas. Therefore the prohibition of these activities in the future in the respective subject vulnerable areas 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, in regard to waste disposal sites.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas, which are small. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, the small areas, or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>The MOE is normally the approval body for Environmental Compliance Approvals (Certificates of Approval) – sewage works, under the legislation governing this activity, and 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.</p>
<p>Policy Tool</p>	<p>Prescribed Instruments – Environmental Compliance Approval (Certificates of Approval), under the governing legislation and under Section 39 Part V, the Environmental Protection Act</p>

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Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Monitoring Policy Number	13M
Monitoring Policy Reference Number	WILIAI-minetail-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> Storage, treatment and discharge of tailings from mines
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-minetail-1 (Prescribed Instrument).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage, treatment and discharge of tailings from mines, in the vulnerable areas:</p> <p>Windsor IPZ-1</p> <p>Lakeshore (Belle River) IPZ-1</p> <p>Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body for Environmental Compliance Approvals (Certificates of Approval) – sewage works, under the legislation governing this activity, and the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that no Environmental Compliance Approvals (Certificates of Approval) were issued for the storage, treatment and discharge of tailings from mines in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.

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Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Status of Policy	Approved

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Vulnerable Area	Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I
Policy Number	14
Policy Reference Number	W11A1-waste-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Land disposal of petroleum refining waste • Land disposal of hazardous waste • Land disposal of municipal waste • Land disposal of industrial or commercial waste • Storage of hazardous waste at disposal sites
Significant Risk Circumstances	<ul style="list-style-type: none"> • The land filling of the following wastes, each on an area of more than 10 ha: petroleum refinery waste (chemicals of concern: BTEX, PAHs), hazardous, liquid industrial or processed liquid industrial waste (arsenic or its compounds, chromium VI, uranium), municipal waste (arsenic or its compounds, uranium), industrial waste or commercial waste (arsenic or its compounds, uranium) in an <u>IPZ-I of V Score 9</u>. • Hazardous waste or liquid industrial waste in any amount is stored at or above grade, or a portion is stored below grade (chemicals of concern: arsenic, chromium VI) in an <u>IPZ-I of V Score 9</u>, for waste storage sites that are subject to an Environmental Compliance Approval <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-I : Residential, municipal parks, minimal commercial</p> <p>Amherstburg IPZ-I : Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Lakeshore (Belle River) IPZ-I : Marina and Municipal park</p>

<p>Approach</p>	<p>Through Prescribed Provincial Instrument, prohibit existing (none known to exist) and future waste disposal sites related to the landfilling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste, or the storage of hazardous waste or liquid industrial waste in the Windsor IPZ-I and Lakeshore (Belle River) IPZ-I.</p> <p>Through Prescribed Provincial Instrument, prohibit future and manage existing waste disposal sites related to the landfilling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste, or the storage of hazardous waste or liquid industrial waste in the Amherstburg IPZ-I.</p>
<p>Policy Text</p>	<p>No existing (none known to exist) and future waste disposal sites shall be permitted to be established in the Windsor IPZ-I and Lakeshore (Belle River) IPZ-I, at which the land filling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste, or the storage of hazardous waste or liquid industrial waste could take place.</p> <p>No future waste disposal sites at which the land filling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste, or the storage of hazardous waste or liquid industrial waste could take place in the Amherstburg IPZ-I shall be permitted.</p> <p>This policy applies to Environmental Compliance Approvals (Certificates of Approval) administered by the Ministry of Environment for this activity.</p> <p>In the Amherstburg IPZ-I, the Ministry of Environment shall ensure that the existing and amended or updated Environmental Compliance Approvals (Certificates of Approval) include terms and conditions that manage the significant threat activity in order to protect sources of drinking water. For the purpose of this policy, in the Amherstburg IPZ-I, existing threat activities shall include activities related to a complete application made under the Planning Act or Condominium Act or the Building Code or for an Environmental Compliance Approval, if the application is made before the Source Protection Plan takes effect.</p> <p>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.</p> <p>Sites that do not require an environmental compliance approval are exempt from this policy and are subject to Policy No. 26 policy (WILIAI-hazardouswaste-I (Clean Water Act)), which requires a Risk Management Plan.</p> <p>The date of compliance for prohibiting existing and future threats is when the Source Protection Plan takes effect.</p>

	<p>For managing existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
<p>Rationale</p>	<p>In most cases, waste disposal sites are regulated directly by the Ministry of the Environment via environmental compliance approvals; however, the short-term storage of some wastes where they are generated is exempt (e.g., waste from glassmaking, liquid waste from a hospital, waste chemicals from photo finishing. For those instances which are exempt from environmental compliance approvals, a Risk Management Plan is required and is addressed in a complementary policy (WILIAI-hazardouswaste-1 (Clean Water Act)).</p> <p>These activities are not known to exist nor to be proposed in these 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 implementation of this policy is expected to have no negative effect, while ensuring that the sources of drinking water are adequately protected, in regard to waste disposal sites.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect (in the Windsor IPZ-1 and Lakeshore (Belle River) IPZ-1) based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>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</p>

	<p>impact of the works (water quality, not quantity), reporting on incidents, and provision of contingencies to prevent and deal with accidental spills. The MOE must ensure that the terms and conditions specified in the Environmental Compliance Approval (Certificate of Approval) ensure that any existing waste disposal sites in the Amherstburg IPZ-I is managed in order to protect sources of drinking water.</p> <p>The MOE 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.</p> <p>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-I. The land based portion of the IPZ-I affects only a very narrow protrusion into Lake St. Clair, including a municipal marina and small portion of a municipal park.</p>
Policy Tool	Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE, City of Windsor, Town of Amherstburg,
Legal Effect	Must conform/comply with
Compliance Date	<p>The date of compliance for prohibiting existing and future threats is when the Source Protection Plan takes effect.</p> <p>For managing existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Monitoring Policy	I4M
Monitoring Policy Reference Number	WILIAI-waste-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Land disposal of petroleum refining waste • Land disposal of hazardous waste • Land disposal of municipal waste • Land disposal of industrial or commercial waste • Storage of hazardous waste at disposal sites
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-waste-1 (Prescribed Instrument).</p> <p>The City of Windsor and the Town of Amherstburg shall document the actions taken to reflect policy WILIAI-waste-1 (Prescribed Instrument) in Official Plans and Zoning By-laws.</p> <p>The above applies to the existing and future significant threat of the landfilling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste, or the storage of hazardous waste or liquid industrial waste, in the vulnerable areas:</p> <p>Windsor IPZ-1</p> <p>Lakeshore (Belle River) IPZ-1</p> <p>Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body under the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that no new Environmental Compliance Approvals (Certificates of Approval) were issued for the land filling of petroleum refinery waste, hazardous, liquid industrial or processed liquid industrial waste or municipal waste, or the storage of hazardous</p>

	<p>waste or liquid industrial waste (in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I).</p> <p>For the existing waste disposal sites in the Amherstburg IPZ-I, the MOE must ensure that the terms and conditions specified in the Environmental Compliance Approval (Certificate of Approval) ensure that the site is managed to protect sources of drinking water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
<p>Monitoring Policy Compliance Date</p>	<p>By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.</p>
<p>Municipality Policy Applies to</p>	<p>City of Windsor, Town of Amherstburg, Town of Lakeshore</p>
<p>Implementing Body</p>	<p>MOE, City of Windsor, Town of Amherstburg</p>
<p>Status of Policy</p>	<p>Approved</p>

Threat	The application of Pesticide
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2, Lakeshore IPZ-1 and Amherstburg IPZ-1
Policy Number	15
Policy Reference Number	WIW2LIAIapplPesticide-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Application of pesticide
Significant Risk Circumstances	<ul style="list-style-type: none"> The total pesticide application area is > 1 ha, chemicals of concern being MCPA and mecoprop, in an IPZ-1 of vulnerability score 9 The total pesticide application area is > 10 ha, chemicals of concern being atrazine, dicamba, 2,4-D, dichloropropene-1, 3, MCPB and metalaxyl, in an IPZ-1 of vulnerability score 9 The total pesticide application area is > 10 ha, chemical of concern being MCPA, in an IPZ-2 of vulnerability score 8.1 <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-1 : Residential, Municipal parks, minimal Commercial</p> <p>Amherstburg IPZ-1: Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Windsor IPZ-2: Residential, Commercial, Industrial, Parks, Public Works, Institutional</p> <p>Lakeshore (Belle River) IPZ-1: Marina and Municipal park</p> <p>No agricultural uses existing or permitted.</p>
Approach	Through Prescribed Provincial Instrument, manage existing and future application of pesticides in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.

<p>Policy Text</p>	<p>In reviewing applications for Pesticides Permits under the Pesticides Act for the application of pesticides in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1, the Ministry of Environment shall ensure that conditions in the Permit adequately protect the sources of drinking water.</p> <p>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.</p> <p>The above applies to the existing and future significant threat of the application of pesticide, in the vulnerable areas mentioned above.</p> <p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
<p>Rationale</p>	<p>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.</p> <p>The Pesticides Act bans the use and sale of pesticides that may be used for cosmetic purposes on lawns, vegetable and ornamental gardens, patios, driveways, cemeteries, and in parks and school yards. There are exemptions to this cosmetic pesticide ban under the Pesticide Act (for example the application of pesticides at golf courses, and to control plants of human health concern such as hogweed – see support document for more information). Pesticide permits are still required for those excepted from the cosmetic pesticide ban.</p> <p>The current land uses and zoning do not seem to preclude the application of pesticide. It is recognised that the application of pesticides may be necessary to control nuisance, and sometimes, poisonous plants and insects. The careful use of pesticides, 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. Therefore it is proposed that the application of pesticides, existing and future, be managed through Pesticide Permits where applicable in the subject areas.</p> <p>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 the water if using water from a well or from a lake, river or other body of surface water in an extermination. In addition, any equipment used in an extermination 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</p>

	<p>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.</p> <p>In a Pesticides Permit, the conditions section sets out more requirements for the permit holder that are over and above what is required by the Pesticides Act and Regulations. The conditions are specific to the treatment and location. They can be used to address specific concerns such as setbacks from watercourses, etc. for land or structural exterminations, or considerations for weather events. The terms and conditions outlined in a Permit 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.</p> <p>The Source Protection Committee recommends that the conditions in the Permits ensure that this significant threat activity (the application of pesticide) is adequately managed in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p> <p>Given the significant threat circumstance thresholds for application area and limited number of chemicals of concern, there are very limited opportunities for the significant threat circumstances to exist in the subject IPZs. The implementation of this policy is expected to have no negative effect, while ensuring that the application of pesticide is adequately managed in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.</p> <p>The MOE 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.</p>
<p>Policy Tool</p>	<p>Prescribed Instrument – Environmental Compliance Approval (Certificate of Approval), Section 39, Part V, the Environmental Protection Act</p>
<p>Municipality Policy Applies to</p>	<p>City of Windsor, Town of Amherstburg, Town of Lakeshore</p>
<p>Implementing Body</p>	<p>MOE</p>
<p>Legal Effect</p>	<p>Must conform/comply with</p>
<p>Compliance Date</p>	<p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>

Status of Threat Policy	Approved
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MONITORING POLICY

Threat	The application of Pesticide
Monitoring Policy Number	15M
Monitoring Policy Reference Number	WIW2LIAIapplPesticide-2 (Monitoring Policy)
Sub Threats	Application of pesticide
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WIW2LIAIapplPesticide-1 (Prescribed Instrument).</p> <p>The above applies to the existing and future significant threat of the application of pesticide in the vulnerable areas:</p> <p>Windsor IPZ – 1 and IPZ-2</p> <p>Lakeshore IPZ-1</p> <p>Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MOE is normally the approval body under the Environmental Protection Act, and should take the lead in implementing the significant threat policies, including monitoring. This is as per Section 45 of the Clean Water Act. The monitoring by the MOE shall confirm that the application of pesticides in the subject vulnerable areas does not become a significant threat.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.

Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	MOE
Status of Policy	Approved

Threat	The handling and storage of fuel
Vulnerable Area	All Events Based Areas (EBAs) within IPZs in the Essex Region Source Protection Area
Policy Number	16
Policy Reference Number	SLWA123-handlestorefuel-1 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2, IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report.
Threat Status	Existing and Future Activities
Current Land Use	Various
Approach	Through Prescribed Provincial Instrument: Municipal Drinking Water License and Permit - manage the handling and storage of fuels

<p>Policy Text</p>	<p>The Ontario Ministry of Environment (MOE) shall review Municipal Drinking Water Licenses and Permits issued under the Safe Drinking Water Act, in the vulnerable areas listed below where there is an existing or future significant drinking water threat of handling and storage of liquid fuels. The MOE shall ensure that the permits refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code. This may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored.</p> <p>This applies to the existing and future significant threat of the above grade handling and storage of liquid fuels, in quantities listed below in the EBAs where modeling reported in the Assessment Report has demonstrated that this activity is a significant threat. Therefore this policy applies to:</p> <ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2, IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report. <p>The date of compliance for future threats is when the Source Protection Plan takes effect. For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director</p>
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	<p>determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
<p>Rationale</p>	<p>The Essex Region intake protection zones are very extensive, and include many land uses where the handling and storage of large quantities of liquid fuel is a necessity. It should be feasible to manage (rather than prohibit) these existing and future significant drinking water threats. It is felt that the TSSA requirements are an acceptable means of managing these threats.</p> <p>There are two Prescribed Instruments under the Clean Water Act to address this activity, which are applicable to the handling and storage of fuel for municipal residential drinking water systems and aggregate operations. This policy applies to the handling and storage of fuel at municipal residential drinking water systems where this activity is or could be a significant threat.</p> <p>Through modeling conducted, the above grade handling and storage of liquid fuels (containing benzene) was found to be a significant threat to source water, at certain volumes. The identified volumes are the minimum volume of fuel (containing benzene) found to result in a significant drinking water threat. This estimate is based on an assumption that fuels contain 2% benzene. The volume of fuel that would result in a significant drinking water threat will vary depending on the concentration of benzene in the fuel. For example, when fuel containing 2% is considered to be a threat at 15,000L, the equivalent volume of fuel containing 1% benzene would be 30,000L.</p> <p>The modeling scenarios resulted in the delineation of the EBAs reported in the Essex Region Assessment Report. It is important to note that the EBA is an area where modelling demonstrates that a spill of a specific contaminant (i.e. fuel) within this area would reach the intake and cause deterioration to the raw water quality. The EBA is a combination of the IPZ-1, IPZ-2 and IPZ-3, but may not include areas of high uncertainty. Because the EBA may be smaller than the combined IPZ-1, IPZ-2 and IPZ-3, this policy applies to the EBA only.</p> <p>The MOE should refer to the requirements of the Technical Standards and Safety Act (TSSA) for the handling and storage of fuel, in the Municipal Drinking Water License and Permit issued under the Safe Drinking Water Act.</p> <p>The MOE should ensure that the permits refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code, to demonstrate compliance with the Municipal Drinking Water License and Permit under the Safe Drinking Water Act. This may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored. The implementation of this policy is not expected to have a negative impact since the requirements of the TSSA are to be fulfilled anyway.</p> <p>This policy was updated April 2016 under S.51(1) of O.Reg 278/07.</p>

Policy Tool	Municipal Drinking Water License and Permit under the Safe Drinking Water Act
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	MOE
Legal Effect	Must conform/comply with
Compliance Date	<p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of the Environment shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of fuel
Monitoring Policy Number	I6M
Monitoring Policy Reference Number	SLWA123-handlestorefuel-2 (Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MOE shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy SLWA123-handlestorefuel-1.</p> <p>The above applies to the existing and future significant threat of the handling and storage of liquid fuels, in the vulnerable areas of:</p> <p>All EBAs within IPZs in the Essex Region Source Protection Area</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the MOE should ensure that the requirements of the TSSA for the handling and storage of fuel in subject areas are met. The MOE should ensure that the permits refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code, to demonstrate compliance with the Municipal Drinking Water License and Permit under the Safe Drinking Water Act. This may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE, has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the MOE shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	MOE
Status of Policy	Approved



Threat	The handling and storage of fuel
Vulnerable Area	All Events Based Areas (EBAs) within IPZs in the Essex Region Source Protection Area
Policy Number	17
Policy Reference Number	SLWA123-handlestorefuel-5 (Prescribed Instrument)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report.
Threat Status	Existing and Future Activities
Current Land Use	Various
Approach	Through Prescribed Provincial Instrument: Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans under the Aggregate Resources Act - manage the handling and storage of fuels

<p>Policy Text</p>	<p>The Ministry of Natural Resources (MNR) shall review instruments under the Aggregate Resources Act (including Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans) with respect to the handling and storage of liquid fuel at aggregate operation sites. The MNR shall ensure that the permits refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code. This may include, but is not limited to, details concerning installation and operation of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored.</p> <p>This applies to the existing and future significant threat of the above grade handling and storage of liquid fuels, in quantities listed below where modeling reported in the Assessment Report has demonstrated that this activity is a significant threat. Therefore this policy applies to:</p> <ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report. <p>The date of compliance for future threats is when the Source Protection Plan takes effect. For existing threats, the Ministry of Natural Resources shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
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<p>Rationale</p>	<p>The Essex Region intake protection zones are very extensive, and include many land uses where the handling and storage of large quantities of liquid fuel is a necessity. It should be feasible to manage (rather than prohibit) these existing and future significant drinking water threats. It is felt that the TSSA requirements are an acceptable means of managing these threats.</p> <p>There are two Prescribed Instruments under the Clean Water Act to address this activity, which are applicable to the handling and storage of fuel at municipal residential drinking water systems and aggregate operations. This policy applies to the handling and storage of fuel where this activity is or could be a significant threat at sites licensed or permitted under the Aggregate Resources Act.</p> <p>Through modeling conducted, the above grade handling and storage of liquid fuels (containing benzene) was found to be a significant threat to source water, at certain volumes. The identified volumes are the minimum volume of fuel (containing benzene) found to result in a significant drinking water threat. This estimate is based on an assumption that fuels contain 2% benzene. The volume of fuel that would result in a significant drinking water threat will vary depending on the concentration of benzene in the fuel. For example, when fuel containing 2% is considered to be a threat at 15,000L, the equivalent volume of fuel containing 1% benzene would be 30,000L.</p> <p>The modeling scenarios resulted in the delineation of the EBAs reported in the Essex Region Assessment Report. It is important to note that the EBA is an area where modelling demonstrates that a spill of a specific contaminant (i.e. fuel) within this area would reach the intake and cause deterioration to the raw water quality. The EBA is a combination of the IPZ-1, IPZ-2 and IPZ-3, but may not include areas of high uncertainty. Because the EBA may be smaller than the combined IPZ-1, IPZ-2 and IPZ-3, this policy applies to the EBA only.</p> <p>The MNR should refer to the requirements of the Technical Standards and Safety Act (TSSA) for the handling and storage of fuel, in the instruments under the Aggregate Resources Act including Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans. MNR has indicated that they are prepared to add a note on the site plan which reads to the effect that “Fuel storage tanks will be installed and maintained in accordance with the Liquid Fuel Handling Code”.</p> <p>The MNR should ensure that the instruments refer to the requirements of the Technical Standards and Safety Act (TSSA), liquid fuel handling code, to demonstrate compliance with the Aggregate Licenses, Wayside Permits and Aggregate Permits and Site Plans under the Aggregate Resources Act. This may include, but is not limited to, details concerning installation and operation of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored, to demonstrate compliance with the Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans under the Aggregate</p>
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	<p>Resources Act. This policy is not intended to require that MNR actually undertake official TSSA inspections.</p> <p>The implementation of this policy is not expected to have a negative impact since the requirements of the TSSA are to be fulfilled anyway.</p> <p>This policy was updated April 2016 under S.51(1) of O.Reg 278/07.</p>
Policy Tool	Instruments under the Aggregate Resources Act including Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	MNR
Legal Effect	Must conform/comply with
Compliance Date	<p>The date of compliance for future threats is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Ministry of Natural Resources shall comply with the policy within 5 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of fuel
Monitoring Policy Number	17M
Monitoring Policy Reference Number	SLWA123-handlestorefuel-6 (Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The MNR shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy SLWA123-handlestorefuel-5 (Prescribed Instruments).</p> <p>The above applies to the existing and future significant threats of the handling and storage of fuel in the vulnerable areas of:</p> <p>All EBAs within IPZs in the Essex Region Source Protection Area</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The MNR should obtain documentation indicating compliance with TSSA requirements. MNR will not be expected to carry out a compliance check regarding TSSA requirements, but rather will check documentation from the owner which shows that the owner is satisfying TSSA. This may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored</p> <p>The MNR should also ensure that it obtains documentation from the owner of the facility, to demonstrate compliance with the instruments under the Aggregate Resources Act including Aggregate Licenses, Wayside Permits, and Aggregate Permits and Site Plans.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE, has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the MNR shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	MNR
Status of Policy	Approved



