

Mississippi-Rideau Source Protection Plan

Implementation Resources for Municipalities

The material in this binder has been provided to guide and assist municipalities with implementation of the municipal policies in the Mississippi-Rideau Source Protection Plan. Additional or alternate materials or methods for implementation may be developed and used by municipalities as they see fit.

Please refer to the Mississippi-Rideau Source Protection Plan for policy wording, compliance dates, policy intent and helpful background information.

- Tab 1 General Information and Policy Summary
- Tab 2 Integrating Policies Into Planning and Building
Department Procedures
- Tab 3 Part IV Policies
- Tab 4 Transport Pathways Notification
- Tab 5 Lot Grade and Drainage Plan Policy
- Tab 6 Municipal Sewer Services Policies
- Tab 7 Road Salt Management Plan Policy
- Tab 8 Non-Legally Binding Policies
- Tab 9 Education and Outreach Policies
- Tab 10 Record Keeping and Reporting

Source Protection Plan Implementation Summary

Legally Binding Policies – Lanark County and the United Counties of Leeds and Grenville

	Policy Code(s) (or short form)	Policy Name or Description	Action Required by Municipality	Compliance Deadline	Binder Tab	SPMIF Eligible	Complete
1	ADMIN-1-LB ADMIN-2-LB ADMIN-4-LB ADMIN-5-LB SEW-9 SEW-15	<ul style="list-style-type: none"> – Administrative policies – Policies where <i>Planning Act</i> decisions must conform 	Set up a process to ensure that new Planning and Building applications (and property inquiries) are screened for applicable Source Protection Plan requirements and to ensure <i>Planning Act</i> decisions conform to Source Protection Plan policies.	When Source Protection Plan comes into effect	2	yes	✓
2	ADMIN-3-LB	Official Plan and Zoning By-Law Conformity	Amend planning documents to conform with Source Protection Plan policies.	5 years from Plan effective date	2	yes	
3	EDU-1-LB	Living and Working in the Drinking Water Zone	Establish an education program. This is being led by Source Protection staff using provincial funding transferred from the counties.	Initiate within 1 year from Plan effective date	9	yes	
4	MON-2-LB	Annual Report – Legally Binding Policies	Submit an annual report to the Source Protection Authority (a template will be developed for ease of reporting).	1 st report due 2018	10	yes	

Source Protection Plan Implementation Summary

Non-Legally Binding Policies – Lanark County and the United Counties of Leeds and Grenville

	Policy Code(s)	Policy Name or Description	Action Encouraged by Municipality	Compliance Deadline	Binder Tab	SPMIF Eligible	Complete
1	EDU-3-NLB EDU-4-NLB	Signs	Municipality is encouraged to install signs along municipal roads and waterways to mark Wellhead Protection areas and Intake Protection Zones. The signs are being designed and manufactured by MTO.	2 years from Plan effective date	9	no	
2	EDU-5-NLB	Transporting Contaminants Through the Drinking Water Zone	Municipality is encouraged to establish an education program with assistance from the SPA.	Initiate within 1 year from Plan effective date	9	no	
3	CORR-1-NLB	Emergency Response Plan Updates	Municipality is encouraged to update Emergency Response Plans to include information about the location of vulnerable drinking water areas and corresponding contingency measures.	1 year from Plan effective date	8	no	
4	MON-3-NLB	Annual Report – Non-legally Binding Policies	Municipality is requested to submit an annual report to the Source Protection Authority about implementation activities related to non-legally binding policies.	1 st report due 2018	10	no	

**Source Protection Plan
Implementation Summary
MUNICIPALITIES WITH DRINKING WATER SYSTEMS**

Legally Binding Policies

	Policy Code(s) (or short form)	Policy Name or Description	Action Required by Municipality	Compliance Deadline	Binder Tab	SPMIF Eligible	Complete
1	All policy codes with "S57" or "S58" (23 policies)	Policies that prohibit activities under Section 57 of the <i>Clean Water Act</i> and policies that require a Risk Management Plan under Section 58 of the <i>Clean Water Act</i>	Establish a Risk Management Office or enter into an agreement to delegate authority to another body.	When Source Protection Plan comes into effect	3	yes	✓
2	ADMIN-1-LB ADMIN-2-LB ADMIN-4-LB ADMIN-5-LB SEW-9 SEW-15	<ul style="list-style-type: none"> – Administrative policies – Policies where <i>Planning Act</i> decisions must conform 	Set up a process to ensure that new Planning and Building applications (and property inquiries) are screened for applicable Source Protection Plan requirements and to ensure <i>Planning Act</i> decisions conform to Source Protection Plan policies.	When Source Protection Plan comes into effect	2	yes	✓
3	ADMIN-3-LB	Official Plan and Zoning By-Law Conformity	Amend planning documents to conform with Source Protection Plan policies.	5 years from Plan effective date	2	yes	
4	SEW-3-LB	Lot Grade and Drainage Plans	Require a lot grade and drainage plan as part of Building Permit applications when a septic system is proposed as part of the development (<u>areas with a score of 10 only</u>).	6 months from Plan effective date	5	yes	
5	SEW-4-LB	Mandatory Connection to Municipal Services	Establish / modify by-law to require connection to municipal sewer services (<u>areas with a score of 10 only</u>).	1 year from Plan effective date	6	yes	
6	SEW-6-LB	Sanitary Sewer Maintenance Program	Amend existing maintenance program to ensure that sewers are monitored as described in the policy (<u>areas with a score of 10 only</u>).	Initiate within 1 year from Plan effective date	6	no	
7	SALT-3-LB	Road Salt Management Plan <i>(legally binding for Perth, Smiths Falls, Carleton Place, North Grenville only)</i>	Develop and implement a Salt Management Plan (<u>areas with a score of 10 only</u>).	1 year from Plan effective date	7	no	
8	SALT-4-LB	Smart Salt Practices <i>(legally binding for Perth, Smiths Falls, Carleton Place, North Grenville only)</i>	Offer the "Smart About Salt" program (regionally and coordinated by the Source Protection Authority).	1 year from Plan effective date	9	yes <i>Perth, Smiths Falls, Carleton Place, North Grenville only)</i>	
9	EDU-1-LB	Living and Working in the Drinking Water Zone	Establish an education program. This is being led by Source Protection staff using provincial funding transferred from the counties.	Initiate within 1 year from Plan effective date	9	yes	
10	MON-2-LB	Annual Report – Legally Binding Policies	Submit an annual report to the Source Protection Authority (a template will be developed for ease of reporting).	1 st report 2018	10	yes	

**Source Protection Plan
Implementation Summary
MUNICIPALITIES WITH DRINKING WATER SYSTEMS
Non-Legally Binding Policies**

	Policy Code(s)	Policy Name or Description	Action Encouraged by Municipality	Compliance Deadline	Binder Tab	SPMIF Eligible	Complete
1	SALT-5-NLB	Road Salt Management Plan	Municipality is encouraged to develop and implement a Salt Management Plan.	1 year from Plan effective date	7	no	
2	SALT-6-NLB	Smart Salt Practices	Municipality is encouraged to offer the “Smart About Salt” program (regionally and coordinated by the Source Protection Authority).	1 year from Plan effective date	9	no	
3	EDU-3-NLB EDU-4-NLB	Signs	Municipality is encouraged to install signs along municipal roads and waterways to mark Wellhead Protection areas and Intake Protection Zones. The signs are being designed and manufactured by MTO.	2 years from Plan effective date	9	no	
4	EDU-5-NLB	Transporting Contaminants Through the Drinking Water Zone	Municipality is encouraged to establish an education program with assistance from the SPA.	Initiate within 1 year from Plan effective date	9	no	
5	CORR-1-NLB	Emergency Response Plan Updates	Municipality is encouraged to update Emergency Response Plans to include information about the location of vulnerable drinking water areas and corresponding contingency measures.	1 year from Plan effective date	8	no	
6	PATH-1-NLB	Oversight of Earth (Geothermal) Energy Systems <i>(municipalities with Wellhead Protection Areas only)</i>	Municipality is encouraged to establish new requirements for new earth energy systems when they are proposed in Wellhead Protection areas.	Initiate within 1 year from Plan effective date	8	no	
7	MON-3-NLB	Annual Report – Non-legally Binding Policies	Municipality is requested to submit an annual report to the Source Protection Authority about implementation activities related to non-legally binding policies.	1 st report 2018	10	no	

