

Chapter 2: Policy Tables for Each Municipal System

For readers interested in a specific municipal water supply, this section provides tables summarizing which policies apply to each municipal system, the vulnerable area(s) affected, and the implementing body(ies) responsible. The Source Protection Plan's (SP Plan) policies are designed to achieve the objectives stated in Section 1.8: *where an activity is or would be ('could be') a significant threat to drinking water, it ceases to be or never becomes a significant threat*. The SP Plan policies apply only in the vulnerable areas that are listed in each policy. The vulnerable areas were identified in the Assessment Report.

An activity's threat level (significant, moderate or low) is determined by the vulnerability of the area and the circumstances under which it is occurring. The Assessment Report summarizes where the activities are or would be significant threats based on the *Clean Water Act* and *Technical Rules: Assessment Report*. In the North Bay-Mattawa Source Protection Area, the significant threats are limited to the most vulnerable areas around drinking water sources. For groundwater sources, these vulnerable areas are known as Wellhead Protection Areas (WHPAs). For surface water sources, they are known as Intake Protection Zones (IPZs).

The SP Plan policies apply to specific WHPAs (WHPA-A, WHPA-B, etc.) for the two municipal groundwater systems (Mattawa and Powassan), and specific IPZs (IPZ-1, IPZ-2, etc.) for the three municipal surface water systems (Callander, North Bay and South River). Maps of each system's vulnerable areas are provided in Figures 2.1 to 2.6. Schedule A: Additional Maps of Vulnerable Areas (A1-A4: Callander Issue Contributing Area by Municipality) is attached to provide higher detail regarding the Callander ICA. Mapping legends utilize a coloured scheme, so caution should be used if interpreting or reviewing black and white mapping images.

The most recently approved Assessment Report should be consulted to identify the official areas where policies apply, and it is recommended that implementing bodies obtain access to approved datasets for the vulnerable areas through the MOECC GIS Portal or through municipal GIS operations (such as City of North Bay GIS Portal or Blue Sky Net Municipal GIS).

Policies apply to specific vulnerable areas specified on the map figures and impact only those activities and circumstances that are significant. One moderate/low threat activity policy was included at the discretion of the Source Protection Committee. Policies may also reference specific circumstances under which a threat is significant, such as a volume or area of storage, a type of chemical/contaminant or pathogen, the grade at which the activity occurs, or others.

Vulnerable Area Policy Summaries – How to Read the SP Plan

Within this Chapter, readers can quickly reference mapping of the vulnerable areas and see which policy(ies) apply. Policies are organized in Chapter 4 according to individual activities or groups of similar activities.

An Implementing Body should reference Appendix A: Legal Effect of Policies on Existing Legislation in addition to the policy summary tables of Chapter 2 to determine which policies they are named to implement. An Implementing Body should also reference the monitoring policies that require reporting to the SP Authority by a certain time in order to complete the required Annual Report.

Individuals residing in or doing any activity in the vulnerable areas should reference the policy summary tables related to that specific vulnerable area to determine if a policy would affect their activity or land use. They should contact the Implementing Body if they believe they are or plan to be engaged in a significant threat activity.

2.1 Callander Policy Table (IPZ 1, 2)

Callander's Intake Protection Zones 1 and 2 are located in Callander Bay and include both urban and rural development along the east shore of the bay. Policies for this area are generally restrictive in nature to prevent the establishment of significant threat activities.

Table 2-1 shows which policies apply to IPZ-1 and 2. For IPZ-1 and IPZ-2, policies listed in Table 2-2: Policy Summary – Callander Issue Contributing Area also apply. Figure 2.1 shows the Callander Intake Protection Zones that were defined in the Assessment Report.

Table 2-1: Policy Summary – Callander Intake Protection Zone (IPZ)

Code	Policy Title (Shortened)	IPZ	Implementing Body
AIR1	Glycol Management Plans	1	Airport Authority
PST1	<i>Pesticide Act</i> Approvals to Contain Conditions	1	MOECC*
PST2	Land Use Prohibition – Pesticide Storage	1	Municipality
PST3	Municipal Pesticide Management Plan	1	Municipality
PST4	Education about Application of Pesticides	1,2	Municipality
SAL1	Land Use Prohibition – Road Salt Storage	1	Municipality
SEW1	Prescribed Instruments for Prohibition of New Sewage Works & Review of Existing	1, 2	MOECC
SEW2	Prescribed Instruments for Management of Sewage Works of Certain Types	1	MOECC
SMF1	Municipal Action to Prohibit Land Application of Nutrients	1, 2	Municipality
SMF2	Land Use Prohibition – Nutrient Handling & Storage & Livestock Activity	1, 2	Municipality
SNO1	Land Use Prohibition – Snow Storage Facilities	1	Municipality
SVA1	Signage for Vulnerable Areas	1,2	Municipality
THS1	Update Protocols for Spills Response	1	Municipality MOECC
WDS1	Prohibition and Management of Waste Disposal Sites under Part V of the EPA	1, 2	MOECC
WDS2	Land Use Prohibition of Waste Disposal Sites	1, 2	Municipality
WDS3	Education Hazardous Waste & PCBs	1	Municipality

*MOECC: Ministry of Environment and Climate Change

2.2 Callander Issue Contributing Area (ICA) Policy Table

The Callander Issue Contributing Area includes the areas identified as Callander IPZ-1, 2, and 3. This area was delineated to address microcystin LR, a Drinking Water Issue related to phosphorus. All policies referenced in Table 2-2 address activities that have phosphorus as a circumstance. As well as policies specifically drafted for the ICA, SEW and WDS policies (sewage and waste disposal sites) are included because they address activities where phosphorus is a potential contaminant.

Table 2-2 shows which policies apply to the Callander Issue Contributing Area which includes IPZ 1, 2 and 3. See Table 2-1 for additional policies that apply to IPZ1 and 2. Figure 2.2 shows the entire ICA. For larger mapping detail, see Schedule A: Additional Maps of Vulnerable Areas.

Table 2-2: Policy Summary – Callander Issue Contributing Area (ICA)

Code	Policy Title (Shortened)	Implementing Body
ICA1	Education – Issue Contributing Area	Municipalities in ICA Conservation Authority
ICA2	<i>Nutrient Management Act</i> Tools to Implement Phosphorus Best Management in the ICA	OMAFRA*
ICA3	Governing Research in the Issue Contributing Area	Municipality of Callander Conservation Authority
ICA4	Monitor Issue in Callander ICA – Phosphorus	Municipality of Callander Conservation Authority
SEW1	Prescribed Instruments for Prohibition of New Sewage Works & Review of Existing	MOECC*
SEW2	Prescribed Instruments for Management of Sewage Works of Certain Types	MOECC
SEW3	Recognize the Implementation of the <i>Ontario Building Code</i> Mandatory Maintenance Inspection Program	Conservation Authority
WDS1	Prohibition and Management of Waste Disposal Sites under Part V of the EPA	MOECC
WDS2	Land Use Prohibition: Waste Disposal Sites	Municipality

*Acronyms for Implementing Bodies

MOECC: Ministry of Environment and Climate Change

OMAFRA: Ontario Ministry of Agriculture, Food and Rural Affairs

2.3 Mattawa Policy Table (WHPAs A, B and C)

Mattawa’s Wellhead Protection Area covers lands that are predominantly used for private residences. Most activities identified as significant threats are incompatible with the current zoning by-law, and are thus largely prohibited from use.

Table 2-3 shows which policies apply to WHPA-A, B and C for the Town of Mattawa’s wells. Figure 2.3 shows the Wellhead Protection Areas for Mattawa that were defined in the Assessment Report.

Table 2-3: Policy Summary – Mattawa Wellhead Protection Area (WHPA)

Code	Policy Title (Shortened)	WHPA	Implementing Body
AIR1	Glycol Management Plans	A, B	Airport Authority
FUL1	Land Use Prohibition: Fuel Storage	A, B	Municipality
FUL2	Conditions for Approvals of Fuel Storage	A, B	MOECC* MNRF* MTO*
FUL3	Continue to Make Safety Information Available	A, B	TSSA*
FUL4	Education: Handling and Storage of Fuel	A, B	Municipality
HAZ1	Education: DNAPLs & Organic Solvents	A, B, C	Municipality
MAT1	Management of Significant Threats in Mattawan Township	C in Mattawan	MNRF
PST1	<i>Pesticide Act</i> Approvals to Contain Conditions	A, B	MOECC
PST2	Land Use Prohibition: Pesticide Storage	A, B	Municipality
PST3	Municipal Pesticide Management Plan	A, B	Municipality
PST4	Education about Application of Pesticides	A, B	Municipality
SAL1	Land Use Prohibition: Road Salt Storage	A, B	Municipality
SEW1	Prescribed Instruments for Prohibition of New Sewage Works & Review of Existing	A, B, C	MOECC
SEW2	Prescribed Instruments for Management of Sewage Works of Certain Types	A, B	MOECC
SEW3	Recognize the <i>Ontario Building Code</i> Mandatory Maintenance Inspection Program	A, B	Conservation Authority
SMF1	Municipal Action to Prohibit Land Application of Nutrients	A, B	Municipality
SMF2	Land Use Prohibition: Nutrient Handling & Storage & Livestock Activity	A, B	Municipality
SNO1	Land Use Prohibition: Snow Storage Facilities	A, B	Municipality
SVA1	Signage for Vulnerable Areas	A, B	Municipality
THS1	Update Protocols for Spills Response	A, B	Municipality MOECC
WDS1	Prohibition and Management of Waste Disposal Sites under Part V of the EPA	A, B, C	MOECC
WDS2	Land Use Prohibition of Waste Disposal Sites	A, B, C	Municipality
WDS3	Education Hazardous Waste & PCBs	A, B	Municipality

*Acronyms for Implementing Bodies

MNRF: Ministry of Natural Resources and Forestry

MTO: Ministry of Transportation

MOECC: Ministry of Environment and Climate Change

TSSA: Technical Standards and Safety Authority

2.4 North Bay Policy Table (IPZ-1)

North Bay’s drinking water supply comes from Trout Lake, which allows for a deep intake. The technical studies determined that the vulnerability of the intake was low, and was scored an “8”. As a result, very few activities could be significant, which is why there are fewer policies for the North Bay Intake Protection Zone. A policy was written at the discretion of the Source Protection Committee for the moderate/low threat of Transportation of Hazardous Substances.