Threats	The transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides, fertilizers
Vulnerable Area	All IPZ-1s, IPZ-2s and IPZ-3s
Policy Number	18
Policy Reference Number	All 23-transportcorridor-1 (Specify Action)
Risk Level of Threat	Moderate and Low
Sub Threats	Not applicable
Significant Risk Circumstances	The transportation of various quantities of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides and fertilizers in intake protection zones of various vulnerability scores. Spills of these substances could occur and affect drinking water sources. Transportation corridors include roads, railways, shipping channels, etc.; these corridors are present in the intake protection zones. Specific circumstances are as per letter dated August 9, 2011 from Ian Smith (Director, Source Protection Programs Branch, MOE).
Threat Status	Existing and Future Activities
Current Land Use	Varied
Approach	Specify actions to include information on drinking water threats (the transportation of various substances) and vulnerable areas in spills response, prevention, and/or emergency plans for transportation corridors, and to encourage marina owners to have regard to relevant best management practices in the Clean Marine Program.
Policy Text	<p>The Essex Region Conservation Authority (ERCA) will provide information on drinking water threats (the transportation of various quantities of organic solvents, dense non-aqueous phase liquids, fuels, pesticides/herbicides and fertilizers) and vulnerable areas (through maps) to various parties and organizations, and encourage them to include this information in their spills response, prevention and/or emergency plans.</p> <p>The various parties and organizations include municipalities (various departments), Ministry of Transportation Ontario (MTO), Ministry of Environment (MOE), Hazmat, Environment Canada, railways, Transport Canada, Chemistry Industry Association of Canada, Regional Environmental Emergencies Team (REET), Canadian Coast Guard, Port Authorities, harbours/marinas, ferry operators, Ambassador Bridge authority, local distributors and dispatchers, Ontario Provincial Police (OPP) and other emergency</p>

	<p>responders. Information on the drinking water threats and vulnerable areas may also be sent to other relevant parties and organizations that ERCA may become aware of.</p> <p>The information will assist in responding to spills (such as reporting and containment), and preventing spills on transportation corridors within the intake protection zones in the Essex Region watershed. The information will be sent by ERCA to the various parties and organizations within 1 (one) year of the date of the approval of the source protection plan.</p> <p>Further, ERCA will encourage marinas within or near the intake protection zones to have regard to best management practices in the Clean Marine Program related to fuel and other relevant substances, and will encourage marinas to participate in the Clean Marine Program.</p> <p>These specified actions apply to the existing and future, moderate and low threats of the transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides and fertilizers in the vulnerable areas of:</p> <p>All IPZ-1s, IPZ-2s and IPZ-3s</p> <p>The date of compliance is within 1 (one) year of the Source Protection Plan taking effect.</p>
<p>Rationale</p>	<p>The Essex Region intake protection zones are very extensive, and include many transportation corridors where the transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides and fertilizers occur. Spills of these substances could occur and affect drinking water sources. Transportation corridors include roads, railways, shipping channels, etc. these corridors are present in the intake protection zones.</p> <p>As per the letter dated August 9, 2011 from Ian Smith (Director, Source Protection Programs Branch, MOE) addressed to Stan Taylor (former Source Protection Program Manager, ERCA), the transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides and fertilizers could be moderate and low threats in various intake protection zones based on vulnerability scoring. (Also, it has been shown through modeling that fuel spills of certain volumes in certain vulnerable areas are significant threats to the sources of drinking water; this is addressed through separate significant threat policies).</p> <p>ERCA will encourage various parties and organizations to include information on the above listed drinking water threats and vulnerable areas (through maps) in their spills prevention, spills response and/or emergency plans. This will bring about awareness of the sensitivity of the intake protection zones to spills from transportation corridors, assist in spills response and help spills prevention.</p> <p>ERCA will encourage marinas within or near the intake protection zones to have regard to best management practices in the Clean Marine Program related to fuel and other</p>

	<p>relevant substances, and will encourage marinas to participate in the Clean Marine Program. The Ontario Marine Operators Association (OMOA), along with over twenty marine industry professionals and Ontario’s boaters’ and anglers’ associations, formed a partnership to develop a voluntary program of environmental best practices for the marine industry, called the Clean Marine Program. OMOA member marinas can enroll in the Clean Marine Program to ensure that their marinas follow these environmentally sound practices. Each of the Clean Marine Program marinas must pass a comprehensive environmental audit to ensure compliance with the program standards set out in the Clean Marine manual. This manual, developed through the cooperation of the OMOA, Environment Canada and the Ontario Ministry of the Environment sets out more than 200 environmental practices that cover all aspects of marine operations from fueling to waste oil and paper recycling. Each marina is audited by Terra Choice Environmental Services, a third party firm, licensed by Environment Canada who provides the marina with a detailed report on their compliance with the standards of the Clean Marine Program. Results of this audit are converted to a five point Eco-rating system, with a low of one and a high of five. More information on the Clean Marine Program is available at: https://www.boatingontario.ca/cpages/clean-marine-program</p>
Policy Tool	Specify Action to be taken to implement Plan or achieve its objectives
Municipality Policy Applies to	All Municipalities
Implementing Body	Essex Region Conservation Authority
Legal Effect	Non-legally binding (Strategic Action)
Compliance Date	Within 1(one) year of the Source Protection Plan taking effect.
Status of Threat Policy	Approved

MONITORING POLICY (OPTIONAL)

Threat	The transportation of organic solvents, dense non-aqueous phase liquids (DNAPLs), fuels, pesticides/herbicides, fertilizers
Monitoring Policy Number	18M
Monitoring Policy Reference Number	All I 23-transportcorridor-2 (Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Non-legally binding (Strategic Action)
Monitoring Policy Text	<p>The Essex Region Conservation Authority will prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy All I 23-transportcorridor-1 (Specify Action).</p> <p>The above applies to the existing and future, moderate and low threats of the transportation of organic solvents, DNAPLs, fuels, pesticides/herbicides and fertilizers in the vulnerable areas of: All IPZ-1s, IPZ-2s and IPZ-3s.</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The effectiveness of the policy All I 23-transportcorridor-1 (Specify Action) should be monitored by the Essex Region Conservation Authority to ensure that ERCA has encouraged the various parties and organizations to include information on the transportation corridor drinking water threats and vulnerable areas in the spills response, prevention and/or emergency plans.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE, has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Essex Region Conservation Authority will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	All Municipalities in the Essex Region Source Protection Area
Implementing Body	Essex Region Conservation Authority
Status of Policy	Approved

Threat	The application of Agricultural Source Material (ASM)
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
Policy Number	20
Policy Reference Number	WIW2LIA1-applASM-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • ASM is applied to land in a vulnerable area where managed lands percent is at least 40%, with livestock density such that ASM can be applied annually at a rate of more than 1 NU/acre; chemicals of concern being nitrogen and total phosphorus (for an <u>IPZ-1 of vulnerability score 9</u>) • ASM is applied to land in a vulnerable area where managed lands percent is more than 80%, with livestock density such that ASM can be applied annually at a rate of 0.5 to 1 NU/acre; chemicals of concern being nitrogen and total phosphorus (for an <u>IPZ-1 of vulnerability score 9</u>) • ASM is applied to land (no volume threshold) and the application could result in pathogen(s) in the surface water (for an <u>IPZ-1 of vulnerability score 9</u> and an <u>IPZ-2 of vulnerability score 8.1</u>) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-1 : Residential, municipal parks, minimal commercial</p> <p>Amherstburg IPZ-1: Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Lakeshore (Belle River) IPZ-1: Marina and Municipal park</p> <p>Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional</p>

<p>Approach</p>	<p>Through Clean Water Act, Section 57 - Prohibit existing (none known to exist) and future applications of agricultural source material (ASM) in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and the Amherstburg IPZ-1.</p>
<p>Policy Text</p>	<p>The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1: the existing (none known to exist) and future application of agricultural source material (ASM).</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>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 <u>chemical</u> threat circumstances.</p> <p>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 of agricultural source material (ASM) on agricultural property. However there are no current or planned agricultural lands in the subject vulnerable areas. As the Prescribed Instruments apply only to agricultural lands, the Clean Water Act will be used as the main policy tool to address this significant threat activity.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be 'existing' threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>There are no known applications of ASM occurring in the subject vulnerable areas. Through the Clean Water Act Section 57, no application of ASM will be permitted in the</p>

	<p>Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1. 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 (which are extremely unlikely to be proposed in any event).</p> <p>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.</p>
Policy Tool	Clean Water Act Section 57 'Prohibited Activities'
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The application of Agricultural Source Material (ASM)
Monitoring Policy Number	20M
Monitoring Policy Reference Number	WIW2LIAI-applASM-2 (CWA Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WIW2LIAI-applASM-1 (Clean Water Act).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the application of Agricultural Source Material (ASM) in the vulnerable areas:</p> <p>Windsor IPZ-1 and IPZ-2 Lakeshore (Belle River) IPZ-1 Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO should ensure that no application of agricultural source material occurs in the Windsor IPZ-1, Windsor IPZ-2 and the Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The application of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I
Policy Number	22
Policy Reference Number	WILIAI-appINASM- I (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> NASM is applied to land in a vulnerable area where managed lands percent is at least 40%, with livestock density such that ASM can be applied annually at a rate of more than 1 NU/acre; chemicals of concern being nitrogen and total phosphorus (for an IPZ- I of vulnerability score 9) NASM is applied to land in a vulnerable area where managed lands percent is at least 80%, with livestock density such that ASM can be applied annually at a rate of 0.5 to 1 NU/acre; chemicals of concern being nitrogen and total phosphorus (for an IPZ- I of vulnerability score 9) The application of NASM (no volume threshold) that contains material generated by a meat plant or sewage works and the application could result in pathogen(s) in the surface water (for an IPZ- I of vulnerability score 9) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ- I : Residential, municipal parks, minimal commercial Amherstburg IPZ- I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ- I: Marina and Municipal park
Approach	Through Clean Water Act, Section 57 - Prohibit existing (none known to exist) and future application of non agricultural source material (NASM) in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I.

<p>Policy Text</p>	<p>The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I: the existing (none known to exist) and future application of non agricultural source material (NASM).</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>In the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I, 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.</p> <p>There are two instruments prescribed by the Clean Water Act to manage this threat: an Environmental Compliance Approval (Certificate of Approval) under the Environmental Protection Act (EPA) and a NASM plan under the Nutrient Management Act (NMA). The Environmental Compliance Approval (Certificate of Approval) under the EPA is required for the application of NASM at waste disposal and organic soil conditioning sites. For NASM application on agricultural property, a NASM plan under the NMA is required; however there are no current or planned agricultural lands in the subject vulnerable areas. For the application of NASM that does not fall under the EPA or NMA, the Clean Water Act will be used as the main policy tool to address this significant threat activity.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be 'existing' threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>There is no known application of NASM occurring in the subject vulnerable areas. Through the Clean Water Act Section 57, no application of NASM will be permitted in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I. Since the</p>

	<p>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 adequately protecting sources of drinking water in regard to the application of NASM (which are extremely unlikely to be proposed in any event).</p> <p>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.</p>
Policy Tool	Clean Water Act Section 57 'Prohibited Activities'
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The application of Non Agricultural Source Material (NASM)
Monitoring Policy Number	22M
Monitoring Policy Reference Number	WILIAI-appINASM-2 (CWA Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-appINASM-1 (Clean Water Act).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the application of Non Agricultural Source Material (NASM), in the vulnerable areas:</p> <p>Windsor IPZ-1 Lakeshore (Belle River) IPZ-1 Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO should ensure that no application of non agricultural source material occurs in the Windsor IPZ-1 and Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The storage of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I
Policy Number	23
Policy Reference Number	WILIAI-storageNASM- I (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The mass of nitrogen in NASM >5 tonnes, chemicals of concern being nitrogen or phosphorus (total), for NASM stored at or above grade in a permanent/temporary facility or a portion of NASM is stored above grade in permanent facility and a spill or runoff could result in the chemical of concern in the surface water (for an IPZ- I of vulnerability score 9) • The NASM (no volume threshold) contains material generated by a meat plant (e.g. slaughter plant, meat packaging, defined as per O. Reg. 31/05 under the Food Safety and Quality Act) when any portion of NASM is stored at or above grade, and a spill or runoff could result in pathogen/s in the surface water (for an IPZ- I of vulnerability score 9) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ- I : Residential, municipal parks, minimal commercial Amherstburg IPZ- I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ- I: Marina and Municipal park
Approach	Through Clean Water Act, Section 57 - Prohibit existing (none known to exist) and future storage of non agricultural source material (NASM) in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I.
Policy Text	The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I

	<p>and Amherstburg IPZ- I: the existing (none known to exist) and future storage of non agricultural source material (NASM).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable areas mentioned above.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>There are two instruments prescribed by the Clean Water Act to manage this threat: an Environmental Compliance Approval (Certificate of Approval) under the Environmental Protection Act (EPA) and a NASM plan under the Nutrient Management Act (NMA). The certificate of approval under the EPA is required for the storage of NASM at waste disposal and organic soil conditioning sites. For NASM storage on agricultural property, a NASM plan under the NMA is required; however there are no current or planned agricultural lands in the subject vulnerable areas. For the storage of NASM that does not fall under the EPA or NMA, the Clean Water Act will be used as the main policy tool to address this significant threat activity.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>There is no known storage of NASM occurring in the subject vulnerable areas. Through the Clean Water Act Section 57, no new storage of NASM will be permitted in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I. 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 adequately protecting sources of drinking water in regard to the storage of NASM (which are extremely unlikely to be proposed in any event).</p>

	<p>The City of Windsor and Town of Amherstburg have indicated that they intend to include information regarding this policy in their Official Plans and Zoning By-laws, in order to assist in informing property owners and others.</p> <p>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.</p>
Policy Tool	Clean Water Act Section 57 'Prohibited Activities'
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The storage of Non Agricultural Source Material (NASM)
Monitoring Policy Number	23M
Monitoring Policy Reference Number	WILIAI-storageNASM-2 (CWAMonitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-storageNASM-1 (Clean Water Act).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable areas:</p> <p>Windsor IPZ-1 Lakeshore (Belle River) IPZ-1 Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO and municipalities should ensure that no storage of non agricultural source material occurs in the Windsor IPZ-1, Town of Lakeshore and Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The handling and storage of Road Salt
Vulnerable Area	Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and Amherstburg IPZ-I
Policy Number	24
Policy Reference Number	WILIAI-storageroadsalt-I (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	The storage of Road Salt
Significant Risk Circumstances	<ul style="list-style-type: none"> In summary, the quantity of road salt stored is >5000 tonnes, chemicals of concern being sodium and chloride (IPZ-I of vulnerability score 9) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ-I : Residential, municipal parks, minimal commercial Amherstburg IPZ-I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ-I: Marina and Municipal park
Approach	Through Clean Water Act, Section 57 - Prohibit existing (none known to exist) and future storage of road salt in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I.
Policy Text	<p>The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ-I, Lakeshore (Belle River) IPZ-I and the Amherstburg IPZ-I: the existing (none known to exist) and future storage of road salt in quantities greater than 5000 tonnes. The above applies to the existing and future significant threat of the storage of road salt in the vulnerable areas mentioned above.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
Rationale	Under the Clean Water Act there are no Prescribed instruments to address this threat. Windsor and Amherstburg Planning staff have advised that this activity is not controlled through Land Use Planning, Municipal Act, or any other Instrument administered by Municipality, and that parks management plans have no legal effect (only guidelines).

	<p>Existing threats are activities that already are confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas, the small size of the vulnerable areas, and the threat circumstances. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses the small size of the vulnerable areas, and the threat circumstances (storage of road salt in amounts greater than 5000 tonnes), or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>Discussions with Windsor and Amherstburg Planning staff indicate likely no alternative to Clean Water Act. Management (such as run-off control) is not feasible. This activity is not known to currently occur in IPZ-1. There is no negative impact likely, if the storage of road salt in amounts greater than 5000 tonnes in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 is prohibited. The City of Windsor and Town of Amherstburg have indicated that they intend to include information regarding this policy in their Official Plans and Zoning By-laws, in order to assist in informing property owners and others. 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.</p>
Policy Tool	Clean Water Act Section 57 ‘Prohibited Activities’
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of Road Salt
Monitoring Policy Number	24M
Monitoring Policy Reference Number	WILIAI-storageroadsalt-2 (CWAMonitoring Policy)
Sub Threats	The storage of Road Salt
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-storageroadsalt-1 (Clean Water Act).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage of road salt in the vulnerable areas:</p> <p>Windsor IPZ-1 Lakeshore (Belle River) IPZ-1 Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO and the municipalities should ensure that no storage of road salt occurs in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The storage of Snow
Vulnerable Area	Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I
Policy Number	25
Policy Reference Number	WILIAI-storagesnow- I (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> Governing circumstance is snow stored on areas 1 ha or more, chemical of concern being lead or its compound/s (IPZ- I of vulnerability score 9) Other circumstances are snow stored on areas more than 5 ha, chemicals of concern being chloride, cyanide, nitrogen, sodium, copper or its compound/s, zinc or its compound/s (IPZ- I of vulnerability score 9) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ- I : Residential, municipal parks, minimal commercial Amherstburg IPZ- I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ- I: Marina and Municipal park
Approach	Through Clean Water Act, Section 57 - Prohibit existing (none known to exist) and future storage of snow over areas of 1 ha or more in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and the Amherstburg IPZ- I.
Policy Text	The following activity is designated for the purposes of Section 57 ('Prohibited Activities') of the Clean Water Act in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and the Amherstburg IPZ- I: the existing (none known to exist) and future storage of snow over areas of 1 ha or more. The above applies to the existing and future significant threat of the storage of snow in the vulnerable areas mentioned above. The date of compliance is when Source Protection Plan takes effect.
Rationale	Under the Clean Water Act there are no Prescribed instruments to address this threat. Windsor, Lakeshore and Amherstburg Planning staff have advised that this activity is not controlled through Land Use Planning, Municipal Act, or any other Instrument

	<p>administered by Municipality, and that parks management plans have no legal effect (only guidelines).</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>This policy prohibits future occurrences of significant threat activities which are not known to exist now or highly unlikely to exist in the future, mainly due to current and zoned land uses in the subject vulnerable areas, the small size of the vulnerable areas, and the threat circumstances. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses the small size of the vulnerable areas, and the threat circumstances (storage of snow over areas of 1 ha or more), or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>Discussions with Windsor, Lakeshore and Amherstburg Planning staff indicate likely no alternative to Clean Water Act. Management (such as run-off control) is not feasible. This activity is not known to currently occur in IPZ-1s. There is no negative impact likely, if the storage of snow over areas of 1 ha or more in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1 is prohibited. 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.</p>
Policy Tool	Clean Water Act Section 57 ‘Prohibited Activities’
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The storage of Snow
Monitoring Policy Number	25M
Monitoring Policy Reference Number	WILIAI-storagesnow-2 (CWA Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-storagesnow-1 (Clean Water Act).</p> <p>The above applies to the existing (none known to exist) and future significant threat of the storage of snow in the vulnerable areas:</p> <p>Windsor IPZ-1 Lakeshore (Belle River) IPZ-1 Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO should ensure that no storage of snow over areas of 1 ha or more occurs in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Vulnerable Area	Windsor IPZ- I, Lakeshore (Belle River) IPZ- I and Amherstburg IPZ- I
Policy Number	26
Policy Reference Number	WILIAI-hazardouswaste- I (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Storage of hazardous or liquid industrial waste
Significant Risk Circumstances	<ul style="list-style-type: none"> Hazardous waste or liquid industrial waste in any amount is stored at or above grade, or a portion is stored below grade (chemicals of concern: arsenic, chromium VI) in an <u>IPZ- I of V Score 9</u>, for waste storage sites that are not subject to an Environmental Compliance Approval <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ- I : Residential, municipal parks, minimal commercial Amherstburg IPZ- I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ- I: Marina and Municipal park
Approach	Through Clean Water Act, Section 58 Risk Management Plan – Manage existing and future waste disposal sites in the Windsor IPZ- I, Lakeshore (Belle River) IPZ- I, and Amherstburg IPZ- I. This approach is taken to address existing or future waste disposal sites that are not subject to an Environmental Compliance Approval under Part V of the Environmental Protection Act.