**Source Protection Plan
Implementation Summary
MUNICIPALITIES WITHOUT DRINKING WATER SYSTEMS**

Legally Binding Policies

	Policy Code(s) (or short form)	Policy Name or Description	Action Required by Municipality	Compliance Deadline	Binder Tab	SPMIF Eligible	Complete
1	All policy codes with "S57" or "S58" (23 policies)	Policies that prohibit activities under Section 57 of the <i>Clean Water Act</i> and policies that require a Risk Management Plan under Section 58 of the <i>Clean Water Act</i>	Establish a Risk Management Office or enter into an agreement to delegate authority to another body.	When Source Protection Plan comes into effect	3	yes	✓
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3	ADMIN-3-LB	Official Plan and Zoning By-Law Conformity	Amend planning documents to conform with Source Protection Plan policies.	5 years from Plan effective date	2	yes	
4	EDU-1-LB	Living and Working in the Drinking Water Zone	Establish an education program. This is being led by Source Protection staff using provincial funding transferred from the counties.	Initiate within 1 year from Plan effective date	9	yes	
5	MON-2-LB	Annual Report – Legally Binding Policies	Submit an annual report to the Source Protection Authority (a template will be developed for ease of reporting).	1 st report 2018	10	yes	

**Source Protection Plan
Implementation Summary
MUNICIPALITIES WITHOUT DRINKING WATER SYSTEMS
Non-Legally Binding Policies**

	Policy Code(s)	Policy Name or Description	Action Encouraged by Municipality	Compliance Deadline	Binder Tab	SPMIF Eligible	Complete
1	SALT-5-NLB	Road Salt Management Plan	Municipality is encouraged to develop and implement a Salt Management Plan.	1 year from Plan effective date	7	no	
2	SALT-6-NLB	Smart Salt Practices	Municipality is encouraged to offer the “Smart About Salt” program (regionally and coordinated by the Source Protection Authority).	1 year from Plan effective date	9	no	
3	EDU-3-NLB EDU-4-NLB	Signs	Municipality is encouraged to install signs along municipal roads and waterways to mark Wellhead Protection areas and Intake Protection Zones. The signs are being designed and manufactured by MTO.	2 years from Plan effective date	9	no	
4	EDU-5-NLB	Transporting Contaminants Through the Drinking Water Zone	Municipality is encouraged to establish an education program with assistance from the SPA.	Initiate within 1 year from Plan effective date	9	no	
5	CORR-1-NLB	Emergency Response Plan Updates	Municipality is encouraged to update Emergency Response Plans to include information about the location of vulnerable drinking water areas and corresponding contingency measures.	1 year from Plan effective date	8	no	
6	PATH-1-NLB	Oversight of Earth (Geothermal) Energy Systems <i>(municipalities with Wellhead Protection Areas only)</i>	Municipality is encouraged to establish new requirements for new earth energy systems when they are proposed in Wellhead Protection areas.	Initiate within 1 year from Plan effective date	8	no	
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ADMIN-1-LB and ADMIN-2-LB
Restricted Land Use (Section 59) Policies

Policy Wording:

Policy: ADMIN-1-LB

Restricted Land Use Policy – Intake Protection Zones and Wellhead Protection Areas Where the Vulnerability Score is 10

All land uses identified within the Official Plan and/or Zoning By-Laws are designated for the purpose of Section 59 of the *Clean Water Act* if they are located within:

- Intake Protection Zones with a vulnerability score of 10; or
- Wellhead Protection Areas with a vulnerability score of 10.

Within these designated land use categories and areas, a notice from the Risk Management Official in accordance with Section 59(2) of the *Clean Water Act* shall be required prior to approval of any *Planning Act* application (as prescribed in Ontario Regulation 287/07 section 62) or Building Permit application.

Despite the above policy, a site specific proposed land use that is the subject of an application for an approval under the *Planning Act* or for a permit under the *Building Code Act*, is not designated for the purposes of Section 59 if the applicant can demonstrate to the satisfaction of the planning authority or the building official that a significant drinking water threat activity designated for the purposes of Section 57 or 58 of the *Clean Water Act* will not be engaged in.

Restricted Land Use Policy – Intake Protection Zones Scored 8 to 9 and Wellhead Protection Areas “A”, “B” or “C” Scored 4 to 8

All land uses, with the exception of solely residential land uses, identified within the Official Plan and/or Zoning By-Laws are designated for the purpose of Section 59 of the *Clean Water Act* if they are located within:

- Intake Protection Zones with a vulnerability score of 8, 8.1 or 9; or
- Wellhead Protection Areas “A”, “B” or “C” with a vulnerability score of 4, 6 or 8.

Within these designated land use categories and areas, a notice from the Risk Management Official in accordance with Section 59(2) of the *Clean Water Act* shall be required prior to approval of any *Planning Act* application (as prescribed in Ontario Regulation 287/07 section 62) or Building Permit application.

Despite the above policy, a site specific proposed land use that is the subject of an application for an approval under the *Planning Act* or for a permit under the *Building Code Act*, is not designated for the purposes of Section 59 if the applicant can demonstrate to the satisfaction of the planning authority or the building official that a significant drinking water threat activity designated for the purposes of Section 57 or 58 of the *Clean Water Act* will not be engaged in.

ADMIN-1-LB and ADMIN-2-LB Restricted Land Use (Section 59) Policies

Purpose:

Restricted Land Use (*Clean Water Act* Section 59) policies are intended to help municipalities avoid inadvertently approving a Planning or Building application without first complying with Source Protection Plan policies (specifically policies that Prohibit activities under Section 57 or require a Risk Management Plan under Section 58).

Implications for Municipalities:

- Planning and Building applications in certain vulnerable drinking water areas may not proceed without a Section 59 notice from the Risk Management Official.
- For Building Officials – Section 59 has been added to the list of “applicable law” under the *Building Code Act*.
- For planning staff – these provisions of the *Planning Act* are prescribed for the purposes of Section 59:
 - Section 22 – OP amendments
 - Section 34 – zoning by-law amendments
 - Section 39 – temporary use
 - Section 41 – site plan control
 - Section 45 – minor variances
 - Section 51 – plans of subdivision
 - Section 53 – consents

The Section 59 policies in the Mississippi-Rideau Source Protection Plan have an exemption that allows a first level of screening to be conducted by Planning or Building staff. This will greatly reduce the involvement of the Risk Management Official where an application clearly does not involve a drinking water threat activity.

Implementation Tasks:

- Incorporate into the application screening process
- Create a GIS map tool
- Provide staff orientation
- Modify business processes (e.g. circulation sheet, work flow)

Implementation Resources Available:

- Vulnerable area mapping
- GIS data layer

Must be in place on the date the Source Protection Plan comes into effect

Source Water Protection Checklist
For Planning and Building Applications in an
Intake Protection Zone with a Vulnerability Score of 8

Property and Contact Information

Name of Applicant: _____
Address: _____
Telephone / Cellular Number: _____
Email Address: _____
Municipal Address of Subject Property: _____
Legal Description of Subject Property: _____
Roll # _____
Date of Completion of this Checklist: _____

Description of the Proposal

This property is located in an Intake Protection Zone where certain activities have the potential to adversely affect the surface water that supplies a municipal water treatment plant.

*PLEASE CHECK ALL LAND USES AND ACTIVITIES THAT MAY BE ASSOCIATED
WITH THE PROPOSAL:*

PART A

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Land Spreading of Untreated Septage |
| <input type="checkbox"/> | Sewage Works: |
| <input type="checkbox"/> | ➤ Sewage treatment plant effluent discharges |
| <input type="checkbox"/> | ➤ Industrial effluent discharges |
| <input type="checkbox"/> | ➤ Combined sewer discharge from a stormwater outlet to surface water |
| <input type="checkbox"/> | ➤ Sewage treatment plant bypass discharge to surface water |

If checkmarks in PART A above, indicate if the land use or activity is:

Already existing/occurring

Expanding

Resuming after an interruption

(circle any that apply)

ADMIN-3-LB

Official Plan and Zoning By-Law Conformity

Policy Wording:

Policy ADMIN-3-LB

Official Plan and Zoning By-Law Conformity

Where this Source Protection Plan specifies that Section 40 and 42 of the *Clean Water Act* apply (see Appendix A, List A), the municipality shall amend their Official Plan and Zoning By-Laws to conform with significant threat policies in the Source Protection Plan. Official Plans must be updated no later than the date of their next five-year review required under Section 26 of the *Planning Act* and zoning by-laws must be updated within three years of the Official Plan amendments to bring them into conformity with the Official Plan.