Table 2-4 shows which policies apply to IPZ-1. Figure 2.4 shows the Intake Protection Zones for North Bay that were defined in the Assessment Report. For larger mapping detail, see Schedule A: Additional Maps of Vulnerable Areas.

Table 2-4: Policy Summary – North Bay Intake Protection Zone (IPZ)

Code	Policy Title (Shortened)	IPZ	Implementing Body
SEW1	Prescribed Instruments for Prohibition of New Sewage Works & Review of Existing	1	MOECC*
SEW2	Prescribed Instruments for Management of Sewage Works of Certain Types	1	MOECC
SMF1	Municipal Action to Prohibit Land Application of Nutrients	1	Municipality
SMF2	Land Use Prohibition: Nutrient Handling & Storage & Livestock Activity	1	Municipality
SVA1	Signage for Vulnerable Areas	1	Municipality
THS2	Update Protocols for Spills Response (Mod/Low)	1	Municipality MOECC
WDS1	Prohibition and Management of Waste Disposal Sites under Part V of the EPA	1	MOECC
WDS2	Land Use Prohibition of Waste Disposal Sites	1	Municipality

*MOECC: Ministry of Environment and Climate Change

2.5 Powassan Policy Table (WHPAs A, B and C)

Powassan's Wellhead Protection Area (WHPA) covers mostly open space and a segment of Highway 11. There are two private residences within WHPA-A. The local zoning by-law would not currently permit many of the land uses associated with significant threat activities.

The following table shows which policies apply in the Wellhead Protection Area. Figure 2.5 shows the Powassan Wellhead Protection Areas that were defined in the Assessment Report (AR).

Table 2.5: Policy Summary – Powassan Wellhead Protection Area (WHPA)

Code	Policy Title	WHPA	Implementing Body
AIR1	Glycol Management Plans	A, B1	Airport Authority
FUL1	Land Use Prohibition: Fuel Storage	A, B1	Municipality
FUL2	Conditions for Approvals of Fuel Storage	A, B1	MOECC* MNRF* MTO*
FUL3	Continue to Make Safety Information Available	A, B1	TSSA*
FUL4	Education: Handling and Storage of Fuel	A, B1	Municipality
HAZ1	Education: DNAPLs & Organic Solvents	A, B, C	Municipality
PST1	<i>Pesticide Act</i> Approvals to Contain Conditions	A, B1	MOECC
PST2	Land Use Prohibition: Pesticide Storage	A, B1	Municipality
PST3	Municipal Pesticide Management Plan	A, B1	Municipality
PST4	Education about Application of Pesticides	A, B1	Municipality
SAL1	Land Use Prohibition: Road Salt Storage	A, B1	Municipality
SEW1	Prescribed Instruments for Prohibition of New Sewage Works & Review of Existing	A,B1, B2, B4, C1	MOECC
SEW2	Prescribed Instruments for Management of Sewage Works of Certain Types	A, B1	MOECC
SEW3	Recognize the <i>Ontario Building Code</i> Mandatory Maintenance Inspection Program	A, B1	Conservation Authority
SMF1	Municipal Action to Prohibit Land Application of Nutrients	A, B1	Municipality
SMF2	Land Use Prohibition: Nutrient Handling & Storage & Livestock Activity	A, B1	Municipality
SNO1	Land Use Prohibition: Snow Storage Facilities	A, B1	Municipality
SVA1	Signage for Vulnerable Areas	A, B1	MTO Municipality
THS1	Update Protocols for Spills Response	A, B1	Municipality MOECC
WDS1	Prohibition and Management of Waste Disposal Sites under Part V of the EPA	A, B1, B2, B4, C1	MOECC
WDS2	Land Use Prohibition of Waste Disposal Sites	A,B1, B2, B4, C1	Municipality
WDS3	Education Hazardous Waste & PCBs	A, B1	Municipality

*Acronyms for Implementing Bodies

MNRF: Ministry of Natural Resources and Forestry

MTO: Ministry of Transportation

MOECC: Ministry of Environment and Climate Change

TSSA: Technical Standards and Safety Authority

2.6 South River Policy Table (IPZ-1)

South River’s Intake Protection Zone 1 includes area within the Village of South River, Machar Township, and Laurier Township. The latter lacks municipal organization. The following table should be referenced to determine which policies apply to IPZ-1. The implementing body and the specific IPZ are also identified. A map of the vulnerable areas is provided as Figure 2.6 for reference.

Table 2.6: Policy Summary – South River Intake Protection Zone (IPZ)

Code	Policy Title (Shortened)	IPZ	Implementing Body
AIR1	Glycol Management Plans	1	Airport Authority
LAU1	Education about Threat Activities in Laurier	1 in Laurier	Village of South River
PST1	<i>Pesticide Act</i> Approvals to Contain Conditions	1	MOECC***
PST2	Land Use Prohibition: Pesticide Storage	1*	Municipality
PST3	Municipal Pesticide Management Plan	1*	Municipality
PST4	Education about Application of Pesticides	1	Municipality
SAL1	Land Use Prohibition: Road Salt Storage	1*	Municipality
SEW1	Prescribed Instruments for Prohibition of New Sewage Works & Review of Existing	1	MOECC
SEW2	Prescribed Instruments for Management of Sewage Works of Certain Types	1	MOECC
SMF1	Municipal Action to Prohibit Land Application of Nutrients	1*	Municipality
SMF2	Land Use Prohibition: Nutrient Handling & Storage & Livestock Activity	1*	Municipality
SNO1	Land Use Prohibition: Snow Storage Facilities	1*	Municipality
SVA1	Signage for Vulnerable Areas	1	MTO*** Municipality
THS1	Update Protocols for Spills Response	1**	Municipality MOECC
WDS1	Prohibition and Management of Waste Disposal Sites under Part V of the EPA	1	MOECC
WDS2	Land Use Prohibition of Waste Disposal Sites	1*	Municipality
WDS3	Education Hazardous Waste & PCBs	1	Municipality

* As noted in each policy, these policies do not apply in the portions of IPZ-1 that fall within Laurier Township.

** Portions of the policy that specify responsibilities of a Municipality are not applicable in Laurier Township.

***Acronyms for Implementing Bodies

MOECC: Ministry of Environment and Climate Change

MTO: Ministry of Transportation

Policies

AIR: Management of Aircraft De-Icing Chemicals

AIR1: Glycol Management Plans

Background

Under certain circumstances, the de-icing of aircraft is required for the safety of flight. Two chemicals used are considered threats to drinking water: Dioxane-1,4 and Ethylene Glycol. Airports with de-icing facilities must have adequate containment to capture runoff of waste water and chemicals, and compliance with this and other requirements is to be documented in a glycol management plan. Only the largest class of airport (National) would be equipped for de-icing operations. North Bay's Jack Garland Airport has de-icing facilities and runways within an IPZ-3, but the threat is not identified as significant. This policy addresses the possibility of the establishment of airports with de-icing facilities in vulnerable areas where the threat would be significant.

Intent

To ensure that a glycol management plan is in place to manage runoff from de-icing operations or a spill. Where the operator/authority is a Municipality, the Municipality shall comply with this policy.

Policy

Prior to the installation or operation of any de-icing facility to be located where the threat could be significant, the airport authority/operator should have in place an appropriate glycol management plan. Said plan should manage the risk posed by runoff from de-icing operations or a spill. The authority/operator should also have in place an emergency response plan to ensure continued protection of the environment in the event of an emergency.

Where the operator/authority is a Municipality, the Municipality shall comply with this policy.

The airport authority/operator should provide notice to the Source Protection Authority when a glycol management plan has been prepared in the areas where this policy applies. This policy shall come into effect on the effective date of the Source Protection Plan and shall apply in the following vulnerable areas:

- Callander IPZ-1;
- Powassan WHPA-A and B1;
- Mattawa WHPA-A and B;
- South River IPZ-1.

Table 4-2: Monitoring Policy for AIR Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
AIR1	M12-SPA	If and when the Source Protection Authority (SP Authority) becomes aware of a facility which can provide chemical de-icing of aircraft where the threat would be significant, the SP Authority shall request that the airport authority/operator provide a copy of the required glycol management plan. The SP Authority may request that, prior to its submission, said plan be reviewed by an independent third party for compliance with this policy.