<p>Policy Text</p>	<p>For any existing or future waste disposal site, or aspect thereof, within the meaning of Part V of the Environmental Protection Act, that is not subject to an Environmental Compliance Approval, where this activity is a significant drinking water threat, it shall be designated for the purpose of Section 58 of the Clean Water Act, 2006 and a Risk Management Plan shall be required to ensure the activity ceases to be or never becomes a significant drinking water threat.</p> <p>The Risk Management Plan may require that the wastes produced on the property be properly managed and stored in accordance to applicable legislation, standards, industry guidelines and industry best practices, but may also include any modifications or additional requirements that are deemed necessary or appropriate by the Risk Management Official.</p> <p>Despite the above policy, a Risk Management Official may issue written direction specifying the circumstances under which a RMP is not required for site specific land uses, types of waste and/or volume thresholds provided that the RMO is satisfied that the activity will not result in a significant drinking water threat. Such direction shall be made in consultation with the Ministry of the Environment and/or building officials.</p> <p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.</p>
<p>Rationale</p>	<p>The Prescribed Instrument policy (WILIAI-waste-I (Prescribed Instrument)) for existing and future waste disposal sites addresses threats through an Environmental Compliance Approval (ECA) process under the authority of the Environmental Protection Act. However, this prescribed instrument cannot be used to manage the activities when waste is generated or stored at waste disposal sites other than landfills and transfer stations (e.g., waste from glassmaking, liquid waste from a hospital, waste chemicals from photo finishing). These other activities that are not subject to an ECA are therefore to be addressed through the Risk Management Plan process under the approval of the Risk Management Official.</p> <p>The intent of this policy is to ensure proper storage of subject the wastes at businesses and facilities that by their nature necessitate this activity (e.g., waste oil at an auto repair shop, liquid waste from a hospital, waste chemicals from photo finishing). It is not intended to be applied to infrequent events such as the cleanup of an accidental spill of waste oil during a do-it-yourself oil change at a private residence.</p> <p>This Section 58 policy is complemented by a Section 59 policy (No.xx). 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 requires a Risk Management Plan.</p>
<p>Policy Tool</p>	<p>Clean Water Act Section 58 'Risk Management Plans'</p>

Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	For future threats, the date of compliance is when the Source Protection Plan takes effect. For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act
Monitoring Policy	26M
Monitoring Policy Reference Number	WILIAI-hazardouswaste-2 (Clean Water Act)
Sub Threats	<ul style="list-style-type: none"> Storage of hazardous or liquid industrial waste
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WILIAI-hazardouswaste-1. (Clean Water Act).</p> <p>The above applies to the existing and future significant threat of the storage of hazardous or liquid industrial waste at waste disposal sites that are not subject to an Environmental Compliance Approval under Part V of the Environmental Protection Act, in the vulnerable areas:</p> <p>Windsor IPZ-1, Lakeshore (Belle River) IPZ-1, Amherstburg IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO will check if the existing and future storage of of hazardous or liquid industrial waste in the Windsor IPZ-1, Lakeshore (Belle River) IPZ-1, and Amherstburg IPZ-1 is as per the Risk Management Plan to ensure the protection of source water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Risk Management Official shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threats	The application of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ-2
Policy Number	27
Policy Reference Number	W2-appINASM-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> The application of NASM (no volume threshold) that contains material generated by a meat plant or sewage works and the application could result in pathogen(s) in the surface water (IPZ-2 of vulnerability score 8.1) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Future Activities
Current Land Use	Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Through Clean Water Act, Section 58 Risk Management Plan – Manage future applications of non agricultural source material (NASM) in the Windsor IPZ-2, in those cases in which the subject activity is not subject to the Prescribed Instruments. The Prescribed Instruments are a NASM plan under the Nutrient Management Act (NMA) or an Environmental Compliance Approval (Certificate of Approval) under the Environmental Protection Act (EPA) - Part V for waste disposal sites, organic soil conditioning sites and waste management systems.
Policy Text	The following activities are designated for the purpose of Section 58 ‘Risk Management Plans’ of the Clean Water Act in the Windsor IPZ-2, in those cases in which the activity is not subject to Provincial Instrument: the future application of non agricultural source material (NASM) such that:

	<p>the application of NASM (no volume threshold) that contains material generated by a meat plant or sewage works and the application could result in pathogen(s) in the surface water.</p> <p>The Risk Management Plan will include the requirements of a NASM plan as per the Nutrient Management Act, for the application of NASM. Therefore the Risk Management Official (RMO) will obtain documentation from the owner of the facility that demonstrates that the requirements of a NASM plan are met. The RMO will ensure that the owner of the facility has the risk management plan prepared by someone certified to develop a NASM plan that meets the requirements of Reg. 267/03.</p> <p>The Risk Management Official may require additional conditions in the Risk Management Plan, to be met such that water bodies are protected adequately from the application of NASM. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan.</p> <p>The above applies to the future significant threat of the application of Non Agricultural Source Material (NASM), in the vulnerable area:</p> <p>Windsor IPZ-2</p> <p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan the Plan takes effect.</p>
<p>Rationale</p>	<p>It is highly unlikely that NASM containing material generated by a meat plant would be applied in the Windsor IPZ-2. There are no known applications of NASM occurring in the subject areas. If the activity is proposed in the Windsor IPZ-2s, it is feasible to manage the threat through Prescribed Instruments or through the Clean Water Act, whichever is applicable. In the limited situations where the Prescribed Instruments are not applicable, Risk Management Plans under the Clean Water Act Section 58 will be used. It is proposed that the Risk Management Plan rely on the requirements of a NASM plan as per the Nutrient Management Act. For greater clarity, nothing in this policy grants the Risk Management Official authority to specify requirements for a prescribed instrument issued under the Nutrient Management Act, or where a person is seeking an exemption from a risk management plan under section 61 of O.Reg 287/07.</p> <p>The requirements of a NASM Plan for the application of NASM are to meet the Regulation 267/03 specifications for the application of NASM under the Nutrient Management Act. The Regulation 267/03 specifications under the Nutrient Management Act are found to adequately manage the application of NASM through the following requirements. A NASM Plan must contain numerous components including information about the nutrients that will be applied (source, type, content, application rate) and the areas where the nutrients will be applied. The land application standards including</p>

	<p>restrictions based on runoff potential and slope of the land, time of the year, setbacks to wells and non-agricultural land uses (including residential), minimum depths to groundwater, vegetated buffer zone requirement, setback from surface water bodies, prohibition from application, application methods of trajectory guns or direct flow, and other miscellaneous requirements based on the type and composition of the NASM. The land application rate specifications are laid out and are based on NASM composition (such as metals, organic content), and plant available nitrogen and phosphate.</p> <p>NASM Plan Developer certification is required for individuals preparing NASM plans. Certification includes three courses, including the NASM Plan Developers course, successful completion of assignments and passing an exam. The facility owner will ensure the risk management plan is prepared by someone certified to develop a NASM plan that meets the requirements of Reg. 267/03. The Risk Management Official may require additional conditions to be met such that water bodies are protected adequately from the application of NASM.</p> <p>The Risk Management Official should obtain documentation from the owner of the facility, to demonstrate that the requirements of a NASM plan as per the Nutrient Management Act are met, as well as any additional requirements made by the RMO to protect water. The RMO should ensure that the owner has the risk management plan prepared by someone certified to develop a NASM plan that meets the requirements of Reg. 267/03.</p> <p>This activity is very unlikely to occur or be proposed in the subject area. As well, the Nutrient Management Act or the Environmental Protection Act will normally apply to the activity; therefore implementation has no negative impact. This Section 58 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 requires a Risk Management Plan.</p>
Policy Tool	Clean Water Act Section 58 'Risk Management Plans'
Municipality Policy Applies to	City of Windsor
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	For future threats, the date of compliance is when the Source Protection Plan takes effect. For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The application of Non Agricultural Source Material (ASM)
Monitoring Policy Number	27M
Monitoring Policy Reference Number	W2-appINASM-2 (CWA Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy W2-applASM-1 (Clean Water Act).</p> <p>The above applies to the future significant threat of the application of Non Agricultural Source Material (NASM), in the vulnerable area:</p> <p>Windsor IPZ-2</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO will check if the future application of non agricultural source material in the Windsor IPZ-2 is as per the Risk Management Plan to ensure the protection of source water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor
Implementing Body	Risk Management Official
Status of Policy	Approved

Threats	The storage of Non Agricultural Source Material (NASM)
Vulnerable Area	Windsor IPZ-2
Policy Number	28
Policy Reference Number	W2-storageNASM-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The NASM (no volume threshold) contains material generated by a meat plant (e.g. slaughter plant, meat packaging, defined as per O. Reg. 31/05 under the Food Safety and Quality Act) when any portion of NASM is stored at or above grade, and a spill or runoff could result in pathogen/s in the surface water (IPZ-2 of vulnerability score 8.1). • The mass of nitrogen in NASM is >5 tonnes, chemicals of concern being nitrogen or phosphorus (total), for NASM stored at or above grade in a permanent/temporary facility or when a portion of NASM is stored above grade in a permanent facility and a spill or runoff could result in the chemical of concern in the surface water (for an IPZ-1 of vulnerability score 9) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Future Activities
Current Land Use	Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Through Clean Water Act, Section 58 Risk Management Plan – Manage future storage of non agricultural source material (NASM) in the Windsor IPZ-2, in those cases in which the subject activity is not subject to the Prescribed Instruments. The Prescribed Instruments are a NASM plan under the Nutrient Management Act (NMA) or an Environmental Compliance Approval (Certificate of Approval) under the Environmental Protection Act (EPA) - Part V for waste disposal sites, organic soil conditioning sites and waste management systems.

<p>Policy Text</p>	<p>The following activities are designated for the purpose of Section 58 ‘Risk Management Plans’ of the Clean Water Act in the Windsor IPZ-2, in those cases in which the activity is not subject to Provincial Instrument: the future storage of non agricultural source material (NASM) such that:</p> <p>the NASM (no volume threshold) contains material generated by a meat plant (e.g. slaughter plant, meat packaging, defined as per O. Reg. 31/05 under the Food Safety and Quality Act) when any portion of NASM is stored at or above grade, and a spill or runoff could result in pathogen/s in the surface water.</p> <p>The Risk Management Plan will include the requirements of a NASM plan as per the Nutrient Management Act, for the storage of NASM. Therefore the Risk Management Official (RMO) will obtain documentation from the owner of the facility that demonstrates that the requirements of a NASM plan are met. The RMO will ensure that the owner has the risk management plan prepared by someone certified to develop a NASM plan that meets the requirements of Reg. 267/03.</p> <p>The Risk Management Official may require additional conditions in the Risk Management Plan, to be met such that water bodies are protected adequately from the storage of NASM. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan.</p> <p>The above applies to the future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable area:</p> <p>Windsor IPZ-2</p> <p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.</p>
<p>Rationale</p>	<p>It is unlikely that NASM containing material generated by a meat plant would be stored in the Windsor IPZ-2. No existing meat plants as defined in the significant threat circumstances have been identified in the Windsor IPZ-2s. There is no known storage of NASM occurring in the subject areas. If this activity is proposed in the Windsor IPZ-2s, it is feasible to manage the threat through Prescribed Instruments or through the Clean Water Act, whichever is applicable. In the limited situations where the Prescribed Instruments are not applicable, Risk Management Plans under the Clean Water Act Section 58 will be used. It is proposed that the Risk Management Plan rely on the requirements of a NASM plan as per the Nutrient Management Act. For greater clarity, nothing in this policy grants the Risk Management Official authority to specify requirements for a prescribed instrument issued under the Nutrient Management Act,</p>

or where a person is seeking an exemption from a risk management plan under section 61 of O.Reg 287/07.

The requirements of a NASM Plan for the storage of NASM are to meet the Regulation 267/03 specifications for the storage of NASM under the Nutrient Management Act. The Regulation 267/03 specifications are found to adequately manage the storage of NASM through the following requirements. Siting requirements for new or expanded facilities include setbacks from wells, surface water bodies, drainage tiles, and storage drainage system construction. The types of construction material and required distance between the floor and uppermost aquifer or bedrock are also specified. The facility itself must be designed to minimize leakage, minimize corrosion and to be structurally safe and sound. A solid NASM permanent facility must have a concrete floor. Liquid NASM cannot be stored in an unlined permanent facility made of earth. The use of liners, conditions for secondary containment and ventilation requirements are specified. If the facility is covered or otherwise allows gases from NASM to accumulate or intensify, a ventilation system must be installed to eliminate corrosive, noxious or explosive gases. The dimensions of liquid storage facilities made of earth must be calculated in accordance with the Nutrient Management Protocol and meet the freeboard and slope specified. A runoff management system is required to be installed. Setbacks to residential, community and other types of land uses for certain types of NASM are specified. Liquid NASM cannot be stored in a temporary facility; however, it can be stored in a portable tank subject to certain conditions. There are restrictions on the number of days for which solid NASM can be stored at a temporary facility.

NASM Plan Developer certification is required for individuals preparing NASM plans. Certification includes three courses, including the NASM Plan Developers course, successful completion of assignments and passing an exam. The facility owner will ensure the risk management plan is prepared by someone certified to develop a NASM plan that meets the requirements of Reg. 267/03. The Risk Management Official may require additional conditions to be met such that water bodies are protected adequately from the storage of NASM.

The Risk Management Official should obtain documentation from the owner of the facility, to demonstrate that the requirements of a NASM plan as per the Nutrient Management Act are met, as well as any additional requirements made by the RMO to protect water. The RMO should ensure that the owner has the risk management plan prepared by someone certified to develop a NASM plan that meets the requirements of Reg. 267/03.

This activity is unlikely to occur or be proposed in the subject area and the Nutrient Management Act (NMA) or the Environmental Protection Act (EPA) will normally apply to the activity, therefore implementation should have no negative impact.

	This Section 58 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 requires a Risk Management Plan.
Policy Tool	Clean Water Act Section 58 'Risk Management Plans'
Municipality Policy Applies to	City of Windsor
Implementing Body	Risk Management Official
Legal Effect	Must conform/ comply with
Compliance Date	For future threats, the date of compliance is when the Source Protection Plan takes effect. For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The storage of Non Agricultural Source Material (ASM)
Monitoring Policy Number	28M
Monitoring Policy Reference Number	W2-storageNASM-2 (CWA Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/ comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy W2-storageNASM-1 (Clean Water Act).</p> <p>The above applies to the future significant threat of the storage of Non Agricultural Source Material (NASM), in the vulnerable area:</p> <p>Windsor IPZ-2</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO will check if the future storage of non agricultural source material in the Windsor IPZ-2 is as per the Risk Management Plan to ensure the protection of source water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The application of Pesticide
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore IPZ-1
Policy Number	29
Policy Reference Number	WIW2A11IapplPesticide-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Application of pesticide
Significant Risk Circumstances	<ul style="list-style-type: none"> • The total pesticide application area is > 1 ha, chemicals of concern being MCPA and mecoprop, in an IPZ-1 of vulnerability score 9 • The total pesticide application area is > 10 ha, chemicals of concern being atrazine, dicamba, 2,4-D, dichloropropene-1, 3, MCPB and metalaxyl, in an IPZ-1 of vulnerability score 9 • The total pesticide application area is > 10 ha, chemical of concern being MCPA, in an IPZ-2 of vulnerability score 8.1 <p>The above circumstances apply to both land and structural extermination. Land extermination means the destruction, prevention or control in, on or over land of a pest or pests by the use of a pesticide. Structural extermination means the destruction, prevention or control of a pest that may adversely affect a building, structure, machine, vehicle or their contents or the use or enjoyment thereof by any person by the use of a pesticide in, on or in the vicinity of the building, structure, machine or vehicle and includes the destruction, prevention or control of termites.</p> <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-1 : Residential, Municipal parks, minimal Commercial</p> <p>Amherstburg IPZ-1: Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Lakeshore (Belle River) IPZ-1: Marina and Municipal park</p> <p>Windsor IPZ-2: Residential, Commercial, Industrial, Parks, Public Works, Institutional</p>

	No agricultural uses existing or permitted.
Approach	Through Clean Water Act, Section 58 Risk Management Plan – Manage existing and future application of pesticides in the Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore (Belle River) IPZ-1 to which the Prescribed Instrument does not apply.
Policy Text	<p>The following activities are designated for the purpose of Section 58 ‘Risk Management Plans’ of the Clean Water Act in the Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore (Belle River) IPZ-1: the existing and future application of pesticides such that:</p> <ul style="list-style-type: none"> • the total pesticide application area is > 1 ha, chemicals of concern being MCPA and mecoprop, in an IPZ-1 of vulnerability score 9 • the total pesticide application area is > 10 ha, chemicals of concern being atrazine, dicamba, 2,4-D, dichloropropene-1, 3, MCPB and metalaxyl, in an IPZ-1 of vulnerability score 9 • the total pesticide application area is > 10 ha, chemical of concern being MCPA, in an IPZ-2 of vulnerability score 8.1. <p>The above circumstances apply to both land and structural extermination as defined under the Pesticides Act. The Risk Management Plan (RMP) shall 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 will also require that the Pesticide Label be followed.</p> <p>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. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan.</p> <p>The above applies to the existing and future significant threat of the application of pesticides in the above mentioned vulnerable areas.</p> <p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan the Plan takes effect.</p>
Rationale	<p>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 the very limited situations that the Prescribed Instrument may not apply, it is proposed to use the Section 58 Risk Management Plan under the Clean Water Act to manage those applications of pesticides.</p>

The Pesticides Act bans the use and sale of pesticides that may be used for cosmetic purposes on lawns, vegetable and ornamental gardens, patios, driveways, cemeteries, and in parks and school yards. There are exemptions to this cosmetic pesticide ban under the Pesticide Act (for example the application of pesticides at golf courses, and to control plants of human health concern such as hogweed – see support document for more information). Pesticide permits are still required for those excepted from the cosmetic pesticide ban.