Note: App. A, List A sites policies SEW-9, SEW-15 and ADMIN-1,2,4,5 (described below)

Purpose:

Updating the Official Plan and zoning by-laws will help to ensure that decisions on planning matters will be consistent with Source Protection Plan policies. Also, conformity is mandatory under Section 40 and 42 of the *Clean Water Act*.

Implications for Municipalities:

Mandatory amendments:

- Policies SEW-9, SEW-15 – Prohibit the future establishment of some types of sewage works (recognizing that those that are “activities” and not “land uses” will only be able to be addressed in a general way in the Official Plan)
- Policies ADMIN-1-LB and ADMIN-2-LB – Planning and building applications within certain land uses and certain vulnerable drinking water areas may not proceed without a notice from the Risk Management Official
- Policies ADMIN-4-LB and ADMIN-5-LB – Transition and Interruptions / Expansions Policies that dictate what activities or land uses are considered “existing” and what is “future” to determine which policies apply (many activities or land uses may continue if they are existing but are prohibited in the future)

Optional amendments:

- Change to complete application requirements to include the activity checklist so that municipal planning or building staff can do much of the screening out (to reduce the number of referrals to the Risk Management Official)
- List of activities prohibited under Part IV, Section 57
- List of activities requiring a Risk Management Plan under Part IV, Section 58
- Other Source Protection Plan policies such as mandatory connection to municipal services (policy SEW-4-LB) or lot grade and drainage plan requirement (policy SEW-3-LB)

No later than the next five-year review required under the *Planning Act*

ADMIN-4-LB and ADMIN-5-LB

Transition / Interruptions / Expansions Policies

Policy Wording:

Policy: ADMIN-4-LB

Transition Policy

A drinking water threat activity that is established or commences after the date the Source Protection Plan takes effect is considered existing and is subject to policies addressing existing activities when:

- The activity is related to a development proposal where an application was made or an approval was obtained under the *Planning Act* or the *Condominium Act* on a date before the date this Source Protection Plan takes effect. (Note that the activity would also be considered “existing” with respect to any further applications under the *Planning Act*, *Condominium Act*, or Prescribed Instruments required to implement the development proposal).
- The activity is related to an application made or an approval was obtained under the *Building Code Act* on a date before the date this Source Protection Plan takes effect.
- The activity is related to an application made or an approval was obtained for the issuance or amendment of a Prescribed Instrument on a date before the date this Source Protection Plan takes effect.

Policy: ADMIN-5-LB

Interruptions / Expansions Policy

A drinking water threat activity that resumes after an interruption or expands after the date the Source Protection Plan takes effect is considered existing and is subject to policies addressing existing activities when:

- It is usually occurring on the property but has been interrupted for a maximum of 24 months due to temporary circumstances such as fire, renovation, change of ownership or due to the seasonal nature of the activity
- It involves an expansion of an existing activity but the expanded activity would be more protective of drinking water sources
- It involves an expansion of the existing physical space but does not result in an expansion of the existing activity (unless the expansion of the activity is more protective of drinking water sources)
- It involves an expansion of the existing activity that is minor such that:
 - it does not require regulatory or planning approvals; and
 - it is not part of, or was not preceded by, an expansion of the physical space that required regulatory or planning approvals.

ADMIN-4-LB and ADMIN-5-LB

Transition / Interruptions / Expansions Policies

Purpose:

Policies for existing activities are often different than policies for future activities. Many future activities are prohibited but the same activities are permitted to continue if they already exist when the Source Protection Plan comes into effect.

The Transition Policy and the Interruptions / Expansions Policy are intended to address the grey area where activities were not occurring on the date the Source Protection Plan came into effect but were:

- already applied for or approved
- previously occurring but were temporarily interrupted
- previously occurring and an expansion is proposed

Implications for Municipalities:

Planning and Building staff need to be aware of these policies so that the correct policy (future) or (existing) is applied

Implementation:

- Incorporate into the application screening process
- Incorporate into the GIS map tool
- Provide staff orientation

Implementation Resources Available:

- Vulnerable area mapping
- GIS data layer

Must be in place on the date the Source Protection Plan comes into effect

SEW-9, SEW-15

Land Use Planning Policies

Policy Wording:

Policy: SEW-9-LB-PI/PA-MC

Future Stormwater Management Facility in Wellhead Protection Area “A” or Intake Protection Zone Scored 10 – Prescribed Instrument/Planning Act Decisions

Future stormwater management facilities that would be a significant drinking water threat as described in Appendix B are prohibited in the:

- Wellhead Protection Area “A”; and
- Intake Protection Zone with a vulnerability score of 10.

Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act*) must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

A stormwater management facility is exempt from this policy and instead subject to policy SEW-10-LB-PI-MC (permitted but regulated by MOE instruments) if:

- It is located within a Wellhead Protection Area “A” that is under municipal ownership and maintained in a natural state that protects source water;
- It is located at the outer perimeter of the Wellhead Protection Area “A” and a minimum of 30 metres from the municipal well; and
- It is located in an area where it can be demonstrated that there is no discernible hydrogeological connection between the surface and the aquifer supplying the municipal well.

Policy SEW-15-LB-PI/PA-MC

Future “Other” Sewage Works – Prescribed Instrument / Planning Act Decisions

Future sewage works (types listed below) are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act*) must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

This policy applies to sewage treatment plant effluent discharges, industrial effluent discharges, storage of sewage (excluding storage associated with the sewer network), combined sewer discharge from a stormwater outlet to surface water, sewage treatment plant bypass discharge to surface water

SEW-9, SEW-15

Land Use Planning Policies

Purpose:

For municipalities to use their powers under the *Planning Act* to prohibit the future establishment of large sewage works where they would be a significant drinking water threat.

Implications for Municipalities:

Decisions under the *Planning Act* must conform to these policies immediately when the Source Protection Plan comes into effect.

Implementation:

- Incorporate into the application screening process
- Incorporate into the GIS map tool
- Provide staff orientation
- Follow usual procedure for when there is a change of permitted uses in the zoning by-law
- Zoning by-law (and OP if applicable) can be updated at the time of the next scheduled review

Implementation Resources Available:

- Vulnerable area mapping
- GIS data layer
- Chart showing types of waste disposal sites and sewage works and the vulnerable areas where they must be prohibited

Must be in place on the date the Source Protection Plan comes into effect

SEW-9, SEW-15 Planning Act Decisions Must Prohibit

When the Mississippi-Rideau Source Protection Plan comes into effect, Planning Act decisions must conform with two policies (SEW-9 and SEW-15). These policies prohibit the future establishment of certain types of sewage works within certain vulnerable areas as shown in the table below.

Sewage Works*:	WHPA-A	WHPA-B(10)	WHPA-8	IPZ-10	IPZ-9	IPZ-8.1	IPZ-8
Stormwater management facility**	✓			✓			
Sewage treatment plan effluent discharges	✓	✓		✓	✓	✓	✓
Industrial effluent discharges				✓	✓	✓	✓
Storage of sewage (excluding storage associated with the sewer network)	✓	✓	✓	✓	✓		
Combined sewer discharge from a stormwater outlet to surface water				✓	✓	✓	✓
Sewage treatment plant bypass discharge to surface water				✓	✓	✓	✓

** Refer to Source Protection Plan, (App B) or consult Risk Management Official for detailed circumstances that trigger a significant drinking water threat.*

** A stormwater management facility is exempt from the prohibition policy if:

- It is located within a Wellhead Protection Area "A" that is under municipal ownership and maintained in a natural state that protects source water;
- It is located at the outer perimeter of the Wellhead Protection Area "A" and a minimum of 30 metres from the municipal well; and
- It is located in an area where there is no discernible hydrogeological connection between the surface and the aquifer supplying the well

S57 Policies

Prohibition under the Clean Water Act

Policy Wording:

Policy: XXXX-#-LB-S57

Risk Management Plan

_____ (activity) is designated as prohibited under Section 57 of the *Clean Water Act*, where it would be a significant threat as described in Appendix B.

