

Mississippi-Rideau Source Protection Plan

Detailed Policy Information Booklet

Wellhead Protection Area – Vulnerability Score of 10 (WHPA-10)

1. Prohibited Land Uses / Activities – see attached list

Note that a stormwater management facility is listed as prohibited (only in the WHPA “A”) but would be permitted if:

- *It is located within a WHPA “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 WHPA “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*

Stormwater management facilities are permitted in the WHPA “B”.

2. Activities Requiring a Risk Management Plan – see attached list

3. Transport Pathways – see attached factsheet

Aggregate extraction, open loop geothermal energy system, housing development, creation of large surface water pond, underground structure or major construction project (e.g., high rise building, industrial building, shopping centre, solar farm) require consultation with the municipality and Source Protection Authority.

4. On-Site Sewage Systems

- New on-site sewage (septic) systems are not permitted where there are municipal sewer services available (capacity permitting and within designated serviced areas where services are available at the property line)
- New on-site sewage (septic) systems are permitted in unserviced areas but a Lot Grade and Drainage Plan is required as part of the Building Permit application (consult municipality)
- On-site sewage (septic) systems are subject to the Mandatory Maintenance Inspection Program under the Building code
- On-site sewage (septic) systems regulated under the *Ontario Water Resources Act* may have special requirements (consult with the Ministry of Environment and Climate Change)

5. Sanitary Sewers and Related Pipes

The Environmental Compliance Approval may require new sewers and related pipes to be constructed of watermain quality pipe and pressure tested in place at a pressure of 350 kPa (50 psi) using the testing methodology in Ontario Provincial Standard Specification 412 (OPSS 412). Sewers and related pipes will be subject to a municipal sanitary sewer maintenance program at five year intervals.

6. Aggregate Extraction

Aggregate extraction proposals may be subject to special requirements (consult provincial approval agencies) and also require consultation with the municipality and Source Protection Authority because of transport pathways as mentioned above.

Prohibited List

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New Waste Disposal Site:

- Application of untreated septage to land
- Landfarming of petroleum refining waste
- Liquid industrial waste injection into a well
- PCB waste storage
- Landfill (municipal waste, solid non hazardous industrial or commercial waste or hazardous waste)
- Storage of hazardous waste at disposal sites
- Storage of hazardous waste described in clauses (p) to (u) of O. Reg. 347 under the *Environmental Protection Act*
- Storage, treatment and discharge of tailings from mines

(Waste prohibition does not apply if the waste is registered with the MOECC waste generating reporting system or is approved to be transported off-site using the MOECC manifest process or is subject to Director's Instructions).

New Sewage Works:

- Stormwater management facility (prohibited in the Wellhead Protection Area "A" only)
- Sewage treatment plant effluent discharges
- Large storage of sewage (e.g. sewage treatment plant tanks)

New Snow Dump

New Road Salt Storage: >5,000 tonnes

New Fuel Storage at a bulk plant, cardlock/keylock, retail facility (gas station) or refinery

New Commercial Storage of Fertilizer – storage of >2,500 kg for retail sale

New Commercial Storage of Pesticide – storage of >250 kg for manufacturing, processing, wholesaling, retailing or for custom application

New Chemical Handling and Storage – DNAPL* substances (any quantity):

- Dioxane-1,4
- Polycyclic aromatic hydrocarbons (PAHs)
- Tetrachloroethylene (PCE) (also called PERC)
- Trichloroethylene (TCE)
- Vinyl chloride

New Chemical Handling and Storage – organic solvents*:

- Carbon tetrachloride (>25 litres stored below grade; 250 litres stored above grade)
- Chloroform or methylene chloride (dichloromethane) (>250 litres stored below grade or >2,500 litres stored above grade)
- Pentachlorophenol (>2,500 litres stored below grade)

**DNAPL and organic solvent use is associated with automotive, dry cleaning and furniture refinishing businesses as well as certain manufacturing processes. DNAPL is an acronym for Dense Non-Aqueous Phase Liquids.*

Consult the Municipality or 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; or
- There is uncertainty regarding whether or not a proposed activity is prohibited.

Risk Management Plan Requirement Wellhead Protection Area – Vulnerability Score of 10

Activity	Circumstances Requiring a Risk Management Plan
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 (under 5 nutrient units) • Activities already regulated under the <i>Nutrient Management Act</i> (i.e. a Nutrient Management Strategy is in place for the activity)
Agricultural Source Material (e.g. manure)	The existing or future land application or storage of any amount. <u>Exemptions:</u> <ul style="list-style-type: none"> • Small, non-intensive farms (under 5 nutrient units) • Residential use (backyard gardens) • Activities already regulated under the <i>Nutrient Management Act</i> (i.e. a Nutrient Management Plan or Strategy is in place for the activity)
Category 1 Non-Agricultural Source Material (NASM) (e.g. culled fruit and vegetables)	Storage of Category 1 NASM (depends on location / type of storage and mass of nitrogen – consult Risk Management Official)
	Land application of any amount in the Munster Wellhead Protection Area. In all other Wellhead Protection Areas, no Risk Management Plan is required for the application of Category 1 NASM. Note: All other categories of NASM are already regulated under the <i>Nutrient Management Act</i> (i.e. require a NASM Plan).
Commercial (chemical) fertilizer storage	>2,500 kg stored in relation to its application (new storage for retail sale is prohibited)
Commercial (chemical) fertilizer application	Land application of any amount in the Munster Wellhead Protection Area. In all other Wellhead Protection Areas, no Risk Management Plan is required for application of commercial fertilizer
Fuel Storage	>250 litres stored below grade (i.e. in a basement)
	>2,500 litres stored above grade

Consult the municipality or Risk Management Official if:

- A Risk Management Plan is required; or
- There is uncertainty regarding whether or not a Risk Management Plan is required

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.

- ✓ The plan is site-specific – it is customized to suit 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.

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.

- ✓ 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

RISK MANAGEMENT PLANS ARE NOT TRANSFERABLE

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

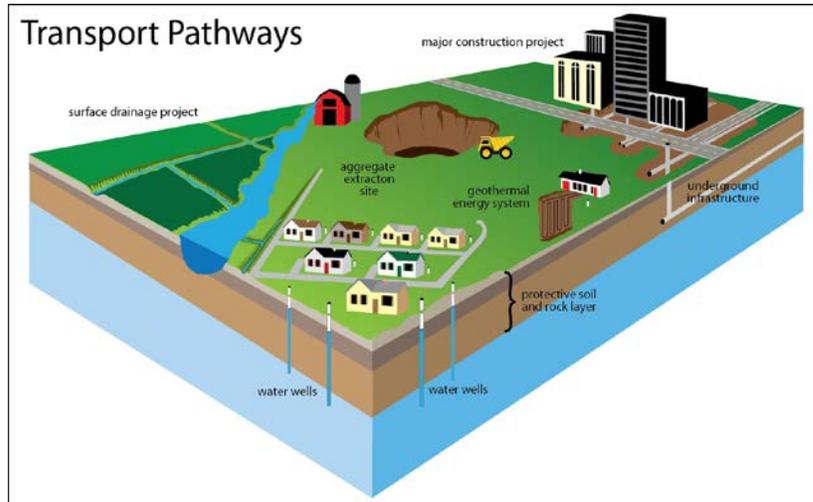
Transport Pathways Fact Sheet

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