



# Organic Solvents

Organic solvents are carbon-based substances that are capable of dissolving other substances, such as, oils, fats, resins, rubber, and plastics. Organic solvents are routinely used in commercial industries because of their ability to dissolve substances. They are also found in a variety of products including but not limited to paints, varnishes, lacquers, adhesives, degreasers, cleaners, dyes, polymers, plastics, textiles, agricultural products and pharmaceuticals.

## Organic Solvents as a Drinking Water Threat

Under the *Clean Water Act, 2006*, the storage and handling of organic solvents are considered drinking water threats. Many organic solvents are recognized as carcinogens or neurotoxins that can negatively affect reproductive systems. In the Quinte area, all products that are carbon-based, with the ability to dissolve one or more substances, is considered an organic solvent that poses a threat to drinking water sources.



## Where are Organic Solvents Drinking Water Threats?

The handling and storage of organic solvents are considered significant drinking water threats when they occur in the most vulnerable areas around a municipal drinking water source (Wellhead Protection Areas (WHPAs) A and B and Intake Protection Zone (IPZ) 1). There are significant drinking water threats for the handling and storage of organic solvents in:

- WHPA A and B for wells in Deloro, Madoc, Peats Point, Point Anne, and Tweed.
- IPZ 1 in Ameliasburgh, Picton, and Point Anne.
- The Hamlet of Point Anne has both WHPAs and IPZs because of the infrastructure of the system. Due to the uniqueness of this system, significant threats can occur in both WHPAs A and B as well as IPZ 1.

## How are Organic Solvent Threats Being Addressed?

The Quinte Source Protection Plan contains policies that address the existing and future handling and storage of organic solvents that are or would be considered significant drinking water threats in vulnerable areas (WHPAs and IPZs).

### Risk Management Plans

Risk Management Plans (RMP) are required for all existing commercial and industrial handling and storage of organic solvent in vulnerable areas where the threat is considered significant such as, WHPAs A and B, and IPZ 1. A Risk Management Official will negotiate a RMP with any person conducting activities that are considered significant drinking water threats within vulnerable areas.



### Restricted Land Use

Restricted land use allows municipalities to identify areas where the handling and storage of fuel should be either prohibited or require a risk management plan (WHPAs A and B, and IPZ 1). This allows municipalities to create their own process to ensure that future development complies with the Quinte Source Protection Plan.



### Prohibition

The future storage and handling of organic solvents will be prohibited in the areas immediately surrounding municipal wells (WHPAs A and B) and municipal drinking water intakes (IPZ 1).

### Education and Outreach

The Quinte Source Protection Plan includes a policy for general education and outreach. This policy exists to raise awareness about the drinking water concerns related to the handling and storage of organic solvents in vulnerable areas (WHPAs) and Intake Protection Zones (IPZs).