The current land uses and zoning do not preclude the application of pesticide. It is recognised that the application of pesticides may be necessary to control nuisance, and sometimes, poisonous plants and insects. The careful use of pesticides, such that the target plant or insect is controlled, without being detrimental to watercourses is considered a reasonable approach. 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 the water if using water from a well or from a lake, river or other body of surface water in an extermination. In addition, any equipment used in an extermination 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 a Pesticides Permit, the conditions section sets out more requirements for the permit holder that are over and above what is required by the Pesticides Act and Regulations. The conditions are specific to the treatment and location. They can be used to address specific concerns such as setbacks from watercourses, etc. for land or structural exterminations, or considerations for weather events. The terms and conditions outlined in a Permit 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 Risk Management Plan will include the requirements of the Pesticides Act and conditions similar to those in typically Pesticide Permits for the application of pesticides. In some cases other measures may be needed to protect water. These include maximum quantities of use, treatment area location and dimensions, timing restrictions (and consideration of weather events), setbacks from watercourses, etc. for land or structural exterminations, and spills/runoff management. The RMP will also require that the Pesticide Label be followed.

Land extermination means the destruction, prevention or control in, on or over land of a pest or pests by the use of a pesticide. **Structural extermination** means the destruction, prevention or control of a pest that may adversely affect a building, structure, machine, vehicle or their contents or the use or enjoyment thereof by any person by the use of a pesticide in, on or in the vicinity of the building, structure, machine or vehicle and includes the destruction, prevention or control of termites. The RMP will apply to both land and structural extermination.

	<p>The Risk Management Official will obtain documentation from the property owner to indicate that the requirements of the Pesticides Act and any other conditions in the RMP are followed. A form may be prescribed for this purpose.</p> <p>Given the significant threat circumstance thresholds for application area and limited number of chemicals of concern, there are very limited opportunities for the significant threat circumstances to exist in the subject IPZs. In most cases, the Pesticides Act will apply, and the 'Prescribed Instrument' policy will be used. As a result, the use of this Section 58 Policy will be extremely unlikely. The implementation of this policy is expected to have no negative effect, while ensuring that sources of drinking water are adequately protected in regard to the application of pesticide in the Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore IPZ-1.</p> <p>This Section 58 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 requires a Risk Management Plan.</p>
Policy Tool	Section 58 – Risk Management Plan under the Clean Water Act
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	<p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan the Plan takes effect.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The application of Pesticide
Monitoring Policy Number	29M
Monitoring Policy Reference Number	WIW2AILI applPesticide-2 (CWA Monitoring Policy)
Sub Threats	Application of pesticide
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Risk Management Official shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WIW2AILI applPesticide- I (Clean Water Act).</p> <p>The above applies to the existing and future significant threat of the application of pesticides in the vulnerable areas:</p> <p>Windsor IPZ- I and IPZ-2,</p> <p>Amherstburg IPZ- I</p> <p>Lakeshore IPZ- I</p> <p>The date of compliance is by February I of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO will check if the requirements of the RMP are being followed for the application of pesticides in the subject vulnerable areas.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February I of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threats	The handling and storage of pesticide
Vulnerable Area	Windsor IPZ- I, Amherstburg IPZ- I, Lakeshore (Belle River) IPZ- I
Policy Number	30
Policy Reference Number	WIAILI-storagepesticide-I (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Storage of pesticide
Significant Risk Circumstances	<ul style="list-style-type: none"> the quantity stored is > 2500 kg (for retail sale or for use in extermination), chemicals of concern being MCPA (2-methyl-4-chlorophenoxyacetic acid) or Mecoprop (IPZ- I of vulnerability score 9) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ- I : Residential, Municipal parks, minimal Commercial Amherstburg IPZ- I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ- I: Marina and Municipal park
Approach	Through Clean Water Act, Section 58 Risk Management Plan – Manage existing and future storage of pesticides (in the Windsor IPZ- I, Amherstburg IPZ- I, Lakeshore (Belle River) IPZ- I). There are no Prescribed Instruments under the Clean Water Act to manage this threat.
Policy Text	<p>The following activities are designated for the purpose of Section 58 ‘Risk Management Plans’ of the Clean Water Act in the Windsor IPZ- I, Amherstburg IPZ- I and Lakeshore (Belle River) IPZ- I: The existing and future storage of pesticides such that the quantity stored is > 2500 kg (for retail sale or for use in extermination).</p> <p>The Risk Management Plan (RMP) shall require that the Pesticides Act requirements for storage of pesticides be fulfilled, and include measures necessary to protect water, such as spills/runoff management and setbacks from water courses or drainage systems. The RMP will also require that the Pesticide Label be followed.</p>

	<p>The Risk Management Official will obtain documentation from the property owner to indicate that the requirements of the RMP are followed. A form may be prescribed for this purpose. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan.</p> <p>The above applies to the existing and future significant threat of the storage of pesticide in the vulnerable areas mentioned above.</p> <p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan the Plan takes effect.</p>
<p>Rationale</p>	<p>There is no known storage of pesticides MCPA and mecoprop in quantities of 2500 kg or more in the Windsor IPZ- I, Amherstburg IPZ- I and Lakeshore (Belle River) IPZ- I. If the activity is proposed in the Windsor IPZ- I, Amherstburg IPZ- I and Lakeshore (Belle River) IPZ- I, it is feasible to manage the threat through the Clean Water Act Section 58 Risk Management Plans. There is no Prescribed Instrument to address the storage of pesticides under the Clean Water Act. It is proposed that the Risk Management Plan 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.</p> <p>O. Reg. 63/09 sets out requirements related to: pesticide storage, mixing and loading of pesticides, washing of pesticide equipment, safe and secure transportation of pesticides, proper disposal of empty and damaged pesticide containers, and pesticide spill cleanup. It is illegal to store pesticides under unsafe condition. Sections 107 to 112 of the O. Reg. 63/09 sets out storage requirements, to include ensuring that the pesticides are not likely to impair the health or safety of any person; the pesticides will not 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 pesticides from contaminating the environment or other pesticides; the storage area is properly secured, posted with warning signs, and has emergency telephone numbers prominently displayed nearby; pesticides stored in an unsupervised vehicle must be in a place inaccessible to the public or in a locked compartment and the vehicle must display the required warning sign; Class 1, 2 and 3 pesticides are to 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 readily available; licensed vendors, licensed operators, manufacturers, and persons storing Class 1 pesticides are required to provide written notice annually to the fire department responsible for the area in which the pesticide is stored.</p> <p>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 may set out the proper storage,</p>

	<p>transportation and disposal besides other things. The Pesticides Permits can contain conditions that prevent the pollution of water during the storage of pesticides, including setbacks from water courses. 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 the use precautions to minimize any potential risks to human health or the environment. This includes a buffer zone (setback) to aquatic habitats.</p> <p>It is proposed that the Risk Management Plan specify the requirements of the Pesticides Act for the storage of pesticides and any additional conditions if needed, such as spills/runoff management, and/or setbacks from water courses or drainage systems. The RMP will also require that the Pesticide Label be followed. The Risk Management Official will obtain documentation from the property owner to indicate that the RMP is followed. A form may be prescribed for this purpose.</p> <p>This activity is very unlikely to occur or be proposed in the subject area and therefore implementation has no negative impact.</p> <p>The City of Windsor and Town of Amherstburg have indicated that they intend to include information regarding this policy in their Official Plans and Zoning By-laws, in order to assist in informing property owners and others.</p> <p>This Section 58 policy is complemented by a Section 59 policy (No.xx). 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 requires a Risk Management Plan.</p>
Policy Tool	Clean Water Act Section 58 'Risk Management Plans'
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Legal Effect	Must conform/comply with
Compliance Date	<p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan the Plan takes effect.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of pesticide
Monitoring Policy Number	30M
Monitoring Policy Reference Number	WIAILI-storagepesticide-2 (CWA Monitoring Policy)
Sub Threats	The storage of pesticides
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy WIAILI-storagepesticide-3 (Clean Water Act).</p> <p>The above applies to the future significant threat of the storage of pesticide in the vulnerable areas:</p> <p>Windsor IPZ- I Amherstburg IPZ- I Lakeshore(Belle River) IPZ- I</p> <p>The date of compliance is by February 1 of each year</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO should ensure that the storage of pesticides in the Windsor IPZ- I, Amherstburg IPZ- I and Lakeshore IPZ- I is as per the Risk Management Plan to ensure the protection of source water.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Risk Management Official
Status of Policy	Approved

Threat	The handling and storage of fuel
Vulnerable Area	All Events Based Areas (EBAs) within IPZs in the Essex Region Source Protection Area
Policy Number	31
Policy Reference Number	SLWA123-handlestorefuel-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report.
Threat Status	Existing and Future Activities
Current Land Use	Varied
Approach	Through Clean Water Act, Section 58 Risk Management Plan – Manage the handling and storage of fuels

<p>Policy Text</p>	<p>The following activities are designated for the purpose of Section 58 'Risk Management Plans' of the Clean Water Act in the subject vulnerable areas where modeling reported in the Assessment Report has demonstrated that this activity is a significant threat. Therefore this policy applies to:</p> <ul style="list-style-type: none">• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report.• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report.• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report.• The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report. <p>The Risk Management Plan may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored. The Risk Management Official will have discretion as to what constitutes a satisfactory Risk Management Plan.</p> <p>The above applies to the existing and future significant threat of the handling and storage of fuel in all EBAs within IPZs in the Essex Region Source Protection Area related to the handling and storage of fuel.</p> <p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.</p>
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<p>Rationale</p>	<p>The Essex Region intake protection zones are very extensive, and include many land uses where the handling and storage of large quantities of liquid fuel is a necessity. It should be feasible to manage (rather than prohibit) these existing and future significant drinking water threats.</p> <p>Through modeling conducted, the above grade handling and storage of liquid fuels (containing benzene) was found to be a significant threat to source water, at certain volumes. The identified volumes are the minimum volume of fuel (containing benzene) found to result in a significant drinking water threat. This estimate is based on an assumption that fuels contain 2% benzene. The volume of fuel that would result in a significant drinking water threat will vary depending on the concentration of benzene in the fuel. For example, when fuel containing 2% is considered to be a threat at 15,000L, the equivalent volume of fuel containing 1% benzene would be 30,000L.</p> <p>The modeling scenarios resulted in the delineation of the EBAs reported in the Essex Region Assessment Report. It is important to note that the EBA is an area where modelling demonstrates that a spill of a specific contaminant (i.e. fuel) within this area would reach the intake and cause deterioration to the raw water quality. The EBA is a combination of the IPZ-1, IPZ-2 and IPZ-3, but may not include areas of high uncertainty. Because the EBA may be smaller than the combined IPZ-1, IPZ-2 and IPZ-3, this policy applies to the EBA only.</p> <p>There are two Prescribed Instruments under the Clean Water Act to address this activity, but these are only applicable to the handling and storage of fuel associated with residential drinking water systems and aggregate operations. Therefore, it is proposed to use the Clean Water Act Section 58 - Risk Management Plan, where the Prescribed Instruments do not apply, including but not limited to the handling and storage of fuel used for back-up generators at sewage treatment plants. The Technical Standards and Safety Act (TSSA), liquid fuel handling code, is not an instrument under the Clean Water Act, however it is felt that the TSSA requirements are an appropriate means to assess fuel threats and may be used to guide the development of RMPs. The Risk Management Plan (RMP) tools available through the Clean Water Act will enable the Risk Management Official (RMO) to produce a RMP consisting of details to address installation, operation and regular inspection of fuel storage tanks as well as how and where fuel is contained and stored, which demonstrate compliance with the TSSA requirements for installation, operation, regular inspections, etc. Unique RMPs will be negotiated with each landowner; however all RMPs will have requirements that are consistent with TSSA requirements. This policy is not intended to require that the RMO actually undertake official TSSA inspections.</p> <p>The implementation of this policy is not expected to have a negative impact since the requirements of the TSSA are to be fulfilled anyway.</p>
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	<p>This Section 58 policy is complemented by a Section 59 policy (No.32). 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 requires a Risk Management Plan.</p> <p>This policy was updated April 2016 under S.51(1) of O.Reg 278/07.</p>
Policy Tool	Clean Water Act Section 58 - Risk Management Plan
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area
Implementing Body	Risk Management Official(s)
Legal Effect	Must conform/comply with
Compliance Date	<p>For future threats, the date of compliance is when the Source Protection Plan takes effect.</p> <p>For existing threats, the Risk Management Official shall comply with the policy within 5 years from the date the Plan takes effect.</p>
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of fuel
Monitoring Policy Number	31M
Monitoring Policy Reference Number	SLWA123-handlestorefuel-3 (CWA Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>In accordance with Section 81 of the Clean Water Act, the Risk Management Official (RMO) shall prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy SLWA123-handlestorefuel-1 (Clean Water Act).</p> <p>The above applies to the existing and future significant threat of the handling and storage of fuel in the vulnerable areas:</p> <p>All EBAs within IPZs in the Essex Region Source Protection Area</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the RMO should ensure that risk management plans incorporate the requirements of the TSSA for the handling and storage of fuel in subject areas. This may include, but is not limited to, details concerning installation, operation and regular inspection of fuel storage tanks, how fuel is contained, the location of fuel, and how fuel is stored. A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the RMO shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year to comply.
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area
Implementing Body	Risk Management Official(s)
Status of Policy	Approved

Threat	The handling and storage of fuel;
Vulnerable Area	All Events Based Areas (EBAs) within IPZs in the Essex Region Source Protection Area
Policy Number	32
Policy Reference Number	All 123-handlestorefuel-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report.
Threat Status	Future Activities
Current Land Use	Commercial, Agricultural and Industrial land uses identified in Official Plan and/or Zoning By-Laws

<p>Approach</p>	<p>All Restricted Land Uses that would be considered significant drinking water threats are flagged for screening in order to enable the appropriate consideration of Section 57 (Prohibition) and Section 58 (Risk Management Plan) policies.</p>
<p>Policy Text</p>	<p>Commercial, Agricultural and Industrial land uses identified within the Official Plan and/or Zoning By-Laws where the policies of the Source Protection Plan indicate the handling and storage of fuel in quantities described above are subject to Section 57 or Section 58 of the <i>Clean Water Act</i>, are hereby designated as Restricted Land Uses, with the exception of residential uses. Within these designated land uses and areas, a written notice from the Risk Management Official in accordance with Section 59(2) of the <i>Clean Water Act</i> shall be required prior to approval of any Building Permit or <i>Planning Act</i> application.</p> <p>Despite the above policy, a Risk Management Official may issue written direction specifying the circumstances under which a <i>Planning Act</i> Approval Authority or building official may be permitted to make the determination that a site specific land use is not designated for the purposes of Section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the <i>Planning Act</i> or for a permit under the <i>Building Code Act</i> is not designated for the purposes of Section 59, provided that the <i>Planning Act</i> Approval Authority or building official, as the case may be, is satisfied that:</p> <p>The application complies with the circumstances specified in the written direction from the Risk Management Official; and</p> <p>The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of Section 57 or 58 will not be engaged in, or will not be affected by the application</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>Restricted land use policies require municipalities to screen Planning Act, Condominium Act and application under the Building Code Act to determine if the proposed activities are subject to Section 57 (Prohibition) or Section 58 (Risk Management Plan) policies. The purpose is to help municipalities comply with Source Protection Plan policies in advance of approving an application. Restricted Land Use policies reference the land use types and vulnerable areas where applications need to be screened. If an application is made for an activity that is prohibited by the Source Protection Plan, then the application cannot be approved. If an application is made for an activity that is subject to a Risk Management Plan, then the proponent must first work with the Risk Management Official to establish a Risk Management Plan before the application can proceed.</p> <p>Through modeling conducted, the above grade handling and storage of liquid fuels (containing benzene) was found to be a significant threat to source water, at certain</p>

	<p>volumes. The identified volumes are the minimum volume of fuel (containing benzene) found to result in a significant drinking water threat. This estimate is based on an assumption that fuels contain 2% benzene. The volume of fuel that would result in a significant drinking water threat will vary depending on the concentration of benzene in the fuel. For example, when fuel containing 2% is considered to be a threat at 15,000L, the equivalent volume of fuel containing 1% benzene would be 30,000L.</p> <p>The modeling scenarios resulted in the delineation of the EBAs reported in the Essex Region Assessment Report. It is important to note that the EBA is an area where modelling demonstrates that a spill of a specific contaminant (i.e. fuel) within this area would reach the intake and cause deterioration to the raw water quality. The EBA is a combination of the IPZ-1, IPZ-2 and IPZ-3, but may not include areas of high uncertainty. Because the EBA may be smaller than the combined IPZ-1, IPZ-2 and IPZ-3, this policy applies to the EBA only.</p> <p>This policy was updated April 2016 under S.51(1) of O.Reg 278/07.</p>
Policy Tool	Clean Water Act Section 59 – Restricted Land Use
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, Township of Pelee
Implementing Body	City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, Township of Pelee
Legal Effect	Conform with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of fuel;
Monitoring Policy Number	32M
Monitoring Policy Reference Number	All I 23-handlestorefuel-2 (Monitoring Policy)
Sub Threats	Not Applicable
Legal Effect	Conform with
Monitoring Policy Text	<p>The Municipalities will each prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with this policy.</p> <p>The above applies to the existing and future significant threats related to the Section 59 restricted land use policies in the following areas:</p> <p>All EBAs within IPZs in the Essex Region Source Protection Area</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the Municipalities should ensure that all Section 59 policies on restricted land use are complied with in all EBAs within IPZs in the Essex Region SPA</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Municipalities will each prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, Township of Pelee
Implementing Body	City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, Township of Pelee
Status of Policy	Approved

Threat	<p>The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act; The application of agricultural source material to land; The storage of agricultural source material; The application of non-agricultural source material to land; The handling and storage of non-agricultural source material; The handling and storage of road salt; The storage of snow; The application of pesticide to land; The handling and storage of pesticide;</p>
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore (Belle River) IPZ-1
Policy Number	33
Policy Reference Number	WIW2A1LI-allactivities-1 (Clean Water Act)
Risk Level of Threat	Significant
Sub Threats	All activities that are subject to Sections 57 (Prohibition) or 58 (Risk Management Plan) policies
Significant Risk Circumstances	<p>All activities that are subject to Sections 57 (Prohibition) or 58 (Risk Management Plan) policies</p> <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Future Activities
Current Land Use	All land uses identified in Official Plan and/or Zoning By-Laws except for residential uses.
Approach	All Restricted Land Uses that would be considered significant drinking water threats are flagged for screening in order to enable the appropriate consideration of Section 57 (Prohibition) and Section 58 (Risk Management Plan) policies.
Policy Text	All land uses identified within the Official Plan and/or Zoning By-Laws where significant drinking water threat activities have been designated for the purpose of Sections 57 or 58 of the <i>Clean Water Act</i> , are hereby designated as Restricted Land Uses, with the exception of residential uses. Within these designated land uses and