FUL: Handling and Storage of Fuel

Background

The main consideration relating to the handling and storage of fuel is to prevent spills. Fuel threats include the handling of liquid fuel in relation to its storage and the storage of liquid fuel. The types of storage facilities affected are defined in Ontario Regulation 213/01 (Fuel Oil) and Ontario Regulation 217/01 (Liquid Fuels). Both regulations are made under the *Technical Standards and Safety Act, 2000*. Although not covered under the *Technical Standards and Safety Act (TSSA)*, these policies include facilities where fuel is manufactured or refined.

The types of fuel storage facilities include:

- bulk plants or facilities where it is manufactured or refined;
- permanent or mobile retail outlets;
- marinas;
- cardlocks/keylocks;
- private outlets (e.g. public works yard, contractor yard);
- farms; and
- fuel oil tanks for heating purposes.

The types of fuels include diesel, used oil when used as a fuel, kerosene and hydrocarbon fuels (e.g. gasoline). A significant threat occurs in the vulnerable areas where fuel is stored

- in a facility below grade or partially below grade in quantities of 250 L or more, or
- in a facility above grade in quantities of 2500 L or more.

FUL1: Land Use Prohibition: Handling and Storage of Fuel

Intent

To prohibit land uses which involve the handling or storage of fuel in relation to its manufacturing, refining, or storage for retail sale where the threat could be significant, including:

- the handling of liquid fuels and fuel oil in a quantity exceeding 2500 Litres (L).
- the storage of liquid fuels and fuel oil in a quantity of 250 L or more for any facility partially or completely below grade; and
- the storage of liquid fuels and fuel oil in a quantity of 2500 L or more for any facility located above grade.

The Municipality shall comply with the required prohibition. Note that the threat posed by the handling or storage of fuel oil intended for heating is addressed by FUL4.

Policy

When the Source Protection Plan takes effect, the Municipality shall prohibit the use of land for a gas bar, marina, automobile service station, cardlock/keylock facility, private outlet, farm, refinery, bulk plant and any commercial or industrial land use involving the handling and storage of fuel other than for heating at the location where the threat would be significant.

A Municipality's official plan and zoning by-law in effect for the vulnerable areas shall be reviewed and amended, as necessary, as required under Section 26 of the *Planning Act* to conform to this prohibition.

This policy shall apply in the following vulnerable areas:

- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1.

FUL2: Management of Threat Posed by Fuel Storage as a Condition of Other Approvals

Background

Fuel handling and storage can be a component of other land uses that would not be regulated by municipalities in a zoning by-law. Prescribed instruments may permit fuel storage for equipment, generators or other systems on specific sites. For example: municipal drinking water systems are required to have backup power generation which frequently involves the storage of fuel. Such facilities operate under conditions specified within their required approvals. Significant threats include:

- the handling of liquid fuels and fuel oil in a quantity exceeding 2500 Litres (L);
- the storage of liquid fuels and fuel oil in a quantity of 250 L or more for any facility partially or completely below grade; and
- the storage of liquid fuels and fuel oil in a quantity of 2500 L or more for any facility located above grade.

Intent

To require conditions on prescribed instruments to manage significant threats posed to sources of drinking water by the handling and storage of fuel.

Policy

A prescribed instrument that is of a type listed below, issued where the threat from the handling and storage of fuel could be significant, shall contain conditions to manage the threat. A review of existing instruments and their conditions to manage these threats shall be completed within three years of the date the Source Protection Plan takes effect, or by a time determined by a Director as defined in the associated Act or Regulation, based on a prioritized review of prescribed instruments that govern the handling and storage of fuel in association with the named instruments.

This policy shall apply in the following vulnerable areas:

- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1.

The prescribed instruments for this policy include:

1. *Aggregate Resources Act*: Section 8 site plans included in applications for licenses.
2. *Aggregate Resources Act*: Sections 11 and 13 licenses to remove aggregate from pits or quarries.
3. *Aggregate Resources Act*: Section 25 site plans accompanying applications for wayside permits.
4. *Aggregate Resources Act*: Section 30 wayside permits to operate pits or quarries.
5. *Aggregate Resources Act*: Section 36 site plans included in applications for aggregate permits.
6. *Aggregate Resources Act*: Section 34 aggregate permits to excavate aggregate or topsoil.

7. *Environmental Protection Act*: Section 39 for the use, operation, establishment, alteration, enlargement or extension of a waste disposal site.
8. *Safe Drinking Water Act*: Section 40 with respect to drinking water works permits issued by the Director.
9. *Safe Drinking Water Act*: Section 44 with respect to the municipal drinking water licences issued by the Director.

FUL3: Maintenance of Safety Information for Public by TSSA

Intent

To encourage the Technical Standards & Safety Authority (TSSA) to maintain information on its website that could be used for an education and outreach program relating to the handling and storage of fuel.

Policy

When the Source Protection Plan takes effect, the Technical Standards & Safety Authority should continue to maintain information on its website related to safe handling and storage of fuels, to support the education and outreach required by Policy FUL4 in Mattawa WHPA-A & B, and Powassan WHPA-A & B1.

FUL4: Education: Handling and Storage of Fuel

Background

This policy applies to the handling and storage of liquid fuel and fuel oil tanks. The amounts and circumstances are the same as listed in FUL1 and FUL2 (and repeated in the policy wording below). This policy is primarily directed toward the use of fuel oil for heat, but also includes other handling and storage of fuel. It is important to note that “below grade”, as defined in the *Clean Water Act*, includes tanks stored within basements of a structure.

Intent

To provide information on the safe handling and storage of fuel, proper installation and maintenance of equipment, and how to recognize and respond to a spill.

Policy

Where there could be a significant threat from the handling of liquid fuels and fuel oil in a quantity exceeding 2500 L, the storage of liquid fuel in tanks of 250 L or greater that are located partially, or completely below grade, and tanks greater than 2500 L for any facility located above grade, the Municipality, in association with appropriate partners, shall plan and deliver an education and outreach program within one year of the date the Source Protection Plan takes effect.

The program shall be designed to ensure those involved in the handling and storage of fuel, including but not limited to the owner/operator of the facility, are aware of the risks posed to source water, how to reduce those risks, and how to recognize and respond to a spill.

The program shall be made available and updated as necessary on an ongoing basis as is deemed appropriate by the Municipality. Further, the program may be delivered more broadly at the discretion of a municipal council.

The policy shall apply in the following vulnerable areas:

- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1;

Table 4-3: Monitoring Policies for FUL Policies

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
FUL1	M01-PA	By February 1 st of the year after an amendment has come into effect for an official plan or zoning by-law, the Municipality shall provide written notice to the SP Authority, including a copy of the amended planning documents.
FUL2	M08-ECA	By February 1 st of the year following the year in which the Ontario Ministry named as the implementing body is required to comply with the associated threat policy, that Ministry shall report to the SP Authority confirming implementation of the policy and how that has been accomplished.
FUL3	M13-TSF	By March 1 st of each year, the SP Authority shall review the TSSA website for compliance with policy FUL3 and may request that the TSSA provide additional information if needed to implement FUL4.
FUL4	M03-EO	By February 1 st of the year after the Municipality is required to prepare and deliver an education and outreach program in accordance with FUL4, HAZ1, WDS3, PST4 and every fifth anniversary thereafter, the Municipality shall provide a report to the Source Protection Authority indicating how the program has been delivered and that it continues to be available.

HAZ: Threats from the Handling and Storage of Dense Non-Aqueous Phase Liquids (DNAPLs) and Organic Solvents

HAZ1: Education DNAPLs and Organic Solvents

Intent

To reduce the threat posed by DNAPLs and organic solvents by informing users of proper handling and disposal of such chemicals including manufactured products containing them. Municipalities may choose to implement the policy as part of a broader program to encourage proper handling and disposal of hazardous goods (see also WDS3: Education Hazardous Waste and PCBs).

Policy

Where there could be a threat from the existing or future handling or storage of DNAPLs or organic solvents, the Municipality, in association with appropriate partners, shall plan and deliver an education and outreach program designed to ensure those involved in such activities are aware of the risks posed to source water, how to reduce those, and how to recognize and respond to a spill.

The program shall be designed within two years of the date the Source Protection Plan takes effect and delivered if the activity is occurring where the threat would be significant. Further, the program shall be made available on an ongoing basis and updated as is deemed appropriate by the Municipality. The program shall be delivered to all persons that could be engaged in the activity of handling and storage of a DNAPLs or organic solvents where the threats could be significant in the following vulnerable areas:

- Mattawa WHPA-A, B and C (except for areas in Mattawan Township);
- Powassan WHPA-A, B and C;

Additionally the policy may be more broadly delivered to a whole Municipality or any part of the Source Protection Area, at the discretion of a municipal council.

Table 4-4: Monitoring Policy for HAZ Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
HAZ1	M03-EO	By February 1 st of the year after the Municipality is required to prepare and deliver an education and outreach program in accordance with FUL4, HAZ1, WDS3, PST4, and every fifth anniversary thereafter, the Municipality shall provide a report to the Source Protection Authority indicating how the program has been delivered and that it continues to be available.

