Mississippi-Rideau Source Protection Plan Detailed Policy Information Booklet

Wellhead Protection Area – Vulnerability Score of 8 (WHPA-8)

- 1. Prohibited Land Uses / Activities see attached list
- 2. <u>Transport Pathways</u> see attached factsheet

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

3. 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 Wellhead Protection Area – Vulnerability Score of 8

New Waste Disposal Site:

- o Liquid industrial waste injection into a well
- Landfill municipal waste
- Landfill solid, non hazardous industrial or commercial waste

New Sewage Works:

 Large storage of sewage (e.g. sewage treatment plant tanks)

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

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

*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.

Transport Pathways Fact Sheet

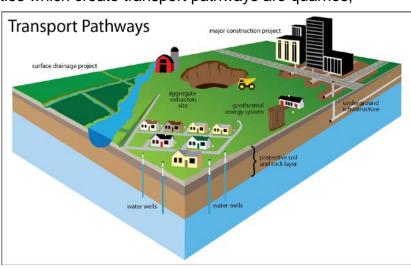
What is a transport pathway?

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:

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