	<p>areas, a written notice from the Risk Management Official in accordance with Section 59(2) of the <i>Clean Water Act</i> shall be required prior to approval of any Building Permit, <i>Planning Act</i> or <i>Condominium Act</i> application.</p> <p>Despite the above policy, a Risk Management Official may issue written direction specifying the circumstances under which a <i>Planning Act</i> Approval Authority or building official may be permitted to make the determination that a site specific land use is not designated for the purposes of Section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the <i>Planning Act</i>, <i>Condominium Act</i>, or for a permit under the <i>Building Code Act</i> is not designated for the purposes of Section 59, provided that the <i>Planning Act</i> Approval Authority or building official, as the case may be, is satisfied that:</p> <ul style="list-style-type: none"> • The application complies with the circumstances specified in the written direction from the Risk Management Official; and • The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of Section 57 or 58 will not be engaged in, or will not be affected by the application <p>The date of compliance is when Source Protection Plan takes effect.</p>
Rationale	<p>Restricted land use policies require municipalities to screen <i>Planning Act</i>, <i>Condominium Act</i> and application under the <i>Building Code Act</i> to determine if the proposed activities are subject to Section 57 (Prohibition) or Section 58 (Risk Management Plan) policies. The purpose is to help municipalities comply with Source Protection Plan policies in advance of approving an application. Restricted Land Use policies reference the land use types and vulnerable areas where applications need to be screened. If an application is made for an activity that is prohibited by the Source Protection Plan, then the application cannot be approved. If an application is made for an activity that is subject to a Risk Management Plan, then the proponent must first work with the Risk Management Official to establish a Risk Management Plan before the application can proceed.</p>
Policy Tool	Clean Water Act Section 59 – Restricted Land Use
Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	City of Windsor, Town of Amherstburg, Town of Lakeshore
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

<p>Threat</p>	<p>The application of agricultural source material to land;</p> <p>The storage of agricultural source material;</p> <p>The application of non-agricultural source material to land;</p> <p>The handling and storage of non-agricultural source material;</p> <p>The handling and storage of road salt;</p> <p>The storage of snow;</p> <p>The application of pesticide to land;</p> <p>The handling and storage of pesticide;</p>
<p>Monitoring Policy Number</p>	<p>33M</p>
<p>Monitoring Policy Reference Number</p>	<p>WIW2A1LI-allactivities-2 (Monitoring Policy)</p>
<p>Sub Threats</p>	<p>Various</p>
<p>Legal Effect</p>	<p>Must Conform/comply with</p>
<p>Monitoring Policy Text</p>	<p>The Municipalities will each prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with this policy.</p> <p>The above applies to the existing and future significant threats related to the Section 59 restricted land use policies in the following areas:</p> <p>Windsor IPZ-1 Windsor IPZ-2 Amherstburg IPZ-1 Lakeshore (Belle River) IPZ-1</p> <p>The date of compliance is by February 1 of each year.</p>
<p>Monitoring Policy Rationale</p>	<p>The monitoring by the Municipalities (City of Windsor, Town of Amherstburg and Town of Lakeshore) should ensure that all Section 59 policies on restricted land use are complied with in the Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore IPZ-1.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>



Monitoring Policy Compliance Date	By February 1 of each year, the Municipalities (City of Windsor, Town of Amherstburg and Town of Lakeshore) will each prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	City of Windsor, Town of Amherstburg, Town of Lakeshore
Status of Policy	Approved

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-2
Policy Number	34
Policy Reference Number	W2bypass-1 (Specify Action)
Risk Level of Threat	Significant
Sub Threats	Sewage treatment plant bypass discharge to surface water
Significant Risk Circumstances	<ul style="list-style-type: none"> The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 2 chemicals of concern: mercury or one or more of its compounds, and one or more PCBs (polychlorinated biphenyls) The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The discharge may result in the presence of pathogen(s) in surface water, in an IPZ-2 of vulnerability score 8.1. There is no quantity threshold <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Manage wastewater treatment facilities that discharge to surface water by means of designed bypass in the Windsor IPZ-2.
Policy Text	The City of Windsor will continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval) (or any updates or replacements to it) under the Ontario Water Resources Act for the Little River Pollution Control Plant (LRPCP) and continue its current monitoring scheme which includes the testing of mercury and PCBs in the raw wastewater and E. coli in the bypass. The City of Windsor

	<p>will also give due consideration to the reduction of the frequency and volumes of bypasses through sewer separation and downspout disconnection programs, and other such measures while developing plans or strategies to manage storm water and sewers. The City of Windsor will initiate the development of plans or strategies, to manage storm water and sewers, when the Source Protection Plan takes effect.</p> <p>The above applies to the existing and future significant threat of sewage treatment plant bypass discharge to surface water, in the vulnerable area:</p> <p>Windsor IPZ-2</p>
<p>Rationale</p>	<p>Wastewater treatment plants are designed to accommodate a certain amount of storm flow. However during an extreme event (such as heavy rainfall or snow melt), the quantity of storm water exceeds the design criteria. The plant is then forced to bypass the excess wastewater to a watercourse or water body in order to protect the plant's infrastructure. Typically plant bypasses receive some level of treatment before discharge but not the full treatment (information adapted from https://www.citywindsor.ca/residents/environment/Environmental-Master-Plan/Pages/State-of-the-Environment.aspx). This results in partially treated or raw sewage entering a surface water body through the plant bypass.</p> <p>There is a sewage treatment plant in the Windsor IPZ-2, and the plant bypass is regulated through Environmental Compliance Approval (Certificate of Approval) under the Ontario Water Resources Act. Current land uses do not preclude sewage treatment plant bypass discharge from happening.</p> <p>Whenever bypass occurs, it is monitored for parameters specified in the Environmental Compliance Approval (Certificate of Approval). These are: E. coli (during disinfection season May 1 to Oct 31), biochemical oxygen demand, total suspended solids, total phosphorus, pH, and ammonia. According to the MOE Tables of Drinking Water Threats, the parameters of concern for the significant threat activity of sewage treatment plant bypass (in an IPZ-2 of vulnerability score 8.1) are mercury or one or more of its compounds, one or more PCBs (polychlorinated biphenyls) and one or more pathogens.</p> <p>The bypass is not tested for mercury or PCBs, but the raw wastewater is. The bypass contains both storm water and raw wastewater. Therefore mercury and PCBs data available for the raw wastewater were reviewed instead. The bypass E. coli data was also reviewed (E. coli is indicative of fecal pathogens). Mercury, tested monthly in the raw wastewater, was detected in only 3 samples over three years, with levels 2 to 10 times less than the stringent treated drinking water standard. PCBs, tested once a year in the raw wastewater, were below detection limits in the three years data reviewed. E. coli counts in bypass, tested weekly in 2011, ranged from 490,000 to 2,470,000 counts/100mL, typical of wet weather events. The review of the parameters of concern indicated that mercury and PCBs in the raw wastewater are considerably below levels at which there would be cause for concern. Although the bypass is not tested for these chemicals, it is adequate to consider these</p>

	<p>chemicals in the raw wastewater. This is because the bypass, comprised of stormwater and raw wastewater, would contain lower levels of these chemicals than in the raw wastewater. The E. coli levels in the bypass are typical of wet weather flows; and the plant disinfects the bypass when it occurs between May 1 and October 31 each year, as required by the Environmental Compliance Approval (Certificate of Approval).</p> <p>The tools available through Section 26 of the O. Reg. 287/07 (under the Clean Water Act) provide for actions that could address the significant threat, considering the current requirements of the existing Environmental Compliance Approval (Certificate of Approval), and the current monitoring scheme. The ‘Specify Action to be taken to implement Plan or achieve its objectives’ tool allows for an action to be specified that addresses the significant threat and is carried out by the implementing body. This approach was discussed with City of Windsor staff and found to be suitable.</p> <p>The proposed Source Protection Plan policies will direct the City of Windsor to continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval), continue its current monitoring scheme which includes the testing of composite samples for mercury and PCBs in the raw wastewater and grab samples for E. coli in the bypass; continue to promote measures to reduce storm water to sanitary or combined sewers, such as downspout disconnection, etc.; and continue with combined sewer separation programs in targeted areas. The draft Policies for the existing CSOs suggest to include measures that reduce stormwater contributing to combined sewer discharge while developing management plans or strategies to manage storm water and sewers. These management plans may identify the need for measures such as targeted sewer separation programs. Consideration should be given to the sewer-shed areas of the Little River Pollution Control Plant (LRPCP) in the plans or strategies to manage storm water and sewers.</p> <p>Education and Outreach policies and Stewardship/Incentive policies are also developed in order to complement the Specify Action policy.</p> <p>The Clean Water Act Part IV tools interim risk management plans, risk management plans, prohibition, and restricted land uses cannot be used for sewage systems, which include industrial sewage works.</p>
Policy Tool	Specify Action to be taken to implement Plan or achieve its objectives.
Municipality Policy Applies to	City of Windsor
Implementing Body	City of Windsor
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-2
Policy Number	35
Policy Reference Number	W2effluent-1 (Specify Action)
Risk Level of Threat	Significant
Sub Threats	Sewage treatment plant effluent discharges (includes lagoons)
Significant Risk Circumstances	<ul style="list-style-type: none"> The wastewater treatment facility discharges treated sanitary sewage directly to land or surface water through a means other than a designed bypass. The facility is designed to discharge at an average daily rate of more than 50,000 m³ (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 4 chemicals of concern: antimony or one or more of its compounds, arsenic or one or more of its compounds, MCPA (2-methyl-4-chlorophenoxyacetic acid) and mercury or one or more of its compounds. The wastewater treatment facility discharges to surface water through a means other than a designed bypass. The discharge may result in the presence of pathogen(s) in surface water, for an IPZ-2 of vulnerability score 8.1. There is no quantity threshold. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Manage wastewater treatment facilities that discharge to surface water by means other than designed bypass in the Windsor IPZ-2.
Policy Text	The City of Windsor will continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval), and will add to its current monitoring scheme the testing of 2-methyl-4-chlorophenoxyacetic acid (MCPA) in the effluent

	<p>discharge, such that MCPA is tested at least once a year at the same sampling point and in the same manner as is done for other pesticides. The City of Windsor will set up a testing schedule when the Source Protection Plan takes effect.</p> <p>The above applies to the existing and future significant threat of sewage treatment plant effluent discharges in the vulnerable area:</p> <p>Windsor IPZ-2</p>
<p>Rationale</p>	<p>All sewage treatment plants release treated wastewater that is called effluent. The effluent can be directly released to a watercourse or water body after treatment or its release from a lagoon can be scheduled.</p> <p>There is a sewage treatment plant in the Windsor IPZ-2, and the effluent discharge is regulated through Environmental Compliance Approval (Certificate of Approval) under the Ontario Water Resources Act. Effluent parameter limits, monitoring and recording requirements are typically specified in the Environmental Compliance Approval (Certificate of Approval). Current land uses do not preclude sewage treatment plant effluent discharge from happening.</p> <p>Through the Environmental Compliance Approval (Certificate of Approval), the effluent is required to be monitored for these parameters: carbonaceous biochemical oxygen demand, total suspended solids, total ammonia nitrogen, total Kjeldahl nitrogen, total phosphorous, E. coli, pH, temperature and dissolved oxygen.</p> <p>According to the MOE Tables of Drinking Water Threats, the parameters of concern for the significant threat activity of sewage treatment plant effluent discharge (in an IPZ-2 of vulnerability score 8.1) are antimony or one or more of its compounds, arsenic or one or more of its compounds, MCPA (2-methyl-4-chlorophenoxyacetic acid), mercury or one or more of its compounds, and one or more pathogens.</p> <p>The effluent discharge is not tested for MCPA, which is a pesticide. Metals in the effluent discharge wastewater are tested monthly. E. coli is tested weekly during the disinfection period of May 1 to Oct 31. Three years data for antimony, arsenic and mercury as well as two years data for E. coli were reviewed. Antimony, arsenic and mercury were not detected in any of the effluent samples. The calculated monthly geometric mean values of E. coli in the effluent in 2010 and 2011 were below 100 counts/100mL. The review of the parameters of concern indicated that they are considerably below levels at which there would be cause for concern.</p> <p>The tools available through Section 26 of the O. Reg. 287/07 (under the Clean Water Act) provide for actions that could address the significant threat, considering the current requirements of the existing Environmental Compliance Approval (Certificate of Approval), and the current monitoring scheme. The 'Specify Action to be taken to implement Plan or achieve its objectives' tool allows for an action to be specified that addresses the significant threat and is carried out by the implementing body. This approach was discussed with City of Windsor staff and found to be suitable. The</p>

	<p>proposed Source Protection Plan policy will direct the City of Windsor to continue to meet the requirements of the Environmental Compliance Approval (Certificate of Approval), and add to its current monitoring scheme the testing of MCPA in the effluent discharge, such that MCPA is tested at least once a year at the same sampling point and in the same manner as is done for other pesticides. This additional testing was discussed with the City of Windsor and found to be feasible, at a minimal cost, through an accredited laboratory.</p> <p>Education and Outreach policies are also developed in order to complement the Specify Action policy.</p>
Policy Tool	Specify Action to be taken to implement Plan or achieve its objectives.
Municipality Policy Applies to	City of Windsor
Implementing Body	City of Windsor
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Monitoring Policy Number	34/35M
Monitoring Policy Reference Number	W2-bypass/effluent-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Municipality will document the actions taken to comply with policies W2bypass-1 (Specify Action) and W2effluent-1 (Specify Action).</p> <p>The above applies to the existing and future significant threat of sewage treatment plant bypass discharge to surface water and sewage treatment plan effluent discharges, in the vulnerable area: Windsor IPZ-2</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring by the municipality will confirm that sewage effluent discharge and bypass in the Windsor IPZ-2 are managed such that the requirements of the Environmental Compliance Approval (Certificate of Approval) are met, the parameters of concern specified in these policies are monitored in the influent and effluent discharge, and measures to reduce bypass are promoted.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Municipality will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor
Implementing Body	City of Windsor
Status of Policy	Approved

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-1 and Windsor IPZ-2
Policy Number	36
Policy Reference Number	WIW2-combinedsewerbypasseffluent-1 (Specify Action)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Combined sewer discharge from a stormwater outlet to surface water • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons)
Significant Risk Circumstances	<ul style="list-style-type: none"> • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m³ (annual basis). This applies to an <u>IPZ-1 of vulnerability score 9</u>, for which there are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 13 chemicals for a rate more than 50,000 m³. • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an <u>IPZ-2 of vulnerability score 8.1</u>, for which there are 2 chemicals of concern. • The combined sewer may discharge sanitary sewage containing human waste to surface water, and the discharge may result in the presence of pathogen(s) in surface water, for an <u>IPZ-1 of vulnerability score 9</u> and an <u>IPZ-2 of vulnerability score 8.1</u>. There is no quantity threshold. • The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 2 chemicals of concern: mercury or one or more of its compounds, and one or more PCBs (polychlorinated biphenyls) • The wastewater treatment facility may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. The discharge may result in

	<p>the presence of pathogen(s) in surface water, in an IPZ-2 of vulnerability score 8.1. There is no quantity threshold</p> <ul style="list-style-type: none"> • The wastewater treatment facility discharges treated sanitary sewage directly to land or surface water through a means other than a designed bypass. The facility is designed to discharge at an average daily rate of more than 50,000 m³ (annual basis). This applies to an IPZ-2 of vulnerability score 8.1, for which there are 4 chemicals of concern: antimony or one or more of its compounds, arsenic or one or more of its compounds, MCPA (2-methyl-4-chlorophenoxyacetic acid) and mercury or one or more of its compounds. • The wastewater treatment facility discharges to surface water through a means other than a designed bypass. The discharge may result in the presence of pathogen(s) in surface water, for an IPZ-2 of vulnerability score 8.1. There is no quantity threshold. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing Activities
Current Land Use	Windsor IPZ-1 : Residential, municipal parks, minimal commercial Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Manage existing combined sewer discharges in the Windsor IPZ-1 and Windsor IPZ-2, and bypass and effluent discharges in the Windsor IPZ-2 through the 'Specify Action' tools available as per O. Reg. 287/07 Section 26 (under the Clean Water Act); in conjunction with other Section 26 policies.
Policy Text	The City of Windsor will initiate the development of a sewer and storm management plan when the Source Protection Plan takes effect. The sewer and storm management plan will include plans for further sewer separation in the sewersheds of the combined sewer overflows and the Little River Pollution Control Plant. The management plan will also consider storm water retention structures such as deep tunnel storage to reduce combined sewer overflow. The development of the management plan will be targeted for completion in 2016. The City of Windsor will also continue its current sewer separation program.

	<p>The above applies to the existing significant threat of Combined Sewer Overflows (CSOs), bypass and effluent discharges in the vulnerable areas: Windsor IPZ-1 and IPZ-2</p>
<p>Rationale</p>	<p>There are 4 combined sewer overflows (CSOs) in the Windsor IPZ-1 (east and west intakes), and 2 CSOs in the Windsor IPZ-2 (east and west intakes). New combined sewers are not permitted by the MOE, as per the ‘Guidelines for the Design of Sanitary Sewer Systems’ (MOE, July 1985). The prohibiting of new combined sewers (by not approving Environmental Compliance Approvals (Certificates of Approvals) for new combined sewers) is indicated in policy WIW2A1-combinedsewer-1 (Prescribed Instrument). Environmental Compliance Approvals (Certificates of Approval) or any other such approvals or paperwork associated with the existing combined sewers in the Windsor IPZ-1 and Windsor IPZ-2, are not available for review and likely do not exist. These combined sewers were installed prior to the 1950s.</p> <p>There is a sewage treatment plant in the Windsor IPZ-2, and the plant bypass and the effluent discharge are regulated through Environmental Compliance Approval (Certificate of Approval) under the Ontario Water Resources Act. Current land uses do not preclude sewage treatment plant bypass or effluent discharge from happening. Wastewater treatment plants are designed to accommodate a certain amount of storm flow. However during an extreme event (such as heavy rainfall or snow melt), the quantity of stormwater exceeds the design criteria. The plant is then forced to bypass the excess wastewater to a watercourse or water body in order to protect the plant's infrastructure. Typically plant bypasses receive some level of treatment before discharge but not the full treatment (information adapted from https://www.citywindsor.ca/residents/environment/Environmental-Master-Plan/Pages/State-of-the-Environment.aspx) This results in partially treated or raw sewage entering a surface water body through the plant bypass. All sewage treatment plants release treated wastewater that is called effluent. The effluent can be directly released to a watercourse or water body after treatment or its release from a lagoon can be scheduled.</p> <p>The tools available through Section 26 of the O. Reg. 287/07 (under the Clean Water Act) and Clean Water Act Section 22 provide for actions that could address the significant threat and therefore these tools were considered to address existing CSOs, sewage bypass and sewage effluent discharges within these vulnerable areas. The following tools or combinations of tools, in order of priority are used: Specify Actions, Govern Research (CSO only), Education and Outreach (E&O), and Stewardship/Incentive Programs. This policy uses the ‘Specify Action’ tool. Policies to address existing CSOs, sewage bypass and sewage effluent discharges using the other Reg. 287/07 Section 26 tools and Clean Water Act Section 22 (E&O and Stewardship/Incentive Programs) tools are also drafted.</p> <p>The implementing body of a ‘Specify Action’ policy is directed to undertake certain actions that address the significant threat. Where a policy specifies actions to be taken</p>

by a public or other body, the SPC should ensure that there are no legal constraints that would prevent the body from taking the specified actions. The SPC, through discussions with the identified implementation body, must determine whether implementation of the policy is within the jurisdiction of that body, and discuss the policy's feasibility, including any financial implications (Reg. 287/07, Section 40 (2).2).