Vulnerable Areas Where Policies Apply:

- Wellhead Protection Areas scored 8 or 10 depending on the activity
- Intake Protection Zones scored 8, 8.1, 9 or 10 depending on the activity

Implications for Municipalities:

- Municipalities are responsible for enforcing Part IV, Section 57 policies unless they delegate the enforcement authority to another body

Implementation:

- Appoint a Risk Management Official and establish a Risk Management Office (individually or jointly with another municipality); or
- Enter into an agreement to delegate the enforcement authority to another body.

Implementation Resources Available:

- Vulnerable area mapping and GIS data layer
- *Module 6 – Part IV Prohibition* (Conservation Ontario's Implementation Guide)
- Communication / administrative materials (currently under development)
- Delegation agreement to delegate to the Conservation Authorities (currently under development)

Risk Management Office must be in place
on the date the Source Protection Plan takes effect

Activities that are Prohibited

What	When and Where
Future waste disposal sites	"Stop gap" policy in case it is not regulated by a provincial instrument
Future large sewage works	"Stop gap" policy in case it is not regulated by a provincial instrument
Future chemical storage – DNAPL	IPZ 10 and WHPA A, B, C any score
Future chemical storage – organic solvents	WHPA-10 and IPZ-10
Future road salt storage	WHPA-10, IPZ-10, IPZ-9, depends on amount and type of storage
Future snow dump	WHPA-10, IPZ-10, IPZ-9, depends on amount and type of storage
Future retail storage of commercial fertilizer	WHPA-10 and IPZ-10, depends on amount stored
Future commercial storage of pesticide	WHPA-10, IPZ-10, IPZ-9, depends on amount stored and type of chemical
Future large fuel storage (e.g. gas stations)	WHPA-10, IPZ-10
Future aircraft de-icing	WHPA-10, IPZ-10, IPZ-9

Prohibited Activities in the Intake Protection Zone (Score of 8 or 8.1)

New Waste Disposal Site:

- Application of untreated septage to land

New Sewage Works:

- Sewage treatment plant effluent discharges
- Industrial effluent discharges
- Combined sewer discharge from a stormwater outlet to surface water
- Sewage treatment plant bypass discharge to surface water

Consult Risk Management Official if:

- *Activities on this list are 1) already occurring, 2) are proposed to resume after an interruption, 3) are proposed to expand or 4) were the subject of a previous application or approval. These may proceed if they meet the Interruptions / Expansions Policy or the Transition Policy but a Risk Management Plan will be required.*
- *Further interpretation or information about detailed circumstances for the activities on this list is needed.*

S58 Policies Risk Management Plans

Policy Wording:

Policy: XXXX-#-LB-S58

Risk Management Plan

_____ (activity) is designated for the purpose of Section 58 of the *Clean Water Act*, requiring a Risk Management Plan in areas where the threat is or would be significant as described in Appendix B. Risk Management Plans for existing activities shall be established within three years from the date the Source Protection Plan takes effect.

Vulnerable Areas Where Policies Apply:

- Wellhead Protection Areas scored 8 or 10 depending on the activity
- Intake Protection Zones scored 8, 8.1, 9 or 10 depending on the activity

Implications for Municipalities:

- Municipalities are responsible for enforcing Part IV, Section 58 policies unless they delegate the enforcement authority to another body

Implementation:

- Appoint a Risk Management Official and establish a Risk Management Office (individually or jointly with another municipality); or
- Enter into an agreement to delegate the enforcement authority to another body.

Implementation Resources Available:

- Vulnerable area mapping and GIS data layer
- *Module 5 – Risk Management Plans* (Conservation Ontario's Implementation Guide)
- Communication / administrative materials (currently under development)
- Delegation agreement to delegate to the Conservation Authorities (currently under development)

Risk Management Office must be in place
on the date the Source Protection Plan takes effect

Risk Management Plans for existing activities must be in place
within 3 years from the date the Source Protection Plan takes effect

Activities that Require a Risk Management Plan

Existing Activities	When and Where
Existing waste disposal sites (unlikely)	Depends on type and vulnerable area and only if not regulated by a provincial instrument (future are prohibited)
Existing large sewage works (unlikely)	Depends on type and vulnerable area and only if not regulated by a provincial instrument (future are prohibited)
Existing chemical storage (DNAPL)	IPZ 10, WHPA A, B ,C any score (future storage is prohibited)
Existing chemical storage (organic solvents)	WHPA-10 and IPZ-10 (future storage is prohibited)
Existing road salt storage or snow dump (unlikely)	WHPA-10, IPZ-9, IPZ-10 depends on amount and type of storage (future are prohibited)
Existing and Future Activities	When and Where
Fuel storage	WHPA-10 and IPZ-10, depends on amount and location of storage (above or below grade), future large fuel storage (e.g. gas station) is prohibited
Commercial fertilizer – storage	WHPA-10 and IPZ-10, depends on amount stored (future retail storage is prohibited)
Commercial fertilizer – application	WHPA-10 at Munster only
Pesticide storage (at a manufacturing, processing, wholesaling or retailing facility or custom applicator's storage yard)	WHPA-10, IPZ-10, IPZ-9, depends on amount and type of chemical (future storage of these types is prohibited)
ASM (manure)	WHPA 10 and IPZ 8 to 10
NASM (e.g. biosolids)	WHPA 10 and IPZ 8 to 10
Livestock	WHPA 10 and IPZ 8 to 10

Risk Management Plan Requirements Intake Protection Zones (score of 8, 8.1, or 9)

Activity	Circumstances
Agricultural Source Material (manure)	The existing or future application or storage of any amount. <u>Exemptions:</u> <ul style="list-style-type: none"> • Small, non-intensive farms • Residential use (backyard gardens) • Activities already regulated under the <i>Nutrient Management Act</i>
Non-agricultural Source Material (e.g. biosolids)	The existing or future application or storage of any amount that contains material from a meat plant or sewage works. <u>Exemptions:</u> <ul style="list-style-type: none"> • Small, non-intensive farms • Residential use (backyard gardens) • Activities already regulated under the <i>Nutrient Management Act</i>
Livestock	The existing or future use of land as livestock grazing or pasturing, an outdoor confinement area or a farm-animal yard for one or more animals. <u>Exemptions:</u> <ul style="list-style-type: none"> • Small, non-intensive farms • Activities already regulated under the <i>Nutrient Management Act</i>
Pesticide storage (existing commercial; future prohibited)	>2,500 kg of MCPA or Mecoprop at a commercial facility

Consult the Risk Management Official if:

- Assistance is required in determining if a Risk Management Plan is needed.

Refer the Applicant to the Risk Management Official if:

- A Risk Management Plan is required.

