

DRINKING WATER THREATS FACTSHEET

The Handling and Storage of Fuel



The types of fuels considered include diesel, oil when used as a fuel, kerosene and hydrocarbon fuel (e.g., gasoline). The main consideration to reduce or eliminate drinking water threats related the handling and storage of fuel is to prevent fuel spills that could enter surface water or groundwater.

Where is this Activity a Threat?

In the case of less than 2,500 L of fuel, storage at or above grade is not considered to be a Significant Drinking Water Threat. Fuel less than 2,500 L stored partially or fully below grade, however, is a Significant Drinking Water Threat in Wellhead Protection Areas (WHPA) A and B with a vulnerability score of 10.

Both above and below ground fuel storage in excess of 2,500 L is a Significant Drinking Water Threat in WHPA-A and B with a vulnerability score of 10 (does not apply to bulk plant and fuel manufacturing/ refining).

For Intake Protection Zones, storage and handling of fuel is only a Significant Drinking Water Threat where this risk has been modelled and involves storage in excess of 15,000 L.

What is the Threat?

This category of drinking water threat includes: 1) the handling of liquid fuel in relation to its storage, and 2) the storage of liquid fuel. The types of storage facilities to be considered are defined in Ontario Regulation 213/01 (Fuel Oil) or Ontario Regulation 217/01 (Liquid Fuels). Both of these regulations are made under the Technical Standards and Safety Act, 2000 (TSSA). Although not part of the TSSA regulations, facilities where fuel is manufactured or refined are also considered.

The types of fuel storage facilities include:

- Bulk plants or facilities where it is manufactured or refined
- Permanent or mobile retail outlets
- Marinas
- Private outlets (e.g., public works yard, contractor yard)
- Farms
- Furnace oil tanks for home and business heating purposes





How is the Threat Managed?

Wellhead Protection Areas

Existing storage, where it is a Significant Drinking Water Threat, will require a Risk Management Plan (RMP) (policy 2.38). Future storage in areas where it would be a Significant Drinking Water Threat is prohibited (policy 2.40). This does not apply to back up generators for municipal wells. These storage facilities will be managed through Prescribed Instruments administered by the Province (Ministry of the Environment and Climate Change) (policy 2.42). The handling and storage of fuel related to an aggregate operation where it would be a Significant Drinking Water Threat will be managed through Prescribed

Instruments administered by the Province (Ministry of Natural Resources and Forestry, or MNRF) (policy 2.41).

Intake Protection Zones

Where modelling has identified Significant Drinking Water Threats, these threats will be managed through a RMP (policy 2.39). The handling and storage of fuel related to an aggregate operation where it would be a Significant Drinking Water Threat will be managed through prescribed instruments administered by the Province (MNRF) (policy 2.41).

For transportation of fuel along roads, railways and waterways and for transportation of liquid petroleum through pipelines, in areas where this activity would be a Significant Drinking Water Threat the Province (Ministry of Transportation), in consultation with municipalities and relevant police services, shall consider source protection information as a criterion when establishing and reviewing Emergency Detour Routes (policy 2.54).

Other Policies

Three other policies were established related to municipal and provincial Spill Prevention, Spill Contingency and Emergency Response Plans and for general spill awareness. These policies are intended to ensure appropriate responses and understanding of the impact of spills on municipal drinking water supplies (policies 4.01, 4.02, and 4.03). Low and moderate threats will be addressed through education and outreach (policy 1.01).

For More Information

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