



# Drinking water threats from fuel

It is said that just one litre of fuel can pollute one million litres of water.

A spill of fuel or other petroleum products can seep through the ground and into the aquifers that provide the source of your municipal drinking water.

Fuel could also reach and harm surface water like rivers and the lake. By making sure that fuel is stored safely you can help to reduce risk to your community's drinking water supply.

## Understanding the threat

### Why is fuel considered a threat to drinking water sources?

Compounds in fuel that could contaminate drinking water include petroleum hydrocarbons and BTEX compounds (benzene, toluene, ethylbenzene and xylene). These compounds cause a range of health problems, and some are carcinogenic (cancer-causing).

Threats to drinking water are assessed as low, moderate, or significant. Whether fuel is considered a significant threat to drinking water, or not, depends on the circumstances of the activity, such as volume of fuel stored, and the proximity of the fuel to the water supply. Large amounts of fuel – greater than 250 litres stored below grade, or 2,500 litres stored above grade – are a significant threat in wellhead protection areas (zones A or B) in the Maitland Valley and Ausable Bayfield source protection areas.

Large amounts of fuel may be stored in:

- Gas stations
- Heating oil tanks for homes and businesses
- Marinas
- Farms
- Bulk plants
- Cardlocks/keylocks
- Private outlets (e.g., public works yard, contractor yard)

Spill prevention is key. Make sure your facility meets all applicable codes and regulations.

## Will plans affect me?

Policies in the source protection plans do not apply legal obligations to all people who store or handle fuel. People are required to comply with policies only if they are doing this activity in areas that are vulnerable to contamination, where this fuel storage activity is considered to be a significant threat to drinking water.

### Where is fuel a significant threat to drinking water sources?

- On properties located within 100 metres of the municipal well (Wellhead Protection Area A), or in most vulnerable areas of the two-year time-of-travel zone (Wellhead Protection Area B).
- For maps of wellhead protection areas go to our website at: [sourcewaterinfo.on.ca](http://sourcewaterinfo.on.ca)

To learn if your activity is assessed as a significant threat to drinking water, and how to manage the threat posed by this activity, contact your local risk management official or staff of the source protection region.

Even if your activity is not a significant threat, we encourage you to use best practices that protect your community's drinking water supply.



## Examples of threat activities

### Activities that pose threat to drinking water sources include:

- Septic systems; On-site sewage
- Fuel oil (including home heating oil)
- Liquid fuel such as gas stations
- Chemicals (toxic chemicals such as organic solvents and dense non-aqueous phase liquids or DNAPLs)
- Commercial fertilizer
- Pesticides
- Nutrients (manure, bio-solids, grazing)
- Waste disposal sites (including storage of hazardous waste)
- Sewage works (sewage treatment plants, municipal sewers)
- Road salt and snow storage
- Others: For the list of 21 provincially prescribed drinking water threats, go to this web page:  
[ontario.ca/document/tables-drinking-water-threats](http://ontario.ca/document/tables-drinking-water-threats)

### How is fuel threat being addressed locally?

A local source protection committee has developed plans to protect your municipal sources of drinking water. The Province of Ontario approved the plans for the Maitland Valley and Ausable Bayfield areas in January of 2015. Policies took effect in April of 2015. These plans use a variety of tools to protect municipal drinking water sources:

#### Education and Outreach

Staff in this region are reaching out to people like you in order to let you know how you can help to protect your local drinking water. We thank you for all you do to protect drinking water sources.

#### Risk Management Plan (RMP)

- A local risk management official works with the operator or landowners to develop a risk management plan.
- Required for existing fuel storage only where it poses a significant threat to drinking water sources.

#### Prohibition

- Any new (i.e., future) fuel storage will be prohibited only where it poses a significant threat to drinking water sources.
- Prohibition is only used in the most vulnerable areas near municipal wells.

#### Restricted Land Use

- This is a 'flag' that helps municipalities identify properties where fuel threat activities require a risk management plan or are prohibited.

### Find out more online:

- **Plans, maps, brochures:** [sourcewaterinfo.on.ca](http://sourcewaterinfo.on.ca)
- **Province of Ontario:**  
[ontario.ca/environment-and-energy/source-protection](http://ontario.ca/environment-and-energy/source-protection)
- **Technical Standards and Safety Authority (TSSA):**  
[tssa.org/regulated/fuels](http://tssa.org/regulated/fuels)
- **Storage of petroleum products:**  
[ontariosoilcrop.org/en/programs/efp\\_infosheets.htm](http://ontariosoilcrop.org/en/programs/efp_infosheets.htm)

### Contact us:

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Ausable Bayfield Source Protection Area: 519-235-2610

This project has received funding support from the Government of Ontario. Such support does not indicate endorsement of the contents of this material.

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