<p>What is a Risk Management Plan? A Risk Management Plan is a document that outlines the actions required to address an activity that has the potential to contaminate drinking water. These actions manage the risk associated with the activity so that drinking water is better protected.</p> <ul style="list-style-type: none"> ✓ The plan is site-specific – it is customized to fit the nature of the property, activity or business. ✓ The plan includes and accounts for risk management measures that are already in place – some property owners will only need to document what they are already doing to protect drinking water. ✓ The plan can include measures to address multiple activities so only one plan is needed for a property with fuel storage, manure storage and livestock for example. 	<p>How is a Risk Management Plan Created? The Risk Management Official works with the person engaging in the activity to decide on the components of the Risk Management Plan.</p> <ul style="list-style-type: none"> ✓ The process provides significant opportunity for discussion, flexibility and agreement ✓ The property owner receives recognition of previous efforts and good stewardship actions ✓ The Risk Management Official receives formal assurance that the property owner will continue to engage in effective risk reduction measures ✓ Where new risk reduction measures are required, the property owner can be assured that these measures help to protect their property and assets from a potentially devastating contamination event
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RISK MANAGEMENT PLANS ARE NOT TRANSFERABLE

Change of ownership means that a new Risk Management Plan must be agreed to

Establishing a Risk Management Office

To Implement Part IV Policies Under the Clean Water Act

1. Understand Municipal Responsibilities
 - a. Under the *Safe Drinking Water Act* (Standard of Care)
 - b. Under the *Clean Water Act*
2. Legal Considerations
 - a. Obtain legal advice or notify legal regarding new role and responsibilities
 - b. Notify insurer
3. Staffing
 - a. Calculate staffing needs – how many?
 - b. Schedule implementation – when?
 - c. Hire, appoint and train staff – who?
 - i. Risk Management Official(s)
 - ii. Risk Management Inspector(s)
 - iii. Persons with Qualifications
 - d. Secure office space, vehicle, administrative support
4. Make Funding Decisions
 - a. Provincial funding – unknown at this time
 - b. Fees / taxes / water rates?
5. Develop Communication / Administrative Materials
 - a. Application forms
 - b. Standard letters to property owners / people engaged in activities
 - c. Rights and responsibilities communication materials
 - d. Inspection checklists
 - e. Risk Management Plan minimum content
 - f. Standard notices (e.g. intent to establish a Risk Management Plan)
6. Establish Standards and Procedures (which may require a by-law or council resolution; see Section 55 of the *Clean Water Act*)
 - a. Classes of Risk Management Plans
 - b. Inspection program
 - c. Application requirements
 - d. Fees, interest, penalties, refunds (requires a by-law or resolution)
 - e. Prescribing circumstances for when a “person with qualifications” may act (requires a by-law or resolution)
7. Implement
 - a. Develop work plan for Risk Management Plans for existing activities
 - b. Establish record keeping and reporting protocols (internal)
 - c. Comply with MOE record keeping and reporting requirements
 - d. Address cross-boundary issues
 - e. Establish a plan for enforcement and ongoing verification of threats

**Communication / Administrative Materials
For Risk Management Office
Draft List**

Section 58 Notices and Letters	Clean Water Act Reference
Notice of requirement of a Risk Management Plan (existing activities, date specified in Source Protection Plan)	58 (3)
Notice of requirement of a Risk Management Plan (existing activities, no date specified in Source Protection Plan)	58 (4)
Letter to accompany Section 58 (3) or (4) notice	n/a
Notice of agreement on a Risk Management Plan (link to 59(2)(b))	58 (6)
Notice of intent to establish a Risk Management Plan by a specified date	58(7)
Letter to accompany Section 58 (7) notice	n/a
Consent in writing (from a person who has received a Section 58 (7) notice) to establish a Risk Management Plan before the specified date	58 (9)
Order to establish a Risk Management Plan (if none has been agreed to by the date specified in the Section 58 (7) notice)	58 (10)
Order to establish a Risk Management Plan (after application has been made under Subsection 11)	58 (12)
Amendment of Risk Management Plan	58 (13)
Section 59 Notices and Letters	
Notice that neither Section 57 nor Section 58 applies	59 (2a)
Notice that Section 58 applies and a Risk Management Plan has been agreed to or established under Section 58 (link to 58(6))	59 (2b)
Letter indicating that Section 57 applies, therefore the activity is prohibited	n/a
Section 60	
Notice of Acceptance of Risk Assessment 60(2)	60 (2)
Enforcement Orders	
Various	various
Information Required from Applicant	
Source Protection Activity Checklist	n/a
Risk Management Plan Application Form	n/a
Information to Provide to Applicant	
Rights and responsibilities brochure	n/a
Risk Management Plan Development	
Risk Management Plan outline and minimum content (agriculture, chemical)	n/a
Risk Management Plan template (fuel)	n/a
Inspection Procedures	n/a

1.0 Source Protection Plan Implementation (sample staff report)

Date:

To:

From:

Subject: Transfer of Part IV Enforcement Authority

Recommendation:

The following recommendation is provided for Council's consideration:

That Council approve the Part IV Enforcement Transfer Agreement to delegate the municipality's Clean Water Act Part IV enforcement authority to _____.

Purpose of the Report

The Mississippi-Rideau Source Protection Plan has now been approved and comes into effect on _____, 2014. Municipalities are responsible for implementing some types of policies in the Source Protection Plan and attached is a complete list of the policies our municipality is responsible for implementing. Staff has been working with the Conservation Authority to prepare for implementation. The purpose of this report is to provide Council with information about entering into an agreement with _____ to enforce all Part IV policies in the Source Protection Plan on behalf of our municipality. This would address the following policies:

- WASTE-2-LB-S58
- WASTE-4-LB-S57
- SEW-11-LB-S58
- SEW-12-LB-S57
- SEW-14-LB-S58
- SEW-16-LB-S57
- SALT-1-LB-S58
- SALT-2-LB-S57
- DNAPL-1-LB-S58
- DNAPL-2-LB-S57
- FUEL-1-LB-S58
- FUEL-5-LB-S57
- FUEL-6-LB-S58
- FERT-2-LB-S58
- FERT-3-LB-S57
- PEST-4-LB-S58
- PEST-5-LB-S57
- LIVE-2-LB-S58
- ASM-2-LB-S58
- NASM-3-LB-S58
- DEICE-1-LB-S57

Background

The purpose of the *Clean Water Act* is to protect existing and future sources of drinking water from contamination. This legislation is a major part of the Ontario government's commitment to ensure that every Ontarian has access to safe drinking water. By keeping contaminants from getting into sources of drinking water like lakes, rivers and aquifers, we can provide the first line of defense in a multi-barrier approach to protecting drinking water and the health of Ontarians. The *Clean Water Act* relies on locally developed watershed-based Source Protection Plans founded on sound science to effectively meet this objective.

The Mississippi-Rideau Source Protection Plan contains policies that manage or prohibit specific activities that are, or may become, "significant drinking water threats" as defined under the *Clean Water Act*. Among other types of policies, the Plan contains policies that prohibit activities under Section 57 of the *Clean Water Act* or manage activities through the establishment of a Risk Management Plan under Section 58 of the

Clean Water Act. These sections of the Act appear in Part IV: *Regulation of Drinking Water Threats*. Under Part IV, any single, upper or lower tier municipality that has the authority to pass by-laws under the *Municipal Act* for the production, treatment and storage of water is the enforcement authority. This means our municipality is responsible for enforcing these Prohibition and Risk Management Plan policies.

Alternatives / Options

Legally, the municipality has several options for carrying out its obligations under Part IV of the *Clean Water Act*. These options are:

Option 1: Retain Part IV Authority

A municipality may choose to retain all enforcement responsibilities under the *Clean Water Act* and operate their own Risk Management Office. This involves sending staff for training, passing a motion to appoint Risk Management Officials and Inspectors, setting up all logistical and procedural aspects (e.g. forms, fees, inspection protocol, reporting, record-keeping) and carrying out the work of implementing Part IV policies.

This may be the best option for municipalities with available staff and resources and / or many properties that will require Risk Management Plans.

Option 2: Jointly Administer Part IV Authority

A municipality may choose to enter into an agreement with one or more municipalities (that have by-law making authority under the *Municipal Act* around the production, treatment and storage of water), a board of health, a planning board or a Source Protection Authority. This agreement would allow bodies to share Part IV staff, resources and costs.

This may be the best option for municipalities that do not require full time Risk Management Official and Inspector services, have fewer properties requiring Risk Management Plans and / or have limited resources or funds.

Option 3: Transfer Part IV Authority

A municipality may choose to transfer their enforcement authority to another municipality (that have by-law making authority under the *Municipal Act* around the production, treatment and storage of water), board of health, planning board or Source Protection Authority. That agency would be responsible for sending staff for training, appointing Risk Management Officials and Inspectors, setting up all logistical and procedural aspects (e.g. forms, fees, inspection protocol, reporting, record-keeping) and carrying out the work of implementing Part IV policies. A partial transfer of Part IV authority is also permitted. This allows another agency to take over responsibility for enforcing policies for one or more types of activities (e.g. chemical storage) while the municipality retains enforcement authority for other types of activities.