In October 2011, the use of various Reg. 287/07 Section 26 Clean Water Act Section 22 tools to address existing CSOs, sewage bypass and sewage effluent discharges was discussed with the City of Windsor staff. **It is important to recognize that the City of Windsor has already established a sewer separation program in the subject sewersheds, and plans on developing a storm and sewer management plan.** The storm and sewer management plan is targeted to be completed in 2016, with data collection in 2012-2013, and modeling studies and plan development in 2014-2016. The City of Windsor is also constructing a retention treatment basin outside of the Windsor IPZ-1 and IPZ-2. The City also has a downspout disconnection program, which is currently subsidized in some cases through the MOE's 'Ontario Drinking Water Stewardship Program', and is proposed to be subsidized in the future in the subject sewer-sheds, through application for Provincial funding assistance, as described in the policy that uses the Stewardship/Incentives tool. Further, the management of stormwater is also being considered through City of Windsor climate change initiatives. Education and Outreach initiatives such as newspaper inserts that inform residents of 'what not to put down the drain'; benefits of downspout disconnection and the sewer separation project are led by the City of Windsor. All of these projects and plans help reduce combined sewer overflows thus mitigating the threat posed by CSOs, sewage bypass and sewage effluent discharges to drinking water sources.

Consideration should be given to the CSOs in the subject vulnerable areas as well as the sewershed areas of the Little River Pollution Control Plant (LRPCP) in the plans or strategies to manage stormwater and sewers.

Timelines and financial implications of the development and implementation of the sewer and storm management plan were discussed with City of Windsor staff. There are several kilometers of combined sewers within the subject vulnerable areas. The estimated cost of sewer separation is 2.5 million dollars per kilometer, and it takes a year to separate a few kilometers. Based on this information, the implementation of a sewer and storm management plan would be a long-term project (more than 20 years) and require large amounts of funding (multi-million dollars). Based on information from the City, about one-third of the streets in the subject CSO sewer-sheds have had sewer separation completed to date, and a substantial number of projects have been completed in the LRPCP sewershed. Additional projects are planned in the next 5 years, however it is unknown at this time whether funding will be available in the future for the implementation of a long term management plan which would include projects for

	<p>further sewer separation and could also potentially stormwater retention structures such as deep tunnel storage.</p> <p>The actions specified in this policy take into consideration the existing projects led by the City of Windsor including sewer separation and downspout disconnection. In accordance with Reg. 287/07 Section 40 (2).2, the financial implications and feasibility were also considered while drafting this policy. The actions specified in this policy are to develop a sewer and storm management plan and to continue the existing sewer separation program. The management plan will include sewer separation for prioritized CSOs and LRPCP sewershed areas, and consider the construction of stormwater retention structures such as deep tunnel storage. The Plan might be informed by the studies discussed under the 'Govern Research' policy to address existing CSOs. It is proposed that the sewer and storm management plan be developed by the end of 2016; this is conditional upon the current budget staying as planned. As mentioned above, it is not known at this time whether funding will be available in the future for the implementation of a long term sewer and storm management plan. Therefore this policy recognizes that the municipality intends to develop the management plan, but does not direct the municipality to implement it.</p>
Policy Tool	Specify Actions
Municipality Policy Applies to	City of Windsor
Implementing Body	City of Windsor
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-1 and Windsor IPZ-2
Policy Number	37
Policy Reference Number	WIW2-combinedsewer-2 (Govern Research)
Risk Level of Threat	Significant
Sub Threats	Combined sewer discharge from a stormwater outlet to surface water
Significant Risk Circumstances	<ul style="list-style-type: none"> • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m³ (annual basis). This applies to an <u>IPZ-1 of vulnerability score 9</u>, for which there are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 13 chemicals for a rate more than 50,000 m³. • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an <u>IPZ-2 of vulnerability score 8.1</u>, for which there are 2 chemicals of concern. • The combined sewer may discharge sanitary sewage containing human waste to surface water, and the discharge may result in the presence of pathogen(s) in surface water, for an <u>IPZ-1 of vulnerability score 9</u> and an <u>IPZ-2 of vulnerability score 8.1</u>. There is no quantity threshold. <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing Activities

<p>Current Land Use</p>	<p>Windsor IPZ-1 : Residential, municipal parks, minimal commercial Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional</p>
<p>Approach</p>	<p>Manage existing combined sewer discharges in the Windsor IPZ-1 and Windsor IPZ-2 through the ‘Govern Research’ tool available as per O. Reg. 287/07 Section 26 (under the Clean Water Act); in conjunction with other Section 26 policies.</p>
<p>Policy Text</p>	<p>The City of Windsor will initiate a research program when the Source Protection Plan takes effect. The research program will characterize combined sewer overflows in the Windsor intake protection zones (IPZs) 1s and 2s such that the program will provide input to a sewer and storm management plan. The research program will include the estimation of combined sewer overflow discharge volumes, frequencies of discharge and pollutant loading (conventional parameters including pH, biochemical oxygen demand-5 day, and suspended solids, and possibly other parameters as needed). The research program will be targeted for completion in 2014.</p> <p>The above applies to the existing significant threat of Combined Sewer Overflows (CSOs) in the vulnerable areas:</p> <p>Windsor IPZ-1 and IPZ-2</p>
<p>Rationale</p>	<p>There are 4 combined sewer overflows (CSOs) in the Windsor IPZ-1 (east and west intakes), and 2 CSOs in the Windsor IPZ-2 (east and west intakes). New combined sewers are not permitted by the MOE, as per the ‘Guidelines for the Design of Sanitary Sewer Systems’ (MOE, July 1985). The prohibiting of new combined sewers (by not approving Environmental Compliance Approvals (Certificates of Approvals) for new combined sewers) is indicated in policy WIW2A1-combinedsewer-1 (Prescribed Instrument).</p> <p>Environmental Compliance Approvals (Certificates of Approval) or any other such approvals or paperwork associated with the existing combined sewers in the Windsor IPZ-1 and Windsor IPZ-2, are not available for review and likely do not exist. These combined sewers were installed prior to the 1950s. The tools available through Section 26 of the O. Reg. 287/07 (under the Clean Water Act) and the Clean Water Act Section 22 provide for actions that could address the significant threat and therefore these tools were considered to address existing CSOs within these vulnerable areas. The following tools or combinations of tools, in order of priority are used: Specify Actions, Govern Research, Education and Outreach, and Stewardship/Incentive Programs. This policy uses the ‘Govern Research’ tool. The outcomes of ‘Govern Research’ policy will inform the ‘Specify Action’ policy. Policies to address existing CSOs using the other Section 26 tools are also drafted.</p> <p>The ‘Govern Research’ type of policy specifies what the research program will be, the implementing body, duration of the program and expected outcomes. The main</p>

	<p>objective of the research program is to provide information that will help develop the sewer and stormwater management plan (see the policy to address CSOs using ‘Specify Action’ tool).</p> <p>Characterizing CSO flows, frequencies, composition and treatability assists in determining suitable and cost effective treatment/storage options (‘Managing Urban Wet-Weather Flows: On the Road to Sustainability’. Water Quality Research Journal of Canada. J. Marsalek, S. Kok and H. Colasvolume Vol. 39, No. 4, 2004). In addition, the delineation of the CSO drainage areas, analysis of rainfall data throughout the drainage area, identification of all CSO outfalls, and preliminary CSO hydraulic analyses is also part of the initial characterization (Combined Sewer Overflows. Guidance for Monitoring and Modeling. USEPA. January 1999). According to the Canadian Council of Ministers of Environment (CCME) document ‘Canada-wide strategy for the management of municipal wastewater effluent’ (June 2008), the characterization, monitoring and modeling of CSOs is one of the key steps to a long-term CSO control plan. The CCME has developed criteria for assessing the risk level of CSOS, which would help prioritize them. The criteria include: percent of total dry weather flow found in sewer at this location (or percent of combined sewer served at this location), frequency of CSO events, receiving environment type and affected uses (vicinity of drinking water intake, endangered species, fish spawning area, contact recreation area, fish consumption advisory area, discharging water body – lake, river, estuary, industrial input).</p> <p>It is proposed that the research program be a basic ‘desktop’ study conducted for the subject sewersheds, including the estimation of CSO discharge volumes, frequencies of discharge and pollutant loading (a few grab samples to taken and be analyzed for conventional parameters including pH, biochemical oxygen demand-5 day, and suspended solids, and possibly others). Based on discussions with City staff, this work will be included in the data collection stage of the sewer and storm management plan which is described in the related ‘Specify Action’ Policy. The information from the research program will prioritize CSOs and assist in determining the measures necessary to address the significant threat. Therefore the outcomes of ‘Govern Research’ policy would inform the ‘Specify Action’ policy.</p>
Policy Tool	Govern Research
Policy Applies to	City of Windsor
Implementing Body	City of Windsor
Legal Effect	Must conform/comply with
Compliance Date	When the Source Protection Plan takes effect.
Status of Threat Policy	Approved



Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-1 and Windsor IPZ-2
Policy Number	38
Policy Reference Number	WIW2-combinedsewerstorm-3 (E&O)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Combined sewer discharge from a stormwater outlet to surface water • Stormwater management (including systems with or with-out ponds or other retention facilities)
Significant Risk Circumstances	<ul style="list-style-type: none"> • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m³ (annual basis). This applies to an <u>IPZ-1 of vulnerability score 9</u>, for which there are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 13 chemicals for a rate more than 50,000 m³. • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an <u>IPZ-2 of vulnerability score 8.1</u>, for which there are 2 chemicals of concern. • The combined sewer may discharge sanitary sewage containing human waste to surface water, and the discharge may result in the presence of pathogen(s) in surface water, for an <u>IPZ-1 of vulnerability score 9</u> and an <u>IPZ-2 of vulnerability score 8.1</u>. There is no quantity threshold. • Stormwater management (see Prescribed Instrument policy) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>

Threat Status	Future Activities (CSO is existing only)
Current Land Use	Windsor IPZ-1 : Residential, municipal parks, minimal commercial Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	In conjunction with other Section 26 policies, manage existing combined sewer discharges, in the Windsor IPZ-1 and Windsor IPZ-2 through the ‘Education and Outreach’ tool available as per the Clean Water Act Section 22. In conjunction with the Prescribed Instrument policy, manage future stormwater management in the Windsor IPZ-1 and Windsor IPZ-2 through the ‘Education and Outreach’ tool available as per Clean Water Act Section 22.
Policy Text	<p>The City of Windsor will initiate and lead Education and Outreach when the Source Protection Plan takes effect. The Education and Outreach will educate property owners within the sewershed areas of the subject vulnerable areas where existing CSOs are significant threats, and where future stormwater management could be significant threats. The Education and Outreach will promote downspout disconnection, use of rain barrels, and will provide information on what not to dispose of down the drain and the spills action centre in case of spills, and other such initiatives that assist in educating the property owners about combined sewer overflow, as well as stormwater management. The delivery of the Education and Outreach will be targeted for completion in 2014, and will be continued as needed based on review at that time.</p> <p>The above applies to the future significant threat of Combined Sewer Overflows (CSOs) and stormwater management in the vulnerable areas:</p> <p>Windsor IPZ-1 and IPZ-2</p>
Rationale	<p>There are 4 combined sewer overflows (CSOs) in the Windsor IPZ-1 (east and west intakes), and 2 CSOs in the Windsor IPZ-2 (east and west intakes). These combined sewers were installed prior to the 1950s. New combined sewers are not permitted by the MOE, as per the ‘Guidelines for the Design of Sanitary Sewer Systems’ (MOE, July 1985).</p> <p>Based on discussions with City of Windsor staff, 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.</p> <p>The tools available through Section 26 of the O. Reg. 287/07 (under the Clean Water Act) and Clean Water Act Section 22 provide for actions that could address the significant threat and therefore these tools were considered to address CSOs, and stormwater discharge within these vulnerable areas. The following tools or</p>

	<p>combinations of tools, in order of priority are used: Specify Actions, Govern Research, Education and Outreach, and Stewardship/Incentive Programs. This policy uses the ‘Education and Outreach’ tool as per the Clean Water Act Section 22. Policies to address CSOs using the other O. Reg. 287/07 Section 26 tools and Clean Water Act Section 22 tools are also drafted.</p> <p>Education and Outreach (E&O) approaches are intended to increase awareness on the requirements and benefits of drinking water source protection, improve landowner acceptance of Source Protection Plan policies, and encourage positive changes in behaviour. E&O policies alone would not adequately address significant threats. However the E&O initiatives should improve the effectiveness of any CSO policy such as ‘Specify Action’ (see the related policy), and are meant to be complementary to such policies. This E&O policy also complements the Prescribed Instrument policy to address future stormwater management.</p> <p>The target audience for this E&O policy is property owners and other residents within the sewershed areas of the CSOs, where these activities are significant threats (note that no future CSOs are allowed), and where future stormwater management could be significant threats. This E&O policy will be led by the City of Windsor (likely with partners as mentioned below), and promotes downspout disconnection, use of rain barrels, and provides information on what not to dispose of down the drain and the spills action centre in case of spills. Based on discussions with City staff, the initiative will involve printing brochures, mailing landowners and other residents within the areas of interest, and holding an open house, in conjunction with ongoing E&O activities on the part of the City and various partners.</p> <p>This policy recognizes several existing E&O efforts by the City of Windsor, the Detroit River Cleanup Committee (DRCC), the Windsor Utilities Commission (WUC), the Essex Region Conservation Authority (ERCA) and the Essex Windsor Solid Waste Authority (EWSWA). The existing E&O efforts include informing landowners of the current sewer separation project, incentives for downspout disconnection, wet weather flow and water conservation (including rain barrel use), what not to put down the drain (including basement flooding causes), ban on cosmetic pesticide use, and the yellow fish road program. These existing initiatives also help address the existing or future threats of sewage bypass and effluent discharge. Various E&O initiatives are funded by the City of Windsor, Environment Canada, the DRCC and the Province.</p> <p>This policy will be complimented by other E&O for broader areas (watershed), and for some significant threats, included under separate E&O policies, proposed to be led by the Conservation Authority.</p>
Policy Tool	Education and Outreach

Municipality Policy Applies to	City of Windsor
Implementing Body	City of Windsor
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Vulnerable Area	Windsor IPZ-1 and Windsor IPZ-2
Policy Number	39
Policy Reference Number	WIW2-combinedsewerbypasseffluent-4 (Stewardship/Incentive)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Combined sewer discharge from a stormwater outlet to surface water • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons)
Significant Risk Circumstances	<ul style="list-style-type: none"> • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 17,500 m³ (annual basis). This applies to an <u>IPZ-1 of vulnerability score 9</u>, for which there are 4 chemicals of concern for an average daily discharge rate of 17,500 to 50,000 m³, and 13 chemicals for a rate more than 50,000 m³. • The combined sewer may discharge sanitary sewage containing human waste to surface water. It is part of a system where the wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate of more than 50,000 m³ (annual basis). This applies to an <u>IPZ-2 of vulnerability score 8.1</u>, for which there are 2 chemicals of concern. • The combined sewer may discharge sanitary sewage containing human waste to surface water, and the discharge may result in the presence of pathogen(s) in surface water, for an <u>IPZ-1 of vulnerability score 9</u> and an <u>IPZ-2 of vulnerability score 8.1</u>. There is no quantity threshold. • Bypass (see specify action policy) • Effluent (see specify action policy) <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>

Threat Status	Existing Activities
Current Land Use	Windsor IPZ-1 : Residential, municipal parks, minimal commercial Windsor IPZ-2: Residential, commercial, industrial, municipal parks, institutional
Approach	Manage existing combined sewer discharges, bypass and effluent discharges in the Windsor IPZ-1 and Windsor IPZ-2 through the 'Stewardship/Incentive' tool available as per Clean Water Act Section 22; in conjunction with other Clean Water Act Section 22 and O. Reg. 287/07 Section 26 policies.
Policy Text	<p>The City of Windsor and Town of Tecumseh in conjunction with the Essex Region Conservation Authority, will seek funding assistance from the Ministry of the Environment, in order to undertake a stewardship/incentive program for downspout disconnections and similar measures that will assist in addressing the threats associated with combined sewer overflows, bypass and effluent discharges in the Windsor IPZ-1 and Windsor IPZ-2.</p> <p>The Town of Tecumseh, in conjunction with the Essex Region Conservation Authority, will seek funding assistance from the Ministry of the Environment, in order to undertake a stewardship/incentive program for downspout disconnections and similar measures that will assist in addressing the threats associated with sewage treatment plant bypass and effluent discharge in the Windsor IPZ-2.</p> <p>The above applies to the existing significant threat of Combined Sewer Overflows (CSOs), bypass and effluent discharges, in the vulnerable areas: Windsor IPZ-1 and IPZ-2</p> <p>The funding assistance will be requested, as described above, when the Source Protection Plan takes effect.</p>
Rationale	<p>There are 4 combined sewer overflows (CSOs) in the Windsor IPZ-1 (east and west intakes), and 2 CSOs in the Windsor IPZ-2 (east and west intakes). These combined sewers were installed prior to the 1950s. New combined sewers are not permitted by the MOE, as per the 'Guidelines for the Design of Sanitary Sewer Systems' (MOE, July 1985).</p> <p>There is a sewage treatment plant in the Windsor IPZ-2, and the plant bypass and the effluent discharge are regulated through Environmental Compliance Approval (Certificate of Approval) under the Ontario Water Resources Act. Current land uses do not preclude sewage treatment plant bypass or effluent discharge from happening. Wastewater treatment plants are designed to accommodate a certain amount of storm flow. However during an extreme event (such as heavy rainfall or snow melt), the quantity of stormwater exceeds the design criteria. The plant is then forced to bypass the excess wastewater to a watercourse or water body in order to protect the plant's</p>

infrastructure. Typically plant bypasses receive some level of treatment before discharge but not the full treatment (information adapted from <https://www.citywindsor.ca/residents/environment/Environmental-Master-Plan/Pages/State-of-the-Environment.aspx>). This results in partially treated or raw sewage entering a surface water body through the plant bypass. All sewage treatment plants release treated wastewater that is called effluent. The effluent can be directly released to a watercourse or water body after treatment or its release from a lagoon can be scheduled.

The tools available through Section 26 of the O. Reg. 287/07 (under the Clean Water Act) and Clean Water Act Section 22 provide for actions that could address the significant threat and therefore these tools were considered to address existing CSOs, bypass and effluent discharges within these vulnerable areas. The following tools **or combinations** of tools, in order of priority are used: Specify Actions, Govern Research, Education and Outreach, and Stewardship/Incentive Programs. This policy uses the 'Stewardship/Incentive' tool. Policies to address existing CSOs, bypass and effluent discharges using the other Clean Water Act Section 22 tools and Section 26 tools are also drafted.