ICA: Phosphorus Activities in Callander Issue Contributing Area (ICA)

The drinking water system intake in Callander Bay has been identified as being in an area where microcystin LR (a toxin that may be produced by blue-green algae) could occur. Blue green algae occurrences are related to phosphorus contributions. Within the Callander ICA, activities that have any circumstance with phosphorus listed as a contaminant are considered significant threats. These activities include:

- The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the *Environmental Protection Act*.
- The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
- The application of agricultural source material (ASM) to land.
- The storage of agricultural source material (ASM).
- The application of non-agricultural source material (NASM).
- The handling and storage of non-agricultural source material.
- The application of commercial fertilizer to land.
- The handling and storage of commercial fertilizer.
- The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.

High levels of phosphorus can contribute to the development of blue green algal blooms. Some blue green algae can produce the toxin microcystin LR, which can contaminate drinking water sources.

Note that several of these activities are addressed by policies in other sections (see Table 2.2).

ICA1: Education – Issue Contributing Area

Intent

To reduce phosphorus loadings to waterways and to increase the amount of phosphorus which is bound in plant material and soil by educating people on appropriate strategies or best management practices and encouraging change in behaviours toward implementation of those strategies.

Policy

Where the threat from the following activities could be significant in the areas delineated as the Callander Issue Contributing Area, an education and outreach program shall be implemented to address:

- The application of agricultural source material
- The storage of agricultural source material
- The application of non-agricultural source material
- The handling and storage of non-agricultural source material
- The application of commercial fertilizer
- The handling and storage of commercial fertilizer
- The use of land as livestock grazing or pasturing land, an outdoor confinement area or farm-animal yard. O. Reg. 385/08, s. 3.
- The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.

The Municipalities shall plan and deliver an education and outreach program designed to result in persons engaged in the above activities and other residents and/or property owners taking the necessary actions to prevent and reduce phosphorus contributions to waterways in the following ways:

1. Identifying sources of phosphorus on the property;
2. Engaging in best management practices for reducing the erosion of stream banks, which should include consideration of vegetated buffers or naturalized shoreline areas which may be implemented independent of local Site Plan Control by-laws;
3. Engaging in best management practices for sediment removal, removal of soil-bound nutrients and soluble nutrients from overland and shallow subsurface flow;
4. Engaging in best management practices for the application of agricultural source material, commercial fertilizer, and non-agricultural source material;
5. Engaging in best management practices for management or handling of agricultural source material generated by grazing, pasturing, maintaining in yards or confining farm animals;
6. Engaging in best management practices for the storage of agricultural and non-agricultural source material and commercial fertilizer;
7. Establishing a vegetated buffer strip on the property; and
8. Fostering the improvement of aquatic habitats.

The education and outreach program should be delivered consistently throughout the five municipalities within the Issue Contributing Area within two years of the date the Source Protection Plan takes effect and shall be updated as necessary and made available on an ongoing basis.

The education and outreach program shall identify the desired actions and/or behaviours, as well as the goals, timeline, deliverables, and desired outcomes of the program; and include a process for measuring the outcomes. The program plan shall identify the benefits of engaging in the desired behaviors, as well as the barriers, and incorporate a variety of strategies and tools to overcome the barriers. The program shall take into consideration the principles of social marketing as a strategy for fostering the desired behaviours and actions.

In the Townships of Ballantyne, Bolter and Wilkes (which lack municipal organization), the Conservation Authority shall collaborate with ICA municipalities to implement this policy.

Additionally the policy may be more broadly released to a whole Municipality or any part of the Source Protection Area, at the discretion of a municipal council.

ICA2: *Nutrient Management Act* Tools to Implement Phosphorus Best Management in Issue Contributing Area

Intent

To recognize that agricultural operations of a certain size or production, or ones completing a physical expansion of buildings, must prepare and implement specific *Nutrient Management Act* instruments. As a part of those instruments, significant threat activities will be addressed by considering how phosphorus is managed on the property and the plan or strategy should address ways to reduce contributions of phosphorus to the drinking water sources.

Policy

In the Callander Issue Contributing Area, where the threat could be significant, the following existing and future activities are designated for the purpose of specifying certain conditions to be placed on a *Nutrient Management Act* instrument:

- The application of agricultural source material
- The storage of agricultural source material
- The application of non-agricultural source material
- The handling and storage of non-agricultural source material
- The application of commercial fertilizer
- The use of land as an outdoor confinement area or farm-animal yard.

Where the threat from any of the activities listed above would be significant and a Nutrient Management Plan, Nutrient Management Strategy, and/or Non-Agricultural Source Materials Plan is required, the instrument should include appropriate terms and conditions that demonstrate that best management practices related to limiting and/or attenuating phosphorus have been implemented in the plan or strategy to meet the objectives of the Source Protection Plan (SP Plan). All existing instruments shall be updated within two years of the date the SP Plan takes effect to demonstrate that best management practices related to limiting and/or attenuating phosphorus have been implemented in the plan or strategy to meet the objectives of the SP Plan.

ICA3: Governing Research in the Issue Contributing Area

Intent

To improve knowledge and understanding of the pertinent factors related to phosphorus loading, phosphorus attenuation and water quality in the Issue Contributing Area.

Policy

The North Bay-Mattawa Conservation Authority, in partnership with the Municipality of Callander and in consultation with the other named municipalities, shall establish a working committee within one year of the date the Source Protection Plan (SP Plan) takes effect. This working committee will prioritize research regarding threat activities in the Callander Issue Contributing Area to accomplish the following research outcomes:

1. verify relative contributions of phosphorus from specific activities and in relation to subzones within the Issue Contributing Area;
2. improve understanding of attenuation mechanisms and their relative significance;
3. target areas of concern for future work using data gathered in the monitoring of the issue and other available watershed research; and
4. identify best management practices that could be implemented to meet the objectives of the SP Plan.

The following activities shall be researched to improve knowledge and understanding of the pertinent factors related to phosphorus loading, attenuation and water quality as they were identified in the North Bay-Mattawa Source Protection Area Assessment Report:

- 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
- The storage of agricultural source material
- The application of non-agricultural source material
- The handling and storage of non-agricultural source material
- The application of commercial fertilizer to land.
- The handling and storage of commercial fertilizer
- The use of land as livestock grazing or pasturing land, an outdoor confinement area or farm-animal yard. O.Reg. 385/08, s. 3.
- The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.

In addition to the Municipality of Callander, the following municipalities having jurisdiction over lands in the Issue Contributing Area shall be included in the working committee in an advisory capacity: Chisholm Township, Municipality of East Ferris, City of North Bay, and the Municipality of Powassan. Responsibility for implementation of this policy shall rest with the Municipality of Callander.

ICA4: Monitor Issue in Callander ICA – Phosphorus Contribution Related to Microcystin LR

Intent

Require ongoing data collection to inform the design and implementation of programs required by other policies.

Policy

When the Source Protection Plan (SP Plan) comes into effect, the North Bay-Mattawa Conservation Authority, with the support of the Municipality of Callander, shall undertake an ongoing program of water quality monitoring annually in the Callander Issue Contributing Area. At a minimum, the program should monitor phosphorus or a surrogate, and may also monitor conditions that can either contribute to the development of blue green algae or to the attenuation of phosphorus. Annual reporting shall focus on reporting trends in the subwatersheds, and shall give consideration to the potential relationships between phosphorus loading and the policies that have been implemented under the SP Plan.

Table 4-5: Monitoring Policies for ICA Policies

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
ICA1	M04-EO	By February 1 st of the year after the Municipalities are required to begin delivering an education and outreach program in accordance with ICA1 and each year thereafter, the Municipalities shall provide a report to the Source Protection Authority indicating actions taken to implement the policy. The report shall address the goal(s) of the education program, the strategies used to achieve the goal(s), timeline, deliverables, outcome and an evaluation of the effectiveness of the program. The report shall also highlight any known changes in behaviours as a result of the education program that have contributed to the protection of the drinking water source. The education program and annual reporting shall continue until monitoring and research, in accordance with ICA3 and ICA4, indicates that no further improvement to water quality is likely to be achieved by additional adoption of best management practices within the ICA.
ICA2	M08-ECA	By February 1 st of the year following the year in which the Ontario Ministry named as the implementing body is required to comply with the associated threat policy, that Ministry shall report to the SP Authority confirming implementation of the policy and how that has been accomplished.
ICA3, ICA4	M10-CAI	By February 1 st of each year, the North Bay-Mattawa Conservation Authority, in collaboration with the Municipality of Callander, shall provide a report to the SP Authority on the activities and findings regarding the research and/or monitoring undertaken with respect to the drinking water issue. Expectations for the upcoming period may also be included.

LAU: Township of Laurier (Unorganized Territory)

LAU1: Education about Threat Activities in Laurier Township

Intent

To use an education and outreach approach to manage significant threat activities in the Township of Laurier that would be addressed with land use planning tools if there were municipal organization.

Policy

An education and outreach program shall be delivered by the Village of South River to property owners in the Laurier Township portion of the South River IPZ-1 to create awareness of the threat that may be posed and encourage responsible action if engaging in any of the following activities:

- 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 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 use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.
- The storage of hazardous waste or liquid industrial waste

The program shall be delivered within one year of the effective date of the plan and continue to be available. Should the area in question come under the jurisdiction of an organized Municipality, the responsibilities for implementation of this policy shall be transferred to that Municipality.