This may be the best option for municipalities that have few properties requiring Risk Management Plans and / or have limited resources, staff or funds.

Analysis / Discussion

Insert the process and factors that led municipal staff to recommend transferring enforcement:

- *Research or consultation conducted*
- *Options considered*
- *Contributing factors (e.g. numbers of threats, cost savings, available resources)*
- *Cost / benefit analysis*
- *Etc.*

Refer to the attached draft Part IV Enforcement Transfer Agreement and highlight pertinent details such as:

- *New enforcement body will assume liability*
- *Municipality to still be consulted about fees and other key decisions*
- *Etc.*

Financial / Staffing Implications

This item has been identified in the current draft budget: Yes No N/A

This item is within the draft budgeted amount: Yes No N/A

Additional Information

Wording of specific policies appear in the Mississippi-Rideau Source Protection Plan. An explanation of policy decisions is provided in the accompanying Explanatory Document. Both can be found at www.mrsourcewater.ca.

The *Clean Water Act* and it's regulations can be viewed on e-laws at http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_06c22_e.htm

Attachments

- Source Protection Plan Implementation Summary
- Part IV Enforcement Transfer Agreement

Subsections 27(3) and 27 (4) of the *Clean Water Act* Regulation Transport Pathways Notification

Regulation Wording:

Subsection 27(3) *If a person applies to a municipality for approval of a proposal to engage in an activity in a wellhead protection area or a surface water intake protection zone that may result in the creation of a new transport pathway or the modification of an existing transport pathway, the municipality shall give the Source Protection Authority and the Source Protection Committee notice of the proposal and shall include a description of the proposal, the identity of the person responsible for the proposal and a description of the approvals the person requires to engage in the proposed activity.*

Subsection 27(4) *If a municipality gives a notice described in subsection (3), the municipality shall give a copy of the notice to the person responsible for the proposal.*
These subsections took effect on July 1, 2010.

Purpose:

Certain types of proposals may create a transport pathway (a human made channel or an alteration to surface drainage that can result in a greater risk of contamination of the aquifer or faster or more widespread distribution of contaminants in surface water). Transport pathways can increase the vulnerability scores of Wellhead Protection Areas or change the boundaries of Intake Protection Zones. Therefore, monitoring the creation of transport pathways is required under the *Clean Water Act* regulation in these areas (IPZ 1, 2, or 3 – scored 8 or higher and WHPA A, B, C – scored 6 or higher).

Implications for Municipalities:

- Staff need to be aware of and adhere to the reporting requirements
- Only larger projects are likely to trigger the need for a notification (see examples on the municipal guide under tab 4)

Implementation:

- Incorporate into the application screening process
- Incorporate into the GIS map tool
- Provide staff orientation

Implementation Resources Available:

- Vulnerable area mapping and GIS data layer
- “Guide for Municipalities” (draft procedure to circulate and follow)
- Fact Sheet for Applicants

Came into effect July 2010

Transport Pathways Notification Requirement Under the Clean Water Act *A Guide for Municipalities*

What is a Transport Pathway?

A transport pathway is a human made channel that bypasses the natural protection provided by the soil and rock layer resulting in a greater risk of contamination of the aquifer. Alterations to natural surface drainage can also result in faster or more widespread distribution of contaminants in surface water.

What is the Transport Pathways Notification Requirement?

The *Clean Water Act* Regulation 287/07 contains specific notification requirements directed at municipalities related to transport pathways:

Subsection 27(3) *If a person applies to a municipality for approval of a proposal to engage in an activity in a wellhead protection area or a surface water intake protection zone that may result in the creation of a new transport pathway or the modification of an existing transport pathway, the municipality shall give the Source Protection Authority and the Source Protection Committee notice of the proposal and shall include a description of the proposal, the identity of the person responsible for the proposal and a description of the approvals the person requires to engage in the proposed activity.*

Subsection 27(4) *If a municipality gives a notice described in subsection (3), the municipality shall give a copy of the notice to the person responsible for the proposal.*
These subsections took effect on July 1, 2010.

What is the Purpose of These Notifications?

The notification is required because an activity that creates a new transport pathway may affect the groundwater vulnerability, which can increase the vulnerability score within a Wellhead Protection Area. Similarly, a new transport pathway can expand the Intake Protection Zone. If this happens, when the Assessment Report is updated it would identify the location as a new area where activities are or may be significant drinking water threats. The applicant may, therefore, be undertaking an activity that is now a significant drinking water threat. By having the Source Protection Authority evaluate the potential impact at the application stage, an applicant can be made aware of future Source Protection Plan policies that may apply to them or to other properties around them.

If the applicant chooses to go forward with the activity that creates the pathway, then they would be doing this knowing they may face future costs associated with complying with the Source Protection Plan policy. The hope is that an applicant would make changes to relocate or prevent the transport pathway or put in any protective measures needed during the design phase to reduce or eliminate future costs and prevent the activity from becoming a significant drinking water threat.

In understanding the potential impact of transport pathways, the municipality may also want to work with the Source Protection Authority to develop new transport pathway policies in accordance with subsection 27(1) of the regulation and propose an amendment to the Source Protection Plan to include these policies.

What Should the Municipality do to Comply?

Step #1 Watch for proposed activities that may require a notice.

If a person applies to the municipality for approval of a proposal (or if the municipality itself proposes) to engage in an activity that would create a transport pathway, notification of the Source Protection Authority may be required. The types of activities include but are not limited to those listed below.

Activity*	Intake Protection Zone (IPZ)	Wellhead Protection Area (WHPA)
New or expanded aggregate extraction site	Not applicable	In a WHPA – A, B or C with a vulnerability score of 6 or higher
Earth (geothermal) energy system	Not applicable	In a WHPA – A, B or C with a vulnerability score of 6 or higher
Development on private services that would create an elevated well density	Not applicable	In a WHPA – A, B or C with a vulnerability score of 6 or higher
Drainage project (surface)	In or adjacent to IPZ 1, IPZ 2, and IPZ 3 with a vulnerability score of 8 or higher	Not applicable
Creation of surface water pond	Not applicable	In a WHPA – A, B or C with a vulnerability score of 6 or higher
Major construction project that may alter the subsurface and / or local drainage (e.g. new road, road widening, high rise building, industrial building, shopping centre, housing development, solar farm)	In or adjacent to IPZ 1, IPZ 2, and IPZ 3 with a vulnerability score of 8 or higher	In a WHPA – A, B or C with a vulnerability score of 6 or higher
Underground structures or infrastructure (e.g. tunnels, subsurface garbage storage)	Not applicable	In a WHPA – A, B or C with a vulnerability score of 6 or higher

*This is not an exhaustive list. When in doubt, contact the Source Protection Authority.

Step #2 Consult with the Source Protection Authority (SPA) contact to confirm that notification under subsection 27(3) is required:

Brian Stratton, P. Eng.
Co-Manager, Drinking Water Source Protection
Mississippi-Rideau Source Protection Region
Box 599, 3889 Rideau Valley Drive, Manotick, ON K4M 1A5
Phone: (613) 692-3571 ext. 1141 or 1(800) 267-3504
brian.stratton@mrsourcewater.ca

Step #3 If the SPA contact confirms that notification is required, complete the attached notification form and send it to the SPA contact (via email is acceptable).

Step #4 Send a copy of the notification form with a Transport Pathways Fact Sheet to the person responsible for the proposal.

Step #5 The SPA contact will send a copy of the results of the review (and any recommendations) to the municipality with a copy to the person responsible for the proposal within 10 business days of receiving the notification.