Stewardships/Incentives are intended to promote or encourage specific actions or behaviours and are complementary to the 'Specify Actions' and 'Education and Outreach' tools. These often include financial incentives or cost share programs but could also include community recognition programs or awards. Stewardship/Incentive programs provide assistance for the development of educational materials, incentives for infrastructure upgrades, or to maintain a monitoring and information network. Note that before a body can be designated in a source protection plan as being responsible to administer a stewardship program, the SPC must consult with the body and provide a draft of the stewardship policy they intend to include in the plan. This consultation must be completed before the SPC publicly consults on the draft plan. The SPC should also consult with the body to ensure it has access to the financial resources necessary to carry out the program before the body is designated to carry out a stewardship program.

The Ontario Drinking Water Stewardship Program (ODWSP), administered by the MOE, is an example of a stewardship program available to landowners and businesses that addresses significant threats. This ODWSP funding is currently being used by the City of Windsor and ERCA in the sewersheds of the Little River Pollution Control Plant in Windsor, for downspout disconnections which helps reduce the amounts of stormwater entering combined or sanitary sewers. Extending this funding in the future, and also applying it to the sewersheds of the CSOs in the subject areas, will assist in addressing the threats

A portion of the Town of Tecumseh is in the sewershed of the Little River Pollution Control Plant (LRPCP). Studies completed by the municipality have identified areas

	<p>which would benefit from downspout disconnections and similar measures to reduce the amounts of stormwater entering sanitary sewers in the LRPCP sewershed. Funding from the Province through the ODWSP or similar programs would greatly assist with this potential initiative.</p> <p>Downspout disconnection programs provide cost-sharing opportunities to qualified landowners to implement best management practices that help to address the threats, by improving water quality and quantity.</p>
Policy Tool	Stewardship/Incentive Programs
Municipality Policy Applies to	City of Windsor and Town of Tecumseh
Implementing Body	City of Windsor, Town of Tecumseh and the Essex Region Conservation Authority (with the support of the Ministry of the Environment)
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Monitoring Policy Number	36/37/38/39M
Monitoring Policy Reference Number	WIW2-combinedsewerbypasseffluent-5 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Combined sewer discharge from a stormwater outlet to surface water • Sewage treatment plant bypass discharge to surface water • Sewage treatment plant effluent discharges (includes lagoons)
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Municipality and the Essex Region Conservation Authority will document the actions taken to comply with policy WIW2-combinedsewerbypasseffluent-1 (Specify Action), WIW2-combinedsewer-2 (Govern Research), WIW2-combinedsewerstorm-3 (E&O), WIW2-combinedsewerbypasseffluent-4 (Stewardship/Incentive).</p> <p>The above applies to the existing and future significant threats of Combined Sewer Overflows (CSOs), sewage treatment plant bypass discharge to surface water, stormwater management and sewage treatment plant effluent discharges, in the vulnerable areas:</p> <p>Windsor IPZ-1 and IPZ-2</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The monitoring policy ensures that the monitoring of the effectiveness of the policies to address the significant threats.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Implementing Body will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor and Town of Tecumseh
Implementing Body	City of Windsor (Specify Action, Govern Research, E&O, Stewardship/Incentive), Town of Tecumseh (Stewardship/Incentive), Essex Region Conservation Authority (Stewardship/Incentive)
Status of Policy	Approved



Threat	The handling and storage of fuel
Vulnerable Area	All EBAs within IPZs in the Essex Region Source Protection Area
Policy Number	41
Policy Reference Number	SLWA123-handlestorefuel-1 (Specify Action)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000,000 L or greater in the Amherstburg IPZ-1 and IPZ-2 (downstream of the intake) where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 3,000,000 L or greater in the Amherstburg IPZ-3 (upstream of the intake, from vicinity of Turkey Creek to Upper Detroit River), Windsor IPZ-1 and IPZ-2 (downstream of the intakes) where the EBAs are applicable as shown in the assessment report.
Threat Status	Existing and Future Activities
Current Land Use	Varied
Approach	Specify actions to develop a fuel storage site inventory and encourage that the municipalities update their emergency plans with respect to fuel spills

<p>Policy Text</p>	<p>The Essex Region Conservation Authority (ERCA) will initiate the development of an inventory of fuel storage sites in order to identify significant threats, when the Source Protection Plan takes effect. ERCA will also encourage municipalities to update their Emergency Plans to include a response to fuel spills. The inventory of sites and updating of emergency plans will be targeted for completion by the end of 2015, and will continue to be updated as needed based on review at that time.</p> <p>The above applies to the existing and future significant threat of the handling and storage of fuel in the vulnerable areas:</p> <p>All EBAs within IPZs in the Essex Region Source Protection Area</p>
<p>Rationale</p>	<p>The Essex Region intake protection zones are very extensive, and include many land uses where the handling and storage of large quantities of liquid fuel is a necessity. It should be feasible to manage (rather than prohibit) these existing and future significant drinking water threats.</p> <p>The Clean Water Act Section 58 (Risk Management Plan) is used as the main approach to manage this activity. There are also two Prescribed Instruments under the Clean Water Act to address this activity, which are applicable to Environmental Compliance Approvals (Certificate of Approvals) associated with water works and sewage works, or aggregate operations. These approaches ensure compliance with the Technical Standards and Safety Act (TSSA) requirements for installation, operation, regular inspections, etc.</p> <p>Through modeling conducted, the above grade handling and storage of liquid fuels (containing benzene) was found to be a significant threat to source water, at certain volumes. The identified volumes are the minimum volume of fuel (containing benzene) found to result in a significant drinking water threat. This estimate is based on an assumption that fuels contain 2% benzene. The volume of fuel that would result in a significant drinking water threat will vary depending on the concentration of benzene in the fuel. For example, when fuel containing 2% is considered to be a threat at 15,000L, the equivalent volume of fuel containing 1% benzene would be 30,000L.</p> <p>The modeling scenarios resulted in the delineation of the EBAs reported in the Essex Region Assessment Report. It is important to note that the EBA is an area where modelling demonstrates that a spill of a specific contaminant (i.e. fuel) within this area would reach the intake and cause deterioration to the raw water quality. The EBA is a combination of the IPZ-1, IPZ-2 and IPZ-3, but may not include areas of high uncertainty. Because the EBA may be smaller than the combined IPZ-1, IPZ-2 and IPZ-3, this policy applies to the EBA only.</p> <p>This policy serves to enhance and complement the significant threat policies that use the Clean Water Act and Prescribed Instruments and to address the significant threat, by</p>

	<p>directing ERCA to developing an inventory, and to encourage municipalities to update their Emergency Plans to include a response to fuel spills.</p> <p>The inventory will assist in identifying existing fuel storage sites that could be significant threats. Further, the municipalities should be encouraged to update their Emergency Plans since it has been shown through modeling that fuel spills of certain volumes in the subject vulnerable areas can affect the drinking source water. Based on discussions with the Regional Emergency Planners, there seems to be interest in updating Emergency Plans to include a fuel spill management/response plan.</p> <p>This policy was updated April 2016 under S.51(1) of O.Reg 278/07.</p>
Policy Tool	Specify Action to be taken to implement Plan or achieve its objectives
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	Essex Region Conservation Authority
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of fuel
Monitoring Policy Number	41M
Monitoring Policy Reference Number	SLWA123-handlestorefuel-2 (SpecActMonitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Essex Region Conservation Authority will prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy SLWA123-handlestorefuel-1 (Specify Action).</p> <p>The above applies to the existing and future significant threat of the handling and storage of fuel in the vulnerable areas:</p> <p>All EBAs within IPZs in the Essex Region Source Protection Area</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The effectiveness of the policy SLWA123-handlestorefuel-1 (Specify Action) should be monitored by the Essex Region Conservation Authority to ensure that it starts the development of a fuel storage site inventory and encourages Municipalities to update their Emergency Plans with respect to fuel spills.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Essex Region Conservation Authority will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	Essex Region Conservation Authority
Status of Policy	Approved

Threat	Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Containment Area or Farm Animal Yard
Vulnerable Area	Windsor IPZ-1, Windsor IPZ-2 and Amherstburg IPZ-1
Policy Number	42
Policy Reference Number	WIW2A1-livgraz-1 (Planning)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Grazing and pasturing • Outdoor confinement area or farm-animal yard
Significant Risk Circumstances	<p>Use of land for livestock grazing or pasture land, or as an outdoor containment area or farm animal yard</p> <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	<p>Windsor IPZ-1 : Residential, municipal parks, minimal commercial</p> <p>Amherstburg IPZ-1: Residential, Commercial, Industrial, Public Works (Water Plant)</p> <p>Windsor IPZ-2: Residential, Commercial, Industrial, Parks, Public Works, Institutional</p> <p>No agricultural uses currently existing, or permitted.</p>
Approach	Land Use Planning - Retain existing Official Plan designations and Permitted Uses. Agriculture (including livestock) is currently not a permitted use.
Policy Text	<p>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.</p> <p>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.</p> <p>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</p>

	<p>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.</p> <p>The above applies to the existing (none known to exist) and future significant threat of the use of land as livestock grazing or pasturing land, an outdoor containment area or farm animal yard, in the vulnerable areas:</p> <p>Windsor IPZ-1 and IPZ-2 Amherstburg IPZ -1</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
<p>Rationale</p>	<p>Current land uses and zoning would preclude the subject activities. Feedback from the MOE 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.</p> <p>Existing threats are activities that are already confirmed (known to exist) or that would potentially exist between now and the date the Source Protection Plan takes effect, based on the vulnerable area and vulnerability score. The Clean Water Act requires that policies are required 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; however this policy was included in case one became engaged in prior to the approved Source Protection Plan taking effect.</p> <p>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. This policy was extended to prohibit those threats which could exist between now and the date the Plan takes effect based only on vulnerable area and score, and which are highly unlikely to occur based on current and zoned land uses, or through other means such as the Municipal Act. The prohibition of the particular type of would be ‘existing’ threat activity was deemed to be a reasonable approach. The SPC determined that the implementation of this policy would have no negative effect, while ensuring that there is no future occurrence of the subject activity.</p> <p>There is no anticipated economic impact on landowners or the community. The land use planning policy will work in conjunction with the monitoring policy.</p> <p>Although the Lakeshore (Belle River) IPZ-1 has the same vulnerability score as the Windsor and Amherstburg IPZ-1s, which results in the activity being a significant threat in the Assessment Report, this policy has not been applied to the Lakeshore IPZ-1, given the unique nature of this IPZ-1. As the land based portion of the IPZ-1 affects only</p>

	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- I. However, as the Clean Water Act requires policies for all significant threats, an Education and Outreach policy has been developed for this purpose.
Policy Tool	Land Use Planning - Planning Act, Section 26(1)(Official Plan monitoring) Section 26(9) (Zoning By-law monitoring)
Municipality Policy Applies to	City of Windsor, Town of Amherstburg
Implementation Body	City of Windsor, Town of Amherstburg
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Containment Area or Farm Animal Yard
Monitoring Policy Number	42M
Monitoring Policy Reference Number	WIW2A1-livgraz-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Grazing and pasturing • Outdoor confinement area or farm-animal yard
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Municipality will report to the Source Protection Authority before February 1 of each calendar year on the steps it has taken to ensure that they are in compliance with policy WIW2A1-livgrz-1 which requires that 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; and that the policy be reflected in the Official Plans at the next 5 year review, and in Zoning By-laws within 3 years following the Official Plan update.</p> <p>The above applies to the existing (none known to exist) and future significant threat of the use of land as livestock grazing or pasturing land, an outdoor containment area or farm animal yard, in the vulnerable areas:</p> <p>Windsor IPZ-1 and IPZ-2 Amherstburg IPZ -1</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	The Municipality will undertake annual monitoring and report to the Source Protection Authority regarding implementation of policy WIW2A1-livgrz-. 1
Monitoring Policy Compliance Date	By February 1 of each year, the Municipality shall prepare a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg
Implementing Body	City of Windsor, Town of Amherstburg
Status of Policy	Approved

Threat	The handling and storage of fuel
Vulnerable Area	Stoney Point EBA; Lakeshore EBA; Windsor EBA, 15,000L; Amherstburg EBA, 15,000L; Harrow-Colchester EBA; Union EBA, 15,000L; Union EBA, 34,000L; Pelee EBA; Wheatley EBA
Policy Number	45
Policy Reference Number	SLWA123-handlestorefuel-I (Stewardship/Incentive)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	<ul style="list-style-type: none"> • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 15,000 L or greater in the Stoney Point IPZ-1, IPZ-2 and IPZ-3, Lakeshore IPZ-1, IPZ-2 and IPZ-3, Windsor IPZ-1, IPZ-2 and IPZ-3 (upstream of intakes), Amherstburg IPZ-1, IPZ-2 and IPZ-3 (upstream of the intake, from the intake to vicinity of Turkey Creek, including Turkey Creek watershed), Harrow-Colchester IPZ-1, IPZ-2 and IPZ-3, Union IPZ-1, IPZ-2 and IPZ-3 (Cedar/Wigle/Mill Creeks, Leamington Area Drainage), Pelee IPZ-1, IPZ-2 and IPZ-3, and Wheatley IPZ-1, IPZ-2 and IPZ-3 where the EBAs are applicable as shown in the assessment report. • The above grade handling and storage of liquid fuels (containing benzene) in quantities of 34,000 L or greater in the Union IPZ-3 (Sturgeon Creek drainage), where the EBAs are applicable as shown in the assessment report. <p>(Note: in some other portions of the Amherstburg and Windsor IPZs, the significant threat storage volume thresholds are substantially larger than 15,000 litres. These volumes {3,000,000 L to 15,000,000 L} would apply to large industrial scale sites which would be subject to more stringent requirements. As this Stewardship/Incentive policy would not be of benefit to these types of facilities, the policy applies only to those IPZ areas where the significant threat volume threshold is 15,000 litres.)</p>

Threat Status	Existing and Future Activities
Current Land Use	Varied
Approach	Manage the existing storage of liquid fuels in the vulnerable areas through a Stewardship/Incentive tool available as per O. Reg 287/07 Section 26 (Stewardship) and Clean Water Act Section 22 (Incentives); in conjunction with other policies.
Policy Text	<p>The Essex Region Conservation Authority (ERCA) will apply for funding assistance from the Ministry of the Environment, when the Source Protection Plan takes effect, in order to undertake a stewardship and incentive program, funded by the Province, to encourage and assist the owners of above grade liquid fuel storage facilities, in replacing single walled tanks with double walled tanks, where not required by TSSA standards. Implementation will be conditional on availability of funding.</p> <p>The above applies to the existing and future significant threat of the handling and storage of fuel, in the vulnerable areas:</p> <ul style="list-style-type: none"> • Stoney Point EBA • Lakeshore EBA • Windsor EBA, 15,000L • Amherstburg EBA, 15,000L • Harrow-Colchester EBA • Union EBA, 15,000L; Union EBA, 34,000L • Pelee EBA • Wheatley EBA
Rationale	<p>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 often include financial incentives or cost-share programs and could also include community recognition programs or awards. Stewardship/Incentive programs provide assistance for the development of educational materials, incentives for infrastructure upgrades, or to maintain a monitoring and information network.</p> <p>Several policy approaches are being proposed in order to manage these threats in the subject vulnerable areas. One of the policy approaches relies on the Technical Standards and Safety Act (TSSA) as a means of managing these threats. As TSSA is not a Prescribed Instrument under the Clean Water Act, the Clean Water Act Section 58 - Risk Management Plan is being used, to enable the Risk Management Official (RMO) to obtain documentation from the owner of the facility demonstrating compliance with the TSSA requirements for installation, operation, regular inspections, etc. Although the TSSA requires new fuel storage tanks be double walled, older tanks are not normally required to be upgraded to double walled tanks. It is felt that a Stewardship/Incentive</p>

program would help to address the threat associated with older tanks in these situations.

The Ontario Drinking Water Stewardship Program, administered by the MOE, is an example of a stewardship program which may be available to assist landowners and businesses in addressing significant threats.

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

Stewardship/Incentive would complement the proposed Education & Outreach policy All IPZ s (E & O) (Education & Outreach), through which ERCA will inform potentially affected parties of the requirements of the significant threat policies, the rationale for these policies, as well as 'best management practices' assisting in reducing the threat level. This Stewardship/Incentive program would also be linked to the 'Specify Action' policy through which ERCA will develop an inventory of above ground liquid fuel storage facilities with volumes above the significant threat thresholds in the subject vulnerable areas.

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

Through modeling conducted, the above grade handling and storage of liquid fuels (containing benzene) was found to be a significant threat to source water, at certain volumes. The identified volumes are the minimum volume of fuel (containing benzene) found to result in a significant drinking water threat. This estimate is based on an assumption that fuels contain 2% benzene. The volume of fuel that would result in a significant drinking water threat will vary depending on the concentration of benzene in the fuel. For example, when fuel containing 2% is considered to be a threat at 15,000L, the equivalent volume of fuel containing 1% benzene would be 30,000L.