Table 4-6: Monitoring Policy for LAU Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
LAU1	M05-E0	By February 1 st of the year after the Municipality is required to deliver an education and outreach program as per LAU1, the Village of South River (or the organized Municipality that has jurisdiction) shall provide a report to the Source Protection Authority indicating that the program has been delivered and shall continue to be available.

MAT: Policy Respecting Lands in Mattawan Township

MAT1: Management of Threats in Mattawan Township

Background

A small portion of the wellhead protection area for the Town of Mattawa's drinking water system is within the Township of Mattawan. As Crown Land, it is administered by the Ministry of Natural Resources and Forestry (MNRF). The only prescribed activity that could pose a threat in this area is the handling and storage of dense non-aqueous phase liquids (DNAPLs). Such threats are to be managed by MNRF exercising discretion in permitting activities on said lands. Note that the policy wording flags other activities which could threaten drinking water, but those are addressed by Prescribed Instrument policies SEW1 and WDS1.

Intent

To manage significant threats related to the handling or storage of dense non-aqueous phase liquids (DNAPLs) that could occur in the WHPA-C for Mattawa's drinking water source in lands that are part of Mattawan Township and currently designated as Crown Land, and to ensure awareness of MNRF to the vulnerability of the area to other named activities.

Policy

When the Source Protection Plan takes effect, the Ministry of Natural Resources and Forestry (MNRF) shall consider the vulnerability of lands in Mattawa WHPA-C to threats posed from the following activities:

- The handling or storage of a dense non-aqueous phase liquid,
- Landfilling (municipal waste) AND landfilling (solid non-hazardous industrial or commercial),
- Liquid industrial waste injection into a well,
- Storage of sewage (e.g. treatment plant tanks).

Further, MNRF shall consult with the Source Protection Authority when making decisions regarding activities or uses permitted on said lands when the potential for use of DNAPLs or products containing them could reasonably be expected to occur.

Table 4-7: Monitoring Policies for MAT Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
MAT1	M09-MNRF	By February 1 st of each year, the Ministry of Natural Resources and Forestry shall, if activities involving or reasonably expected to involve the handling or storage of dense non-aqueous phase liquids have been undertaken or permitted on the lands identified in Policy MAT1, report to the SP Authority describing what consideration was given to the vulnerability of the area in relation to the significant threat.

PST: Pesticides

Background

Pesticides are typically chemicals but could be organisms that are used to control pests, such as weeds, insects and fungi. All of the pesticides considered through the drinking water source protection initiative are chemicals. The application of pesticides to land, as well as the handling and storage of pesticides, is most commonly associated with agricultural, recreational, public works and retail land uses. The application of pesticides to land is now significantly restricted by the *Cosmetic Pesticides Ban Act* (2008), which amended the Pesticides Act to prohibit the use and sale of pesticides that may be used for cosmetic purposes.

The following table demonstrates the circumstances under which various pesticides could be significant threats to drinking water. The vulnerability score of the wellhead or intake would also be a factor.

Table 4-8: Circumstances Whereby Pesticide Application Could Be Significant

Pesticide	Land Area of Application (ha)		
	Less than 1	1 to 10	Greater than 10
Atrazine		X	X
Dicamba		X	X
Dichlorophenoxy Acetic Acid (2, 4-D)		X	X
Dichloropropene 1,3		X	X
MCPA (2-methyl-4-chlorophenoxyacetic acid)	X	X	X
MCPB (4-(4-chloro-2-methylphenox) butanoic acid)		X	X
Mecoprop	X	X	X
Metalaxyl		X	X
Metolachlor or s-Metolachlor			X
Pendimethalin		X	X
Glyphosate			X

PST1: Pesticide Approvals to Consider Source Water

Intent

To require conditions on permits issued for the application of pesticides, such as aerial spraying, that would ensure the activity does not pose a significant threat to drinking water sources.

Policy

Where the application of pesticide to land could be a significant threat, the Ministry of the Environment and Climate Change shall not issue any permits under the *Pesticide Act* and O. Reg. 63/09 unless said permit contains conditions that ensure that pesticide application is not, or does not become, a significant drinking water threat. Instruments that exist when the Source Protection Plan (SP Plan) takes effect shall be reviewed within three years of the date the SP Plan takes effect and amended as necessary.

The Director, as defined in the *Pesticides Act* or its Regulations, may determine another implementation date based on a prioritized review of permits that govern significant drinking water threat activities.

This policy shall apply in the following vulnerable areas:

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

PST2: Land Use Prohibition – Pesticide Storage

Background

Depending on the vulnerability score of the intake or wellhead, the following circumstances for the storage of pesticides could be significant threats to source waters:

1. The storage of pesticides in quantities of 250 kg to 2,500 kg for Mecoprop and for MCPA (2-methyl-4-chlorophenoxyacetic acid).
2. The storage of pesticides in quantities exceeding 2,500 kg for:
 - Atrazine
 - Dicamba
 - Metalaxyl
 - Dichloro-propene 1,3
 - Mecoprop
 - MCPB (4-(4-chloro-2-methylphenox) butanoic acid)
 - MCPA (2-methyl-4-chlorophenoxyacetic acid)
 - Dichlorophenoxy Acetic Acid (2, 4-D)
 - Metolachlor or s-Metolachlor
 - Pendimethalin

Intent

To prohibit the storage of pesticides by excluding it from lists of permitted uses in the vulnerable areas. The Municipality shall comply with the required prohibition.

Policy

When the Source Protection Plan takes effect, the Municipality shall prohibit the establishment of any land use involving the storage of pesticides that would pose a significant threat including retail sale, manufacturing, processing, and wholesaling.

The Municipality's official plan and zoning by-law in effect for the vulnerable areas shall be reviewed and amended, as necessary, as required under Section 26 of the *Planning Act*, to implement this policy.

The policy applies in the following vulnerable areas:

- Callander IPZ-1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1, with the exception of lands in Laurier Township (which are subject to LAU1).

PST3: Municipal Pesticide Management Plan

Intent

To require the Municipality to prepare a plan for its own use of pesticides where threats could be significant. If the Municipality chooses to avoid such activities, the plan could be that pesticides shall not be applied or stored under circumstances where the threat could be significant.

Policy

Within three years of the date the Source Protection Plan takes effect, the Municipality shall develop a pesticide management plan for municipal properties to ensure that the application or storage of pesticides does not pose a significant drinking water threat. This plan may provide direction to minimize the use (volume, area of application, application rate and frequency) of pesticides, target reductions and suggest alternatives to their use where possible.

The policy applies to the following vulnerable areas:

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

PST4: Education about Application of Pesticides

Intent

To reduce the threat posed by the application of pesticides by informing users of safe application of pesticides that are not covered by the prescribed instrument policy PST1, or the Municipal Management Plan covered by PST3. Municipalities may choose to implement the policy as part of a broader program to encourage safe application of pesticides.

Policy

Where there could be a significant threat from the application of pesticides, the Municipality, in association with appropriate partners, shall plan and deliver an education and outreach program within one year of the date the Source Protection Plan takes effect.

The program shall be designed to ensure those involved in the application of pesticides are aware of the risks posed to source water and how to reduce those risks.

The program shall be made available and updated as necessary on an ongoing basis as is deemed appropriate by the Municipality. Further, the program may be delivered more broadly at the discretion of a municipal council.

The policy shall apply in the following vulnerable areas:

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

Table 4-9: Monitoring Policies for PST Policies

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
PST1	M08-ECA	By February 1 st of the year following the year in which the Ontario Ministry named as the implementing body is required to comply with the associated threat policy, that Ministry shall report to the SP Authority confirming implementation of the policy and how that has been accomplished.
PST2	M01-PA	By February 1 st of the year after an amendment has come into effect for an official plan or zoning by-law, the Municipality shall provide written notice to the SP Authority, including a copy of the amended planning documents.
PST3	M02-MUN	By February 1 st of each year the Municipality shall provide a report to the SP Authority that details the annual progress on all specify action policies for which it is responsible that have not previously been reported as fully implemented.
PST4	M03-EO	By February 1 st of the year after the Municipality is required to prepare and deliver an education and outreach program in accordance with FUL4, HAZ1, WDS3, PST4 and every fifth anniversary thereafter the Municipality shall provide a report to the Source Protection Authority indicating how the program has been delivered and that it continues to be available.

SAL: Handling and Storage of Road Salt

Background

Road salt may pose a drinking water threat when the product contains sodium and/or chloride. The most commonly used products to maintain roads and pedestrian areas are sodium chloride and calcium chloride because they are effective and inexpensive. The handling and storage of road salt could be a significant threat where greater than 5,000 tonnes are stored uncovered and/or exposed to runoff. Because of the limited proportion of paved surfaces when this Source Protection Plan was prepared, there was no vulnerable area where the application of road salt would pose a significant threat. Therefore, policies developed address only the threats that could be posed by handling and storage.

SAL1: Land Use Prohibition – Road Salt Storage

Intent

To prevent private operations from establishing road salt storage facilities within the vulnerable areas where the threat could be significant.

Policy

When the Source Protection Plan takes effect, the Municipality shall prohibit the future establishment of a salt storage facility in vulnerable areas listed below where the threat from the storage of road salt could be significant. A municipal official plan and zoning by-law in effect for the vulnerable areas shall be reviewed and amended, as necessary, as required under Section 26 of the Planning Act to implement this prohibition.