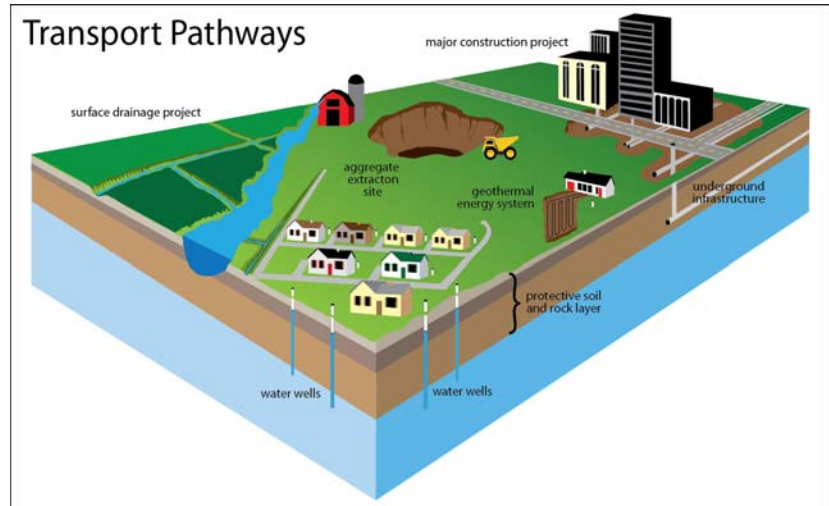
Transport Pathways Fact Sheet

What is a transport pathway?

A transport pathway is a land condition caused by human activity that results in faster or more widespread distribution of contaminants in water. An aquifer is an underground layer of water-bearing permeable rock, gravel, sand or silt. Aquifers (and their overlying soil layers) are natural filters that trap sediment and other particles like bacteria and provide natural purification of the ground water flowing through them. Any activity which creates a pathway that speeds the rate at which water can move from the surface into the aquifer can contaminate the groundwater. Similarly, alterations to natural surface drainage can impact surface water by accelerating flows and resulting in more contaminant laden water reaching lakes and rivers. Examples of activities which create transport pathways are quarries, geothermal energy systems, drainage projects, sewers and major construction projects.

What is the Clean Water Act?

The *Clean Water Act* was created in response to recommendations from the inquiry into the Walkerton tainted water tragedy. The focus of this legislation is the protection of drinking water at its source. Municipal sources of water across Ontario are now protected under locally developed Source Protection Plans. In this region it is the Mississippi-Rideau Source Protection Plan.



Why is my project subject to notification under the Clean Water Act?

Your project is located in a Wellhead Protection Area or Intake Protection Zone. Under the *Clean Water Act*, the areas close to municipal drinking water sources where contaminants can readily enter the drinking water have been scientifically delineated and mapped. If the drinking water source is a well, the vulnerable area is called a “Wellhead Protection Area”. If the drinking water comes from a river, the vulnerable area is called an “Intake Protection Zone”. Some activities within these protected areas, such as activities that create a transport pathway, are subject to new policies to protect drinking water sources under the Mississippi-Rideau Source Protection Plan.

What is the purpose of this notification?

The Source Protection Authority, who is responsible for administering the *Clean Water Act* in this region, was notified about your project (under Subsection 27(3) of the *Clean Water Act* Regulation 287/07) because it has the potential to create a transport pathway which could endanger the raw water supply of a municipal drinking water system. The Source Protection Authority will evaluate whether or not the transport pathway would impact the scientifically delineated Wellhead Protection Area or Intake Protection Zone by either increasing the vulnerability or expanding the boundaries of these areas. These types of changes would result in new areas where Source Protection Plan policies apply. By having the Source Protection Authority evaluate the potential impact at the application stage, you will be fully informed about future Source Protection Plan policies that may apply to your project (e.g. storage of certain chemicals on your site will be prohibited). This allows you to consider any technical or financial implications prior to proceeding with your application. over...

What happens next?

You will receive a copy of the Source Protection Authority's evaluation. This will include:

- A listing of policies that your project may be subject to if it proceeds as proposed
- Any recommendations that would prevent or reduce the impact of the transport pathway so that policies may not apply to your project (relocating, modifying design or incorporating protective measures)

For more information, contact:

Brian Stratton, P. Eng., Co-Manager, Drinking Water Source Protection
Mississippi-Rideau Source Protection Region
Box 599, 3889 Rideau Valley Drive, Manotick, ON K4M 1A5
Phone: (613) 692-3571 ext. 1141 or 1(800) 267-3504
brian.stratton@mrsourcewater.ca

Or visit the website:

www.mrsourcewater.ca

SEW-3-LB

Lot Grade and Drainage Plans

Policy Wording:

Policy: SEW-3-LB

Lot Grade and Drainage Plans

In areas where on-site sewage systems would be a significant drinking water threat as described in Appendix B (areas scored 10), the municipality shall require lot grade and drainage plans as part of the application materials for building permits where a new system is proposed as part of new development. New systems are only permitted where policy SEW-4-LB (Mandatory Connection to Municipal Sewer Services) does not apply. Lot grade and drainage plans must show existing grade and proposed final grade elevations referenced to a permanent benchmark. The new requirements must be established within six months from the date the Source Protection Plan takes effect.

Purpose:

For municipalities to require a lot grade and drainage plan as part of the building permit application materials where a septic system is proposed in an area where it would be a significant drinking water threat (Wellhead Protection Areas and Intake Protection Zones with a vulnerability **score of 10 only**). Carefully following a lot grade and drainage plan will help to ensure that the septic system footprint/envelope is as approved and proper drainage will be maintained at the site which will help to protect ground and surface water.

Implications for Municipalities:

- Building staff need to be aware of and implement this requirement for applications in the areas scored 10
- Most of the areas scored 10 where this policy would apply are fully serviced so new septic systems are unlikely

Implementation:

- Incorporate into the application screening process
- Incorporate into the GIS map tool
- Provide staff orientation
- Ensure the submitted lot grade and drainage plans will be shared with the Principal Authority responsible for septic approvals

Implementation Resources Available:

- Vulnerable area mapping and GIS data layer
- "Information for Building Permit Applicants"
- Staff report (draft)

Must be in place within 6 months following the Source Protection Plan effective date

Lot Grade and Drainage Plan Requirement

For New Development with Septic Systems in Vulnerable Drinking Water Areas

Information for Building Permit Applicants

What is a Lot Grade and Drainage Plan?

A Lot Grade and Drainage Plan identifies and illustrates the contours and drainage patterns of the land.

When is a Lot Grade and Drainage Plan required?

This requirement applies to:

- New development that involves the installation of a septic system
- In a Wellhead Protection Area or Intake Protection Zone (vulnerability score of 10)

What is the purpose of this requirement?

Wellhead Protection Areas and Intake Protection Zones are where special care must be taken to prevent contaminants from entering the municipal drinking water source. These areas are protected by policies in the Mississippi-Rideau Source Protection Plan developed under Ontario's *Clean Water Act*.

The design and installation of a septic system must be done in accordance with Part 8 of the Ontario Building Code and shall be approved by the Principle Authority (the Ottawa Septic System Office or the Leeds, Grenville and Lanark District Health Unit depending on location). Once approved, it is important that the septic system footprint/envelope remains the same (i.e., no placement of fill, change of grades, or change of drainage). Carefully following a Lot Grade and Drainage Plan will help to ensure that the septic system footprint/envelope is as approved and proper drainage will be maintained on the site.

How to comply...

- The Lot Grade and Drainage Plan must be prepared by a qualified Professional Engineer (P. Eng.), qualified Certified Engineering Technologist (CET) or an Ontario Land Surveyor (OLS).
- Two copies must be included with the Building Permit application
- Information must include:
 - Title block (owner/applicant, address/legal description of property, firm preparing the drawing, scale, date of submission, revision date)
 - North arrow, legend, geodetic benchmarks used
 - Property lines, roads, existing surface features
 - Existing grades referenced to a permanent benchmark
 - Existing swales, ditches, watercourses, etc. with elevations and arrows indicating the surface drainage direction
 - Proposed location of buildings, septic tanks and outline of tile beds (septic system footprint/envelope referred to above), well
 - Proposed final grades referenced to a permanent benchmark
 - Final drainage patterns with elevations and arrows indicating the drainage direction, including direction of drainage on proposed paved, graveled and grassed areas
 - Final features that impact drainage such as retaining walls, culverts, roof downspout locations

Source Protection Plan Implementation (sample staff report)
Lot Grade and Drainage Plans

Date:
To:
From:
Subject:

Recommendation:

The following recommendation is provided for Council's consideration:

That Council endorse the new lot grade and drainage plan requirement which must be put in place to comply with policy SEW-3-LB of the Mississippi-Rideau Source Protection Plan.

