Commercial Fertilizers

Commercial fertilizers are used across a variety of land uses including agricultural, commercial, industrial, institutional, recreational, and residential. They typically contain one or more plant nutrient to promote growth. Most commercial fertilizers contain nitrogen, phosphorus, potassium, and some may include supplements such as lime and gypsum. Nitrogen and phosphorus are the ingredients of highest concern for the Quinte area. Excess nutrients could negatively affect the drinking water source due to surface water runoff, leaching, and leaks or spills from improper handling, storage and/or application.

Commercial Fertilizer Health Risks

Increased nitrate concentration in drinking water may lead to Blue Baby Syndrome in infants, hypertension and other health concerns. Increased nutrients in bodies of water can result in harmful algal blooms that can impact the health of humans and animals, while also ruining aquatic habitats. Across the watershed, there has been significant reductions in the amount of phosphorus entering watercourses from sewage treatment plants, agriculture, and stormwater. However, despite this progress, phosphorus levels and growth of undesirable algae blooms continues to be an ongoing issue in the Bay.

Where are Commercial Fertilizers a Drinking Water Threat

The application, storage and handling of commercial fertilizers are or could be significant threats in the vulnerable areas closest to municipal wells in Deloro, Madoc, Peats Point, Point Anne, and Tweed and the municipal intakes of Belleville, Picton, Deseronto, Ameliasburgh, Napanee, and Point Anne. The protection areas and related policies can be found in the Quinte Source Protection Plan.

Risk Management Plans

Risk Management Plans (RMPs) are required for commercial fertilizer activities that are considered to be significant drinking water threats in vulnerable areas. RMPs are negotiated with the people engaged in the threat activity and Risk Management Officials. The RMPs include management measures related to the threat(s) on the property. These measures may include the relocation of storage facilities, application guidelines, and/or the adoption of best management practices.

Application: RMPs are required for the application of commercial fertilizers in certain specific applicable areas near municipal wells and intakes in Ameliasburgh, Belleville, Deloro, Deseronto, Napanee, Madoc, Peats Point, Picton, Point Anne, and Tweed.

Storage and Handling: RMPs are required for the existing storage and handling of commercial fertilizers in certain specific applicable areas near municipal wells and intakes in Ameliasburgh, Deloro, Madoc, Peats Point, Picton, Point Anne, and Tweed. Future handling and storage of commercial fertilizers require a RMP and in some cases, storage of commercial fertilizers will be prohibited in zones immediately surrounding municipal wells and intakes.

Prohibition

Occasionally, prohibition is necessary to remove drinking water threats.

Application: Current and future application of commercial fertilizers will be prohibited in a 100-metre radius surround the municipal wells (WHPA-A) in Deloro, Madoc, Peats Point, Point Anne, and Tweed.

Storage and Handling: Future storage and handling of commercial fertilizers in specific quantities will be prohibited in areas immediately surrounding municipal wells and intakes (WHPA-A and IPZ-1) in Ameliasburgh, Deloro, Madoc, Peats Point, Picton, Point Anne, and Tweed.

Restricted Land Use

Restricted land use allows municipalities to identify areas where the handling, storage, or application of commercial fertilizers are either prohibited or require a RMP (WHPAs A and B, and IPZs 1 and 2). This allows municipalities to create their own process to ensure that future development complies with the Quinte Source Protection Plan.

Non-agricultural Commercial Fertilizer Threats

Non-agricultural commercial fertilizer polices apply to parks sports fields, golf courses etc., but not residential properties.