The areas where the establishment of a facility providing the storage of salt in amounts greater than 5,000 tonnes that is either uncovered or exposed to runoff could pose a significant threat are:

- Callander IPZ-1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

Table 4-10: Monitoring Policies for SAL Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
SAL1	M01-PA	By February 1 st of the year after an amendment has come into effect for an official plan or zoning by-law, the Municipality shall provide written notice to the SP Authority, including a copy of the amended planning documents.

SEW: Establishment, Operation or Maintenance of a System that Collects, Stores, Transmits, Treats or Disposes of Sewage

Background

The establishment, operation or maintenance of a sewage system that collects, stores, transmits, treats or disposes of sewage is a prescribed drinking water threat. Sewage systems are categorized as either large or small based on a design flow relative to 10,000 L/day. Threat circumstances for large systems include the following activities:

- Combined sewer discharge from a storm water outlet to surface water,
- Sewage treatment plant bypass discharge to surface water,
- Discharge of storm water from a storm water retention pond,
- Industrial effluent discharges,
- Sanitary sewers and related pipes,
- Sewage treatment plant effluent discharges (includes lagoons), and
- Storage of sewage (e.g. treatment plant tanks).

Large systems (with a design flow greater than 10,000 L/day), are required by the *Ontario Water Resources Act* to have and operate in accordance with an environmental compliance approval issued under the *Environmental Protection Act*. Schools, campgrounds, larger businesses and municipal systems are common examples.

Approvals for small systems (with a design flow less than or equal to 10,000 L/day) are issued under the Ontario Building Code and administered, in this Source Protection Area, by the North Bay-Mattawa Conservation Authority. These systems come in a variety of forms including earth pit privies, privy vaults, greywater systems, cesspools, leaching bed systems and associated treatment units, and holding tanks. Leaching bed systems with septic tanks or holding tanks are the systems most commonly used.

SEW1: Prescribed Instruments for Prohibition of New Sewage Works and Review of Existing Sewage Works of Certain Types

Intent

To prevent the establishment of certain sewage works which pose an elevated risk of contamination to the source waters based on their design or likelihood to contribute raw, untreated sewage to source water by prohibiting their approval. Existing approvals shall be reviewed to ensure that the threat is appropriately managed.

Policy

The Ministry of Environment and Climate Change shall not issue an Environmental Compliance Approval for future activities where the threat from the establishment, operation or maintenance of a sewage works issued under the *Environmental Protection Act* would be significant.

For Environmental Compliance Approvals that exist in areas where the threats are significant for sewage works, the Ministry of Environment and Climate Change shall review their terms within three years of the date the Source Protection Plan takes effect and amend as necessary to ensure that the terms of each approval adequately addresses the threats to source water.

The Director as defined in the *Environmental Protection Act* or its Regulations may determine another implementation date based on a prioritized review Environmental Compliance Approvals that govern significant drinking water threat activities.

This policy shall apply for the named activities and threat subcategories in the following vulnerable areas:

Combined sewer discharge from a stormwater outlet to surface water AND sewage treatment plant bypass discharge to surface water:

- Callander IPZ-1 and 2;
- North Bay IPZ-1; and
- South River IPZ-1.

Industrial effluent discharges:

- Callander IPZ-1, 2 and Issue Contributing Area (ICA only if related to a circumstance containing phosphorus);
- North Bay IPZ-1; and
- South River IPZ-1.

Sewage treatment plant effluent discharges (includes lagoons):

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- North Bay IPZ-1;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

Storage of sewage (e.g. treatment plant tanks):

- Callander IPZ-1;
- Mattawa WHPA-A, B and C;
- Powassan WHPA-A, B1/B2/B4 and C1; and
- South River IPZ-1.

SEW2: Prescribed Instruments for Management of Sewage Works of Certain Types

Background

Certain existing sewage works were identified in the completion of the Assessment Report that are part of the normal function of communities in the Source Protection Area. Examples include sewer systems in Mattawa and Callander, large sewage systems (frequently for commercial, institutional and residential uses), and the municipal sewage lagoons for Callander.

Intent

Existing procedures regarding issuance of approvals should undergo review and should be revised as warranted to be consistent with the objectives of source protection planning. It is expected that the Ministry of Environment and Climate Change (MOECC) procedures will include provisions to ensure adequate monitoring for compliance with the terms of the prescribed instruments issued.

Policy

The Ministry of the Environment and Climate Change shall ensure that for future Environmental Compliance Approvals for the establishment of sewage works issued under the *Environmental Protection Act*, that the design of such facilities appropriately manages the threats to source waters and may consider the MOECC Design Guidelines for Sewage Works, 2008 and as amended.

For Environmental Compliance Approvals that exist where the threats could be significant for sewage works, the Ministry of Environment and Climate Change shall review their terms within three years of the date the Source Protection Plan takes effect and amend as necessary to ensure that the terms of each approval adequately addresses the threats to source water. The Director, as defined in the *Environmental Protection Act* or its Regulations, may determine another implementation date based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.

This policy shall apply for the named activities and threat subcategories in the following vulnerable areas:

Discharge of Stormwater from a Stormwater Retention Pond:

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- North Bay IPZ-1;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

Sanitary Sewers and Related Pipes:

- Callander Issue Contributing Area (ICA only if related to a circumstance containing phosphorus);
- Mattawa WHPA-A and B (has existing); and
- Powassan WHPA-A and B1;

Large Septic Systems and Septic System Holding Tanks:

- Callander Issue Contributing Area (ICA only if related to a circumstance containing phosphorus);
- Mattawa WHPA-A and B; and
- Powassan WHPA-A and B1;

Sewage Treatment Plant Effluent Discharges (includes lagoons):

- Callander Issue Contributing Area (ICA only if related to a circumstance containing phosphorus)

SEW3: Recognize the Ontario Building Code Mandatory Maintenance Inspection Program

Background

A septic system or holding tank subject to the Ontario Building Code could be a significant threat to drinking water:

1. In Wellhead Protection Areas with a vulnerability score of 10, due to the potential of pathogens to contaminate source water.
2. In the Callander Issue Contributing Area due to the potential release of phosphorus from the septic systems or holding tank.

Intent

To recognize the Ontario Building Code requirements for mandatory maintenance inspections as a tool to meet the objectives of the Source Protection Plan.

Policy

For all future and existing septic systems that could be significant threats and that are subject to the requirements of the Ontario Building Code, a mandatory maintenance inspection program shall be implemented by the principal authority as defined by the Ontario Building Code.

This policy shall apply to the following vulnerable areas:

- Callander Issue Contributing Area
- Mattawa WHPA-A, and B;
- Powassan WHPA-A, and B1;

Table 4-11: Monitoring Policies for SEW Policies

Code of Associated Policy(ies)	Monitoring Policy Code	Monitoring Policy
SEW1 SEW2	M08-ECA	By February 1 st of the year following the year in which the Ontario Ministry named as the implementing body is required to comply with the associated threat policy, that Ministry shall report to the SP Authority confirming implementation of the policy and how that has been accomplished.
SEW3	M11-CAS	By February 1 st of each year, the principal authority defined by the <i>Ontario Building Code</i> shall prepare a progress report for the SP Authority to, at minimum, confirm that the program is being implemented and report the number of any outstanding orders. The report may also include the numbers of inspections completed, failed systems identified, and new systems constructed either as a result of new construction or replaced as a result of a failed septic system in the subject areas.

SMF: Source Materials and Fertilizers

Background

Policies in this section address the following prescribed activities:

- The application of agricultural source material (ASM) to land.
- The storage of agricultural source material (ASM).
- The application of non-agricultural source material (NASM) to land.
- The handling and storage of non-agricultural source material (NASM).
- The application of commercial fertilizer to land.
- The handling and storage of commercial fertilizer.
- The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.

Agricultural Source Material (ASM): According to Ontario Regulation 267/03 (General) under the *Nutrient Management Act*, ASMs include the following materials that may be produced on a farm:

- Manure produced by farm animals, including bedding materials;
- Runoff from farm-animal yards and manure storages;
- Wash water that has not been mixed with human body waste (e.g. from the milking centre);
- Organic materials produced by intermediate operations that process the above materials (e.g. mushroom compost);
- Anaerobic digestion output that does not include sewage biosolids or human body waste (anaerobic digestion is a process used to decompose organic matter by bacteria in an oxygen limited environment); and
- Regulated compost (which contains dead farm animals).

ASM can be stored in a permanent nutrient storage facility or on a temporary field nutrient storage site. The primary consideration for reducing or eliminating the threat to drinking water in the application and storage of ASM is to ensure nitrogen, phosphorus and pathogens do not enter the drinking water supply.

Non-Agricultural Source Material (NASM): According to Ontario Regulation 267/03 (General) under the *Nutrient Management Act*, NASMs include the following materials that are intended to be applied to land as nutrients but that are not produced on a farm:

- Pulp and paper biosolids;
- sewage biosolids;
- Anaerobic digestion output where less than 50% of the total material is on-farm anaerobic digestion materials (anaerobic digestion is a process used to decompose organic matter by bacteria in an oxygen-limited environment); and
- Any other material that is not from an agricultural source and that is capable of being applied to land as a nutrient (such as materials from dairy product or animal food manufacturing).