The modeling scenarios resulted in the delineation of the EBAs reported in the Essex Region Assessment Report. It is important to note that the EBA is an area where modelling demonstrates that a spill of a specific contaminant (i.e. fuel) within this area would reach the intake and cause deterioration to the raw water quality. The EBA is a combination of the IPZ-1, IPZ-2 and IPZ-3, but may not include areas of high

	<p>uncertainty. Because the EBA may be smaller than the combined IPZ-1, IPZ-2 and IPZ-3, this policy applies to the EBA only.</p> <p>This policy was updated April 2016 under S.51(1) of O.Reg 278/07.</p>
Policy Tool	Stewardship/Incentive Programs
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	Essex Region Conservation Authority
Legal Effect	Must conform/comply with
Compliance Date	When the Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	The handling and storage of fuel
Monitoring Policy Number	45M
Monitoring Policy Reference Number	SLWA123-handlestorefuel-2 (Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Essex Region Conservation Authority will prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy SLWA123-handlestorefuel-1.</p> <p>The above applies to the existing and future significant threat of the handling and storage of fuel in the vulnerable areas:</p> <ul style="list-style-type: none"> • Stoney Point EBA • Lakeshore EBA • Windsor EBA, 15,000L • Amherstburg EBA, 15,000L • Harrow-Colchester EBA • Union EBA, 15,000L; Union EBA, 34,000L • Pelee EBA • Wheatley EBA <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The implementation of this policy in this manner builds on the strengths and efficiencies of the Conservation Authority.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Conservation Authority will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	All municipalities in the Essex Region Source Protection Area, County of Essex
Implementing Body	Essex Region Conservation Authority
Status of Policy	Approved

Threat	<p>The establishment, operation or maintenance of a waste disposal site; The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; The application of agricultural source material to land; The storage of agricultural source material; The management of agricultural source material; The application of non-agricultural source material to land; The handling and storage of non-agricultural source material; The application of commercial fertilizer to land; The handling and storage of commercial fertilizer; The application of pesticide to land; The handling and storage of pesticide; The handling and storage of road salt; The storage of snow; The handling and storage of fuel; The handling and storage of a dense non-aqueous phase liquid; The handling and storage of an organic solvent;</p>
Vulnerable Area	All IPZs, HVAs and SGRAs and rural areas with private wells within the Essex Region Source Protection Area
Policy Number	46
Policy Reference Number	All IPZs, HVAs, SGRAs, Wells – I (Stewardship/Incentive)
Risk Level of Threat	Moderate to Low
Sub Threats	Various
Significant Risk Circumstances	<p>Various</p> <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Existing and Future Activities
Current Land Use	Various

<p>Approach</p>	<p>The main objective of the Stewardship/Incentive policy is to reach landowners living or operating in vulnerable areas of municipal drinking water system intakes or other drinking water systems, and encourage them to take action in support of drinking water source protection, through Stewardship/Incentive tool available as per O. Reg 287/07 Section 26 (Stewardship) and Clean Water Act Section 22 (Incentives); in conjunction with other policies.</p>
<p>Policy Text</p>	<p>The Essex Region Conservation Authority (ERCA) will apply for funding assistance from the Ministry of the Environment, when Source Protection Plan takes effect, in order to undertake a stewardship and incentive program, funded by the Province, to encourage the use of risk mitigation practices and assist with the implementation costs of these practices for moderate and low threats to drinking water sources. Implementation will be conditional on availability of funding.</p> <p>The above applies to the existing and future, moderate and low, various threats (listed below) in all IPZs, HVAs and SGRAs and rural areas with private wells in the Essex Region Source Protection Area.</p> <ul style="list-style-type: none"> • the handling and storage of road salt; • the storage of snow; • the handling and storage of fuel; • waste disposal sites; • the establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; • transmits, treats or disposes of sewage; • the handling and storage of a dense non-aqueous phase liquid; • the handling and storage of an organic solvent; • the application of pesticide to land; • the handling and storage of pesticide; • the application of commercial fertilizer to land; • the handling and storage of commercial fertilizer; • the application of agricultural source material to land; • the storage of agricultural source material; • the management of agricultural source material; • the application of non-agricultural source material to land;
<p>Rationale</p>	<p>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 often include financial incentives or cost-share programs and could also include community recognition programs or awards. Stewardship/Incentive programs provide assistance for the development of educational materials, incentives for infrastructure upgrades, or to maintain a monitoring and information network.</p>

	<p>The Essex Region Conservation Authority will strengthen the focus of stewardship programs to address priority drinking water threats in vulnerable areas by including the following best management practice projects:</p> <ul style="list-style-type: none"> • 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 (applies to HVAs, SGRAs, IPZs and septic systems in the vicinity of wells in rural areas,) • Constructing and restoring buffer strips and riparian zones along watercourses (applies to IPZs only). <p>Stewardship/Incentive would complement the Education & Outreach policies HVAs, SGRAs, Wells - I (E&O) and All IPZ s (E&O), through informing potentially affected parties of the requirements of the significant threat policies, the rationale for these policies, as well as ‘best management practices’, assisting in reducing the threats to drinking water sources.</p> <p>The implementation of Stewardship/Incentive programs for vulnerable areas will be in conjunction with other established programs. ERCA has a comprehensive Clean Water - Green Spaces program aimed at improving regional water quality and enhancing natural areas and biodiversity. Grants of up to 90% of project costs are available to qualifying landowners to implement projects which will help improve local water quality, reduce soil erosion, and increase natural areas cover.</p> <p>The Essex Region Conservation Authority will implement the Stewardship/Incentive policy as Conservation Authorities have the strongest link to municipalities, technical information and the source protection planning process itself and is a logical choice for coordinating and delivering Stewardship/Incentives to potentially affected parties. The Conservation Authority also has existing Stewardship programs that could be used in cross promotion of all available programs.</p>
Policy Tool	Stewardship/Incentive Programs
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, County of Essex
Implementing Body	Essex Region Conservation Authority will undertake, in collaboration with affected municipalities and the fuel supply/distribution industry.
Legal Effect	Non-legally binding (Strategic Action)
Compliance Date	When the Source Protection Plan takes effect.
Status of Threat Policy	Approved



MONITORING POLICY

<p>Threat</p>	<p>The handling and storage of road salt; The storage of snow; The handling and storage of fuel; Waste disposal sites; The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage; The handling and storage of a dense non-aqueous phase liquid; The handling and storage of an organic solvent; The application of pesticide to land; The handling and storage of pesticide; The application of commercial fertilizer to land; The handling and storage of commercial fertilizer; The application of agricultural source material to land; The storage of agricultural source material; The management of agricultural source material; The application of non-agricultural source material to land; The handling and storage of non-agricultural source material;</p>
<p>Monitoring Policy Number</p>	<p>46M</p>
<p>Monitoring Policy Reference Number</p>	<p>All IPZs, HVAs, SGRAs, Wells -2 (Monitoring Policy)</p>
<p>Sub Threats</p>	<p>Not applicable</p>
<p>Legal Effect</p>	<p>Non-legally binding (Strategic Action)</p>
<p>Monitoring Policy Text</p>	<p>The Essex Region Conservation Authority will prepare and submit a report to the Source Protection Authority which summarizes the actions taken to comply with policy All IPZs, HVAs, SGRAs, Wells –1.</p> <p>The above applies to the existing and future, moderate and low, various threats in the vulnerable areas:</p>

	<p>All IPZs, HVAs and SGRAs and rural areas with private wells in the Essex Region Source Protection Area</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The implementation of this policy in this manner builds on the strengths and efficiencies of the Conservation Authority.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	<p>By February 1 of each year, the Conservation Authority will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.</p>
Municipality Policy Applies to	<p>City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, County of Essex</p>
Implementing Body	<p>Essex Region Conservation Authority</p>
Status of Policy	<p>Approved</p>

Threat	Management of runoff that contains chemicals used in the de-icing of aircraft
Vulnerable Area	Windsor IPZ- I , Amherstburg IPZ- I and Lakeshore (Belle River) IPZ- I
Policy Number	47
Policy Reference Number	WIAILI -deicair (Specify Action)
Risk Level of Threat	Significant
Sub Threats	Not applicable
Significant Risk Circumstances	The management of runoff of that contains aircraft de-icing chemicals dioxane- I , 4 and ethylene glycol, in any amount, at a <i>national airport</i>
Threat Status	Future Activities
Current Land Use	Windsor IPZ- I : Residential, municipal parks, minimal commercial Amherstburg IPZ- I: Residential, Commercial, Industrial, Public Works (Water Plant) Lakeshore (Belle River) IPZ- I: Marina and Municipal park No airport uses currently existing or zoned.
Approach	Specify Action that the Conservation Authority request Airport Authority to manage runoff from airport de-icing facilities. The action specified is a non-legally binding commitment policy directed at Federal agencies.
Policy Text	The Essex Region Conservation Authority will request Airport Authority, in their consideration of any new airport facilities, 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. This request will be made when the Source Protection Plan takes effect (this is the date of compliance). The above applies to the future significant threat of the management of chemicals used in the de-icing of aircraft, in the vulnerable areas: Windsor IPZ- I Amherstburg IPZ- I Lakeshore (Belle River) IPZ- I
Rationale	Airports and related activities are regulated by the Federal government. The current “built-out” density of the land uses within the IPZ- Is (as well as the relatively small areas

	<p>of the IPZ-1s), would preclude the opportunity to locate an airport. The significant threat circumstance applies only to <i>national airports</i> (rationale unknown).</p> <p>In general, provincial legislation cannot be imposed on Federal lands. Therefore this approach, of specifying an action of request to Airport Authority, has been used.</p> <p>Implementation will have no negative impact. There is no anticipated economic impact on landowners or the community.</p>
Policy Tool	Specify Action to be taken to implement Plan or achieve its objectives.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Essex Region Conservation Authority
Legal Effect	Must conform/comply with
Compliance Date	When the Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	Management of runoff that contains chemicals used in the de-icing of aircraft
Monitoring Policy Number	47M
Monitoring Policy Reference Number	WIAILLI-deicair -2 (Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>The Essex Region Conservation Authority (ERCA) will report annually to the Source Protection Authority as to requests ERCA has made to Airport Authority, and any response(s) received, regarding Airport Authority’s intent to locate a national airport, or run-off from such an airport, within the IPZ-1s of Windsor, Amherstburg or Lakeshore (Belle River).</p> <p>The above applies to the future significant threat of the management of chemicals used in the de-icing of aircraft.</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>Airports and related activities are regulated by the Federal government. The current “built-out” density of the land uses within the IPZ-1s, would preclude the opportunity to locate an airport. The significant threat circumstance applies only to <i>national airports</i> (rationale unknown). The Clean Water Act cannot identify Airport Authority as an implementing body for this monitoring policy.</p> <p>The Essex Region Conservation Authority can undertake annual monitoring to advise on any requested changes in land uses in the IPZ-1 to permit an airport.</p>
Monitoring Policy Compliance Date	By February 1 of each year, The Source Protection Authority shall prepare a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	City of Windsor, Town of Amherstburg, Town of Lakeshore
Implementing Body	Essex Region Conservation Authority
Status of Policy	Approved

Threat	Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Containment Area or Farm Animal Yard
Vulnerable Area	Lakeshore IPZ- I
Policy Number	48
Policy Reference Number	LI-livgraz-I (E & O)
Risk Level of Threat	Significant
Sub Threats	<ul style="list-style-type: none"> • Grazing and pasturing • Outdoor confinement area or farm-animal yard
Significant Risk Circumstances	<p>Use of land for livestock grazing or pasture land, or as an outdoor containment area or farm animal yard</p> <p>The above significant drinking water threat circumstance(s) is an interpretation of those circumstances provided in the Ministry of Environment (MOE) Table of Drinking Water Threats and is meant to help provide context and clarity to the proposed policy. While every effort has been made to accurately interpret the circumstances from the MOE Table, the reader is advised that the significant drinking water threat circumstances defined under the Clean Water Act are in the MOE Table of Drinking Water Threats which can be accessed at: https://www.ontario.ca/page/tables-drinking-water-threats</p>
Threat Status	Future Activities
Current Land Use	Lakeshore (Belle River) IPZ- I: Marina and Municipal park
Approach	It is proposed the Essex Region Conservation Authority (ERCA) will provide Education and Outreach (E & O) to the Town of Lakeshore to inform that agricultural livestock operations would be a significant threat in this IPZ. The Town of Lakeshore will be asked to advise ERCA if there are any changes to land use plans and/or ownership.
Policy Text	The Essex Region Conservation Authority will initiate and lead Education and Outreach when the Source Protection Plan takes effect. The Conservation Authority will inform the Town of Lakeshore, and any subsequent owners of the subject property, that agricultural livestock operations would be a significant threat to sources of drinking water in this IPZ- I, and will contact the Town, and any subsequent owners, on an annual basis to determine if there are any proposed changes to the land use and/or ownership.

	<p>The above applies to future significant threat of the use of land as livestock grazing or pasturing land, an outdoor containment area or farm animal yard, in the vulnerable areas:</p> <p>Lakeshore IPZ-I.</p> <p>The date of compliance is when Source Protection Plan takes effect.</p>
Rationale	<p>Education and Outreach is used to mitigate or prevent impacts to water quality. E & O approaches provide cost-effective opportunities to assist in helping address drinking water threats in the IPZs.</p> <p>Although the Lakeshore (Belle River) IPZ-I has a vulnerability score which results in the activity being a significant threat, the land based portion of the IPZ-I 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-I. However, as the Clean Water Act requires policies for all significant threats, an Education and Outreach policy has been developed for this purpose.</p> <p>The Conservation Authority will inform the Town of Lakeshore, and any subsequent owners of the subject property, that agricultural livestock operations would be a significant threat to sources of drinking water in this IPZ-I, and will contact the Town, and any subsequent owners on an annual basis to determine if there are any proposed changes to the land use and/or ownership. This Education and Outreach approach will be sufficient to address the significant threat, given the unique nature of the IPZ.</p> <p>Implementation will have no negative impact. There is no anticipated economic impact on landowners or the community.</p>
Policy Tool	Education & Outreach
Municipality Policy Applies to	Town of Lakeshore
Implementation Body	Essex Region Conservation Authority
Legal Effect	Must conform/comply with
Compliance Date	When Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Threat	Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Containment Area or Farm Animal Yard
Monitoring Policy Number	48M
Monitoring Policy Reference Number	L1-livgraz-2 (Monitoring Policy)
Sub Threats	<ul style="list-style-type: none"> • Grazing and pasturing • Outdoor confinement area or farm-animal yard
Legal Effect	Must conform/comply with
Monitoring Policy Text	<p>Essex Region Conservation Authority will report annually to the Source Protection Authority on the steps it has taken to ensure that they are in compliance with policy L1-livgraz-1 (E & O).</p> <p>The above applies to the vulnerable area of Lakeshore IPZ-1.</p>
Monitoring Policy Rationale	Essex Region Conservation Authority can undertake annual monitoring and reporting regarding implementation of policy L1-livgraz-1 (E & O)
Monitoring Policy Compliance Date	By February 1 of each year, the Conservation Authority shall prepare a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	Town of Lakeshore
Implementing Body	Essex Region Conservation Authority
Status of Policy	Approved

Issue	Microcystin-LR
Target Area	Lake Erie drinking water intakes and tributaries
Vulnerable Area	Not applicable
Policy Number	50
Policy Reference Number	LE-microcystinLR- I (Clean Water Act)
Risk Level of Threat	Not applicable
Sub Threats	Not applicable
Significant Risk Circumstances	Not applicable
Threat Status	Not applicable
Current Land Use	Varied
Approach	Monitoring Policy under Section 22(2)-7 of the Clean Water Act
Policy Text	<p>In accordance with Section 22(2)-[7] of the Clean Water Act, further monitoring and research of microcystin-LR and phosphorus is required for the Lake Erie drinking water intakes (Wheatley, Union, Harrow-Colchester and Pelee Island) and tributaries.</p> <p>The Harrow-Colchester South Water Treatment Plant, Union Water Supply System, Pelee Island West Shore Water Treatment Plant and Wheatley Water Treatment Plant shall continue to conduct existing water quality sampling (both raw and treated water) and to share information and data with other interested parties where resources are available.</p> <p>Essex Region Conservation Authority, in collaboration with the Province (Ministry of Environment), and other bodies (e.g. Lower Thames Valley Conservation Authority, Environment Canada, research institutions) where possible, should continue the support of existing water quality monitoring programs (e.g. DWSP, PWQMN and research projects) where they relate to the assessment and understanding of microcystin-LR as a drinking water issue and/or phosphorus as a contributor to algal growth. Where it is appropriate, additional water quality monitoring should be incorporated into existing programs or developed as new programs. These monitoring efforts should be directed at such things as, but not limited to:</p> <ul style="list-style-type: none"> • event based water quality monitoring (both blooms and runoff events), • correlation between the various monitoring programs (locally and within Lake Erie)

	<ul style="list-style-type: none"> contributions through transport pathways, including but not limited to agricultural non-point sources, septic systems, water treatment plants, combined sewer overflows and residential sources such as lawns <p>Participation in these monitoring programs is dependent on adequate resources (including funding and staff capacity) being available.</p>
<p>Rationale</p>	<p>Microcystins are the toxins produced by cyanobacteria (blue-green algae). Microcystin-LR in particular is a neurotoxin that can affect human health, potentially causing gastrointestinal discomfort, skin irritation or liver damage. The western basin of Lake Erie experiences blooms of cyanobacteria and associated high levels of total microcystins annually in summer months. The blooms are visible to the public and affect recreational activities and WTP operations. Using available data from WTPs and modelling exercises, microcystin-LR was identified as an issue under the Clean Water Act pursuant to rule 115.1 at Lake Erie intakes in both the Essex Region and Thames-Sydenham Region, which have shared municipalities (see Appendix XV of the Essex Region Assessment Report for more details).</p> <p>Typically when a substance is determined to be an issue under the Clean Water Act, an Issue Contributing Area is delineated and associated significant threats are identified. In the case of microcystin-LR significant threats would be any activity that contributes phosphorus because it is the limiting nutrient for the cyanobacteria (blue-green algae) that produce microcystins-LR. Phosphorus can come from a variety of sources including human and animal waste and fertilizer. Results of ongoing phosphorus monitoring and modelling are currently insufficient to determine the areas and types of threats that may be contributing to microcystins-LR. Continued and/or improved monitoring of phosphorus in Lake Erie and its tributaries may provide more insight in future assessments of potential phosphorus contributions from a variety of sources. These data are needed in order to delineate an Issue Contributing Area; without the delineation of an Issue Contributing Area, there is no defined Vulnerable Area and no significant drinking water threats can be identified or addressed.</p> <p>Microcystin-LR data were available for the Wheatley, Union and Harrow-Colchester drinking water intakes; however the length of the data record is currently insufficient to determine if there is a trend of increasing concentrations. Increased sampling frequency (currently weekly) would help to fully assess the severity of this drinking water issue. In addition to regular sampling of raw and treated water, WTPs may also increase the scope of their sampling during an algal bloom by including additional points within the Distribution System to monitor any passage of microcystins into treated water, which would be beneficial to the Operating Authority. Pelee Island WTP is not currently included in the MOE's Drinking Water Surveillance Program (DWSP). Because this intake is most affected by harmful algal blooms and sees high concentrations of microcystins throughout the summer, this WTP should be included in the MOE's DWSP</p>

	<p>program. ERCA has also begun some additional microcystin monitoring in Lake Erie tributaries and the nearshore. Data from more locations with higher sampling frequency and longer data records would be beneficial to monitor and assess whether microcystin-LR continues to be an issue.</p>
Policy Tool	Section 22(2)-7 of the Clean Water Act
Municipality Policy Applies to	Town of Essex, Town of Kingsville, Town of Lakeshore, Municipality of Leamington, Township of Pelee, Municipality of Chatham-Kent
Implementing Body	<p>To continue monitoring at Lake Erie drinking water intakes: Town of Essex (Harrow-Colchester South Water Treatment Plant), Township of Pelee (Pelee Island West Shore Water Treatment Plant), Joint Board of Management of the Union Water Supply System, Municipality of Chatham-Kent (Wheatley Water Treatment Plant)</p> <p>To facilitate and conduct monitoring and research in Lake Erie tributaries: Essex Region Conservation Authority, Ministry of the Environment</p>
Legal Effect	Non-legally binding (Strategic Action)
Compliance Date	When the Source Protection Plan takes effect.
Status of Threat Policy	Approved

MONITORING POLICY

Issue	Microcystin-LR
Monitoring Policy Number	50M
Monitoring Policy Reference Number	LE-microcystinLR-2 (Monitoring Policy)
Sub Threats	Not applicable
Legal Effect	Non-legally binding (Strategic Action)
Monitoring Policy Text	<p>The Town of Essex, Joint Board of Management of the Union Water Supply System, Township of Pelee, Essex Region Conservation Authority and the Ministry of the Environment will prepare and submit reports to the Source Protection Authority which summarizes the actions taken to comply with LE-microcystinLR-1 (Clean Water Act)</p> <p>The above applies to the monitoring of microcystins at Lake Erie intakes and phosphorus in Lake Erie and its tributaries</p> <p>The date of compliance is by February 1 of each year.</p>
Monitoring Policy Rationale	<p>The implementation of this policy will provide an assessment of the effectiveness of the environmental monitoring. Monitoring programs may be continued or improved based on this assessment. The annual report may also include information such as how and what progress has been made on joint monitoring of blooms and runoff events at the Lake Erie intakes and Lake Erie tributaries between organizations.</p> <p>A form to document the information may be provided by the Source Protection Authority (SPA) in order to assist in the report preparation. It must be noted that the Director, Source Protection Program Branch, MOE has the formal legislative authority to prescribe a form for use for the SPA.</p>
Monitoring Policy Compliance Date	By February 1 of each year, the Essex Region Conservation Authority will prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, to comply with the monitoring policy.
Municipality Policy Applies to	Town of Essex, Town of Kingsville, Town of Lakeshore, Municipality of Leamington, Township of Pelee, Municipality of Chatham-Kent
Implementing Body	Town of Essex, Joint Board of Management of the Union Water Supply System, Township of Pelee, Municipality of Chatham-Kent, Essex Region Conservation Authority and the Ministry of the Environment
Status of Policy	Approved