Purpose of the Report

The Mississippi-Rideau Source Protection Plan has now been approved and comes into effect on _____(date). The municipality is responsible for implementing some of the policies in the Source Protection Plan (see attached Source Protection Plan Implementation Summary). The purpose of this report is to provide to Council the staff recommendation for implementing this policy in the Source Protection Plan:

- SEW-3-LB *Lot Grade and Drainage Plan*

Background

The purpose of the *Clean Water Act, 2006* is to protect existing and future sources of drinking water. This legislation is a major part of the Ontario government's commitment to ensuring that every Ontarian has access to safe drinking water. Protecting water at its source is the first step in the multi-barrier approach to source water protection. By stopping contaminants from getting into sources of drinking water — lakes, rivers and aquifers — we can provide the first line of defense in the protection of our environment and the health of Ontarians. The *Clean Water Act* relies on locally developed watershed-based source protection plans founded on sound science to effectively meet this objective. The Mississippi-Rideau Source Protection Plan contains policies that manage or prohibit specific activities that are, or may become, significant threats to drinking water.

Explanation of Policy SEW-3-LB Lot Grade and Drainage Plans

Policy SEW-3-LB directs the municipality to require a lot grade and drainage plan as part of the building permit application when:

- a septic system is proposed as part of the building project; and
- the building project is located where septic systems are considered a significant threat to drinking water (Wellhead Protection Area or Intake Protection Zone with a vulnerability score of 10).

The design and installation of a septic system must be done in accordance with Part 8 of the Ontario Building Code and shall be approved by the Principle Authority (the Ottawa Septic System Office or Lanark, Leeds, Grenville District Health Unit depending on location). Once approved, it is important that the septic system footprint/envelope remains the same (i.e., no placement of fill, change of grades, or change of drainage). Carefully following a Lot Grade and Drainage Plan will help to ensure that the septic system footprint/envelope is as approved and proper drainage will be maintained on the site.

Analysis / Discussion

The details of the new requirement can be found on the attached document entitled *Lot Grade and Drainage Plan Requirement for New Development with Septic Systems in Vulnerable Drinking Water Areas*. The specifics of the new requirements were developed in consultation with Ottawa Septic System Office staff and Lanark, Leeds, Grenville and District Health Unit staff responsible for septic system approvals as well as Chief Building Officials.

Most of the Wellhead Protection Areas and Intake Protection Zones with vulnerability scores of 10 are fully serviced where new developments would connect to municipal water and sewer services. Therefore, the new lot grade and drainage plan requirement would not be applied widely and would impact very few residents. In some communities, it would not currently apply at all, however it must be in place in the event that a new drinking water source is established in the future. This is a legally binding policy in the Mississippi-Rideau Source Protection Plan.

Alternatives / Options

N/A

Financial / Staffing Implications

This item has been identified in the current draft budget: Yes No N/A

This item is within the draft budgeted amount: Yes No N/A

There are no direct financial implications. This policy will be implemented by existing staff.

Additional Information

Policy text can be found on page 29 of the Source Protection Plan. An explanation of policy decisions can be found on page 18 of the Explanatory Document.

Attachments

- Source Protection Plan Implementation Summary
- Lot Grade and Drainage Plan Requirement for New Development with Septic Systems in Vulnerable Drinking Water Areas

SEW-4-LB

Mandatory Connection to Municipal Sewer Services

Policy Wording:

Policy: SEW-4-LB

Mandatory Connection to Municipal Sewer Services

In areas where on-site sewage systems are a significant drinking water threat as described in Appendix B (areas scored 10), the municipality through their powers under the *Municipal Act* must require connection to municipal sewer services (capacity permitting and within designated serviced areas) where service are available at the property line in the following situations:

- Where an existing system has failed a Phase II Maintenance Inspection and/or an order has been issued to replace or do significant upgrades
- When the Principal Authority has deemed an existing system inadequate to service a proposed redevelopment / renovation
- For new development

The new requirements must be established within one year from the date the Source Protection Plan takes effect. This policy also applies to on-site sewage systems regulated under the *Ontario Water Resources Act*.

Purpose:

For the municipalities to use their powers under the *Municipal Act* to prohibit the establishment of a new septic systems where it would be a significant drinking water threat (Wellhead Protection Areas and Intake Protection Zones with a vulnerability **score of 10 only**) and where they are unnecessary because municipal sewer services exist.

Implications for Municipalities:

- Create (or modify an existing) by-law to implement the policy
- Most municipalities already have in place a sewer use or other by-law that meets the policy intent
- Most of the areas scored 10 where this policy would apply are fully serviced so new septic systems are unlikely.

Implementation:

- Incorporate into the application screening process
- Incorporate into the GIS map tool
- Provide staff orientation

Implementation Resources Available:

- Vulnerable area mapping
- GIS data layer

Must be in place within 1 year following the Source Protection Plan effective date

EDU-1-LB
Living and Working in the Drinking Water Zone
Education and Outreach Policy

Policy Wording:

Policy: EDU-1-LB

Living and Working in the Drinking Water Zone

Within one year of the Source Protection Plan taking effect, the municipality shall initiate an education and outreach program targeted at residents and businesses located in the Wellhead Protection Areas with a vulnerability score of 10 and the Intake Protection Zones with a vulnerability score of 8 or higher. Source Protection Authorities will help develop materials that will raise awareness about these vulnerable areas and foster good stewardship practices within them. Municipalities will then use any means that effectively disseminates this information to residents and businesses in these areas such as a mail-out, participation in community events and partnering with other agencies to make use of existing programs. Once established, this education program shall be ongoing with materials being disseminated periodically as deemed appropriate by the municipality. The program may address any water quality or quantity topic but must include promotion of the following:

- Awareness of the vulnerable areas (will be marked by road and waterway signs)
- Best management practices for waste that is regulated by the MOE through means other than Prescribed Instruments
- Proper septic system care and maintenance
- Awareness of the Mandatory On-Site Sewage System Maintenance Inspection Program
- Best management practices for storing and applying nutrients and for outdoor livestock areas
- Risk management measures for fuel storage
- Awareness of Ontario's Cosmetic Pesticide Ban and best management practices where pesticides are used under an exemption from the ban
- The importance of complying with all aspects of the pesticide training/certification and Integrated Pest Management programs
- Participation in the Environmental Farm Plan Program
- Awareness of DNAPL and organic solvent substances and the products that may contain them, alternative products that do not pose a threat to drinking water and proper disposal of unwanted products
- "Smart salt practices" for the use of road salt
- The importance of addressing existing transport pathways such as abandoned wells and ensuring new projects, such as geothermal installations, do not create new transport pathways
- Existing funding programs available to help property owners and businesses implement best management practices and Source Protection Plan policy requirements

Purpose:

The “Living and Working in the Drinking Water Zone” program will provide information directly to residents and businesses, in the most vulnerable parts of a Wellhead Protection Area or Intake Protection Zone (WHPA 10 and IPZ 8-10). The program is intended to ensure people become aware of the vulnerable area in which they live or work and understand the importance of following good stewardship practices.

The bulleted list in the policy is necessary to:

- Address significant threats where thresholds are extremely low such as keeping livestock on a small, non-intensive (low-risk) farm where the benefits gained from mandatory policies would be minimal
- Address significant threats at the “household” level where implementing mandatory policies would be impractical, expensive and very unpopular such as regulating manure on residential vegetable gardens
- Address moderate threats where mandatory policies are not permitted but risks are high such as outdoor, above ground heating oil tanks
- Address cumulative effects such as too much road salt on many driveways in a community
- Complement mandatory policies such as providing information about septic system care to keep systems well-maintained in between mandatory inspections

Implications for Municipalities:

- This is the only legally binding education policy in the Source Protection Plan
- It must be implemented by the municipalities but the Conservation Authorities can assist by developing a strategy and educational materials

Implementation:

- Develop educational materials or work with the Conservation Authorities to develop materials
- Use any means that effectively disseminates the material to residents and businesses such as a mail out, making it available at the municipal office and at other community locations or events within one year following the Source Protection Plan effective date
- Periodically update and re-distribute material in the future as the program is intended to be ongoing

Implementation Resources Available:

- MOE Education Resource Catalogue

Must be initiated within one year following the Source Protection Plan effective date