NASM that will be applied to fields on a farm can be stored in a permanent nutrient storage facility, or on a temporary field nutrient storage site.

Commercial Fertilizer: Nitrogen and phosphorus are macronutrients required by plants and common components of commercial fertilizers (nitrogen usually as nitrate). Nitrate applied to land, under certain circumstances, has been known to contaminate groundwater making it unsuitable for consumption by infants. As well, both phosphorus and nitrate can contribute to excessive growth of algae in surface

waters. Therefore care needs to be taken with the handling, storage, and application to land of commercial fertilizers.

Land Used for Livestock: The use of land for livestock grazing or pasturing, an outdoor confinement area or a farm animal yard: Ontario Regulation 267/03 made pursuant to the *Nutrient Management Act* defines outdoor confinement areas as follows:

- It is composed of fences, pens, corrals or similar structures;
- It may contain a shelter to protect the animals from the wind or another shelter with a roof of an area of less than 20 square metres;
- It has permanent or portable feeding or watering equipment;
- The animals are fed or watered at the enclosure;
- The animals may or may not have access to other buildings or structures for shelter, feeding or watering; and
- Grazing and foraging provides less than 50 per cent of dry matter intake.

Farm animal yards are outdoor livestock areas lined with concrete other than those meeting the definition of an outdoor confinement area. Food and water are not provided in farm-animal yards. They are generally used as outdoor exercise areas or holding areas for when barns are being cleaned out, usually in association with a barn/covered structure. Ontario grazing systems involve a concentration of up to two to three animals per acre during the grazing season, often on a rotational basis.

SMF1: Municipal Action to Prohibit Land Application of Nutrients

Intent

The application of source materials and fertilizers in the vulnerable areas are not considered land uses and therefore cannot be prohibited using land use planning tools. Application under circumstances that would constitute a significant threat is to be prohibited through local tools. The Municipality shall comply with the required prohibition.

Policy

The application of agricultural source material, non-agricultural source material, or commercial fertilizer to land shall be prohibited by the Municipality where the threat from such activities could be significant in the areas where the policy applies. The prohibition, using a regulatory tool deemed appropriate and enforceable by the Municipality, shall take effect no later than one year from the date the Source Protection Plan takes effect and shall apply to all existing and future activities.

The policy shall apply for the named activities in the following vulnerable areas:

The application of agricultural source material to land AND the application of non-agricultural source material to land:

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- North Bay IPZ-1;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

The application of commercial fertilizer to land:

- Callander IPZ1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

SMF2: Land Use Prohibition – Nutrient Handling & Storage and Livestock Activity

Intent

To use municipal planning tools to prevent the establishment of a storage facility or livestock grazing area in the vulnerable areas since these activities are also considered land uses. The Municipality shall comply with the required prohibition.

Policy

When the Source Protection Plan takes effect the Municipality shall prohibit the future uses of land as listed below where the threat from such uses would be significant in the areas where this policy applies. A Municipality’s official plan and zoning by-law in effect for the vulnerable areas shall be reviewed and amended, as necessary, as required under Section 26 of the *Planning Act*, to implement this prohibition.

The uses to be prohibited include:

1. The storage of agricultural source material.
2. The handling and storage of non-agricultural source material.
3. The handling and storage of commercial fertilizer.
4. The use of land as livestock grazing or pasturing land, an outdoor confinement area or farm-animal yard.

The policy applies in the following vulnerable areas:

- Callander IPZ-1 and 2;
- Mattawa WHPA-A and B;
- North Bay IPZ-1;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

Table 4-12: Monitoring Policies for SMF Policies

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
SMF1	M02-MUN	By February 1 st of each year the Municipality shall provide a report to the SP Authority that details the annual progress on all specify action policies for which it is responsible that have not previously been reported as fully implemented.

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
SMF2	M01-PA	By February 1 st of the year after an amendment has come into effect for an official plan or zoning by-law, the Municipality shall provide written notice to the SP Authority, including a copy of the amended planning documents.

SNO: Storage of Snow

SNO1: Land Use Prohibition – Consolidated Snow Storage Facilities

Background

The storage of snow could be a significant threat where the vulnerability score of the listed areas and the following circumstances are combined:

- above grade where the snow storage area will exceed 1 hectare [2.47 acres]
- below grade where the snow storage area will exceed 100 m² [1,076 ft²]

The circumstances related to the storage of snow relate to chemicals or contaminants which may be contained in the snow and released as it melts.

The associated risk is greater as the volume of snow increases with a wider catchment area, or where the snow is trucked in from other locations.

Intent

To prevent the establishment of snow storage facilities within the vulnerable areas where the threat would be significant. The Municipality shall comply with the required prohibition. This is not intended to restrict piling of snow accumulated from snowfalls on a property or along a roadway.

Policy

When the Source Protection Plan takes effect, the Municipality shall prohibit the future use of land as a snow storage facility or snow dump (areas where snow is likely to be transported from offsite) in vulnerable areas where the threat from their establishment could be significant.

An official plan and zoning by-law in effect for the vulnerable areas shall be reviewed and amended, as necessary, as required under Section 26 of the *Planning Act* to implement this prohibition.

The policy applies in the following vulnerable areas:

- Callander IPZ-1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

Table 4-13: Monitoring Policy for SNO Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
SNO1	M01-PA	By February 1 st of the year after an amendment has come into effect for an official plan or zoning by-law, the Municipality shall provide written notice to the SP Authority, including a copy of the amended planning documents.

SVA: Signage of Vulnerable Areas

SVA1: Signage of Vulnerable Areas

Intent

To install signs at the borders of vulnerable areas to increase public awareness of the potential risks to source water and encourage timely and appropriate response to a spill.

Policy

In accordance with Section 22 (7) of the *Clean Water Act*, the Ministry of Transportation, in collaboration with the Ministry of the Environment and Climate Change as well as in consultation with Source Protection Authorities (SP Authorities), should design a sign to the appropriate provincial standards, to identify the locations of Wellhead Protection Areas and Intake Protection Zones. The Ministry of Transportation should manufacture, install and maintain the signs along Provincial Highways within a Wellhead Protection Area with a vulnerability score of 10, and/or within an Intake Protection Zone with a vulnerability score of 8 or higher.

Municipalities may install additional signs at locations of their choice and will be responsible for the purchase, installation and maintenance of them. The signs should be consistent with those designed by the Ministry of Transportation and should be placed, at a minimum, where municipal arterial roads are located within a Wellhead Protection Area with a vulnerability score of 10, and/or an Intake Protection Zone with a vulnerability score of 8 or higher.

The above policies should be implemented as part of an overall Education and Outreach plan within the Source Protection Area. This policy, in conjunction with additional Education and Outreach policies, should be implemented within two years after the effective date of the Plan.

Table 4-14: Monitoring Policies for SVA Policy

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
SVA1	M14-MTO	By February 1 st of each year following the required date for implementation of SVA1, the Ministry of Transportation shall, provide to the SP Authority a summary report for the preceding calendar year regarding the number and location of signs installed along provincial highways within vulnerable areas (i.e. Wellhead Protection Areas and Intake Protection Zones) within the Source Protection Area.
SVA1	M15-MUN	By February 1 st of the year following the date for implementation of SVA1, the Municipality shall provide a report to the SP Authority specifying details of progress for installation of signage until all intended signs are installed; and every fifth year thereafter, the Municipality shall report by February 1, on the state of the signage and any maintenance undertaken. Municipalities that decide not to install signage shall, by February 1 st of the year following the date for implementation of SVA1, report that decision to the SP Authority and may provide details of any other efforts made to raise awareness of vulnerable areas.

THS: Local Threat – Transportation of Hazardous Substances

THS1: Awareness of Vulnerable Areas and Response to Spills of Hazardous Substances

Background

The threat posed by the transportation of hazardous substances has been identified as a local threat to drinking water. It is not a prescribed activity. Policies below to address the threat focus on improving emergency preparedness to respond to a spill. Installation of signage identifying vulnerable areas as per policy SVA1 may also enhance timely response to a spill and appropriate action.

Intent

To ensure emergency spill responders are aware of the locations of vulnerable areas. To improve emergency response times in the event of a spill. To include the Source Protection Authority in the response plan.

Policy

The following existing and future circumstances are designated for the implementation of a local significant threat activity policy:

1. The transportation of 2500 L or greater of sulphuric acid.
2. The transportation of 2500 L or greater of sodium hydroxide.
3. The transportation of any quantity of septage.

Within one year of the date the Source Protection Plan (SP Plan) takes effect, the Municipality shall recognize a spill as an emergency situation in the emergency response plan for the Municipality that could occur as a result of the circumstances listed above. Further, the vulnerable areas to which this policy applies shall be included as schedule(s) to the emergency response plan. When the emergency response team of the Municipality identifies that a spill has occurred in the vulnerable area, the Source Protection Authority via the Conservation Authority shall be notified in the same way that other emergency response partners are contacted.

Within one year of the date the SP Plan takes effect, the Ministry of Environment and Climate Change Spills Action Centre should review and update contact information, Procedure Cards and other information based on the areas to which this policy applies to ensure that drinking water sources will be protected in the event of a spill as a result of the circumstances listed above.

This policy shall apply in the following vulnerable areas:

- Callander IPZ-1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

THS2: Awareness of Vulnerable Areas and Response to Spills of Hazardous Substances – MOD/LOW

Intent

To implement a policy in the North Bay IPZ-1, similar to THS1, where the threat is moderate or low.

Policy

The following existing circumstances occur in the North Bay Intake Protection Zone 1 (IPZ-1):

A. Moderate

1. The transportation of 2,500 L or greater of ammonium nitrate.
2. The transportation of 2,500 L or greater of sodium hydroxide.
3. The transportation of 2,500 L or greater of sulphuric acid.
4. The transportation of 2,500 L or greater of copper.
5. The transportation of 2,500 L or greater of liquid fuel.
6. The transportation of septage in any quantity.

B. Low

1. The transportation of 2,500 L or greater of formaldehyde.
2. The transportation of 2,500 L or greater of methanol.
3. The transportation of greater than 250 L but less than 2,500 L of liquid fuel.

Within one year of the date the Source Protection Plan (SP Plan) takes effect, the City of North Bay should recognize a spill as an emergency situation in an emergency response plan for the City, which could occur as a result of the circumstances named above. Further, the North Bay IPZ-1 should be included as a schedule to the emergency response plan. When the City emergency response team identifies that a spill has occurred in the vulnerable area, the Source Protection Authority via the Conservation Authority should be notified in the same way that other emergency response partners are contacted.

Within one year of the date the SP Plan takes effect, the Ministry of Environment and Climate Change Spills Action Centre should review and update contact information and Procedure Cards based on the North Bay IPZ-1 to ensure that drinking water sources will be protected in the event of a spill as a result of a circumstance named above.

Table 4-15: Monitoring Policies for THS Policies

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
THS1	M06-ERP	By February 1 st of the year after the Municipality is required to update its emergency response plan in accordance with THS1, the Municipality shall notify the SP Authority that it has fulfilled its responsibilities.
THS1	M07-SAC	By February 1 st of the year after the Ministry of Environment and Climate Change Spills Action Centre (SAC) is required to comply with THS1, SAC shall provide a report to the SP Authority confirming that the required changes have been made and may include details on the changes.

WDS: Establishment, Operation or Maintenance of a Waste Disposal Site within the Meaning of Part V of the *Environmental Protection Act*

Background

The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the *Environmental Protection Act* includes the following threats:

- The application of untreated septage to land;
- Storage treatment and discharge of tailings from mines;
- Landfarming of petroleum refining waste
- Landfilling (hazardous waste);
- Landfilling (municipal waste);
- Landfilling (solid non-hazardous industrial or commercial waste);
- Liquid industrial waste injection into a well;
- PCB waste storage;
- Storage of hazardous waste or liquid industrial waste at disposal sites; and
- Storage of hazardous wastes described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste.

The *Environmental Protection Act* (EPA) provides a definition for a “waste disposal site” (R.S.O. 1990, c. E.19, Part V). In general terms, a waste disposal site is any land, building, structure in connection with the depositing, disposal, handling, storage, transfer, treatment or processing of waste. Operational activities associated with these sites are also included in the definition, for example a generator of waste is included in the definition of a waste disposal site. These waste generators can include small quantities of hazardous waste, empty hazardous waste containers, and cleanup materials from small spills. For complete definitions of the clauses please see Hazardous Waste Clauses under Key Definitions and Acronyms.

WDS1: Prohibition and Management of Waste Disposal Sites under Part V of the EPA

Intent

To prohibit the establishment of waste disposal sites using regulations and procedures under the *Environmental Protection Act*. To manage Environmental Compliance Approvals for existing sites by reviewing the Approvals to ensure effective best management.

Policy

The Ministry of the Environment and Climate Change shall not issue any Environmental Compliance Approvals for a future waste disposal site within the meaning of Part V of the *Environmental Protection Act* where the threat from the establishment, operation or maintenance of such a site could be significant.

For Environmental Compliance Approvals that exist in the areas where the threat could be significant for waste disposal sites within the meaning of Part V of the *Environmental Protection Act*, the Ministry of Environment and Climate Change shall review their terms within three years of the date the Source Protection Plan takes effect and amend the Approval as necessary to ensure that the terms of each Approval adequately addresses the threats to source water. The Director, as defined in the *Environmental Protection Act* or its Regulations, may determine another implementation date based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities.

This policy applies for the named activities and threat subcategories in the following vulnerable areas:

Application of hauled sewage to land:

- Callander IPZ-1, IPZ-2, and Issue Contributing Area (ICA only if related to a circumstance containing phosphorus);
- Mattawa WHPA-A and B;
- North Bay IPZ-1;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

Discharges from the storage and treatment of tailings from mines:

- Callander IPZ-1 and Issue Contributing Area (ICA only if related to a circumstance containing phosphorus);
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

Landfarming of petroleum refining waste AND landfilling (hazardous waste) AND storage of hazardous waste or liquid industrial waste:

- Callander IPZ-1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

Landfilling (municipal waste) AND landfilling (solid non-hazardous industrial or commercial):

- Callander IPZ-1;
- Mattawa WHPA-A, B and C;
- Powassan WHPA-A, B1/B2/B4 and C1; and
- South River IPZ-1.

Liquid industrial waste injection into a well:

- Mattawa WHPA-A, B and C; and
- Powassan WHPA-A, B1/B2/B4 and C1.

WDS2: Land Use Prohibition of Waste Disposal Sites

Intent

Require municipalities to use available tools to mirror the policy WDS1 prohibiting the establishment of waste disposal sites. The purpose is to bring attention to the prohibition early in an application process.

Policy

When the Source Protection Plan takes effect, the Municipality shall prohibit the future use of land as a landfill, mine tailings pond, an area designated to be injected with liquid industrial waste, or an area for landfarming of petroleum refining waste where the threat from the activity would be significant.

An official plan and zoning by-law in effect for the vulnerable areas shall be reviewed and amended, as necessary, as required under Section 26 of the *Planning Act* to implement this policy.

This policy applies to the named activities and threat subcategories in the following vulnerable areas:

Storage of tailings from mines:

- Callander IPZ-1 and Issue Contributing Area (ICA only if related to a circumstance containing phosphorus);
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

Landfarming of petroleum refining waste AND landfilling (hazardous waste)

- Callander IPZ-1;
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

Landfilling (municipal waste) AND landfilling (solid non-hazardous industrial or commercial):

- Callander IPZ-1;
- Mattawa WHPA-A, B and C;
- Powassan WHPA-A, B1/B2/B4 and C1; and
- South River IPZ-1 with the exception of lands in Laurier Township (which are subject to LAU1).

An area where liquid industrial waste is injected into a well:

- Mattawa WHPA-A, B and C; and
- Powassan WHPA-A, B1/B2/B4 and C1.

WDS3: Education Hazardous Waste and PCBs

Intent

To raise awareness of the threat posed to source water from hazardous or liquid industrial waste and polychlorinated biphenyls (PCBs). Municipalities may choose to implement the policy as part of a broader program to encourage proper storage and disposal of hazardous goods (see also HAZ1: Education DNAPLs and Organic Solvents).

Policy

Where there could be a threat from the existing or future storage of hazardous or liquid industrial waste, hazardous waste as defined in (p), (q), (r), (s), (t), or (u) of regulation 374 of the *Environmental Protection Act* (EPA) and polychlorinated biphenyls (PCBs), the Municipality shall plan and deliver an Education and Outreach program designed to ensure those involved in such activities are aware of the risks posed to source water, how to reduce those, and how to recognize and respond to a spill.

The program shall be delivered within two years of the date the Source Protection Plan takes effect and shall be made available and updated as necessary on an ongoing basis as is deemed appropriate by the Municipality. The program shall be delivered to all persons that could be engaged in the activity of storage of hazardous or liquid industrial waste, waste as defined in (p), (q), (r), (s), (t), or (u) of regulation 374 of the *Environmental Protection Act* (EPA) and PCBs where the threats could be significant.

This policy applies for the named activities and threat subcategories in the following vulnerable areas:

Storage of PCBs:

- Mattawa WHPA-A and B; and
- Powassan WHPA-A and B1.

Storage of hazardous waste or liquid industrial waste:

- Callander IPZ-1
- Mattawa WHPA-A and B;
- Powassan WHPA-A and B1; and
- South River IPZ-1.

Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste (in Part V of the *Environmental Protection Act*):

- Mattawa WHPA-A and B; and
- Powassan WHPA-A and B1.

Additionally the program may be more broadly released to a whole Municipality or any part of the Source Protection Area, at the discretion of a municipal council.

Table 4-16: Monitoring Policies for WDS Policies

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
WDS1	M08-ECA	By February 1 st of the year following the year in which the Ontario ministry named as the implementing body is required to comply with the associated threat policy, that ministry shall report to the SP Authority confirming implementation of the policy and how that has been accomplished.
WDS2	M01-PA	By February 1 st of the year after an amendment has come into effect for an official plan or zoning by-law, the Municipality shall provide written notice to the SP Authority, including a copy of the amended planning documents.

Code of Associated Policy	Monitoring Policy Code	Monitoring Policy
WDS3	M03-EO	By February 1 st of the year after the Municipality is required to prepare and deliver an education and outreach program in accordance with FUL4, HAZ1, WDS3, and PST4 and every fifth anniversary thereafter, the Municipality shall provide a report to the Source Protection Authority indicating how the program has been delivered and that it continues to be available.