

Drinking Water Quality Management in Peel



MUNICIPAL DRINKING WATER SYSTEM - LEGISLATIVE OVERVIEW (July 2019)

As a stakeholder (developer/land owner, consultant or contractor) working on infrastructure that is part of, or will become part of, the Region of Peel's municipal drinking water system, this document serves to inform you of applicable provincial legislative and regulatory requirements in accordance with the municipal drinking water licensing program approvals framework.

Statutory Obligations

The Region of Peel (the Region) operates its drinking water systems in compliance with provincial legislation, including the [Safe Drinking Water Act, 2002](#) (the Act) and its supporting regulations. The Act is the principal legislation regulating the treatment and distribution of drinking water in Ontario; imposing a statutory Standard of Care for system owners and operating bodies, defining water quality standards, operator training and certification, accreditation and licensing of water system operating authorities and water testing laboratories, water sampling, testing and monitoring requirements, adverse water quality reporting and corrective actions as well as water system inspections and enforcement by the Ministry of the Environment, Conservation and Parks (the Ministry).

Municipal Drinking Water Licensing Program

The [Municipal Drinking Water Licensing Program](#), implemented by the Ministry under the Act, requires municipal drinking water systems owners to be licensed to operate and operating authorities to establish and maintain a Quality Management System (QMS) accredited to the [Drinking Water Quality Management Standard \(DWQMS\)](#). The Region is a full scope DWQMS accredited operating authority and has successfully maintained this status since first awarded in 2011.

The Municipal Drinking Water Licence (MDWL) is comprised of five components:

- **Drinking Water Works Permit (DWWP)**

A permit describing drinking water system components, which focuses on the physical and technical capabilities of the system with pre-authorized provision to establish or alter a drinking water system without the need for formal approval from the Ministry. The Region holds valid DWWPs for all its drinking water systems.

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- **Permit to Take Water (PTTW)**

A valid permit to take water issued under the Ontario Water Resources Act, 1990 specifying the approved rate of source water taking and any potential monitoring or reporting conditions. The Region holds valid PTTWs for all its drinking water systems.

- **Operational Plan**

Defines and documents the QMS for the Region's drinking water systems in accordance with the requirements of the DWQMS. The Operational Plan outlines the policy commitments and associated procedures, responsibilities and evaluation measures that ensure continuous drinking water quality and safety in all water treatment and distribution processes, from source to tap.

- **Accredited Operating Authority**

At all times, an accredited operating authority must be in charge of the drinking water systems. Continuance of accreditation is based on comprehensive third-party audits of the QMS and periodic review of the Operational Plan. The Region was awarded Full Scope Drinking Water Quality Management Standard Accreditation in 2011 and is successfully maintaining it as the Owner and Operating Authority of the following drinking water systems: South Peel Drinking Water Distribution System, Palgrave-Caledon East Drinking Water System, Caledon Village-Alton Drinking Water System, Inglewood Drinking Water System and Cheltenham Drinking Water System.

The Ontario Clean Water Agency (OCWA) is the contracted Operating Authority for the South Peel Drinking Water Supply System (treatment, storage, and transmission) for the Region, which also holds valid accreditation to DWQMS.

- **Financial Plan**

The Financial Plan under Ontario Regulation 453/07 which is approved by Regional Council outlines a long-term strategy to ensure the financial sustainability of drinking water systems. The plan provides analysis of capital and operating needs, a review of current and forecasted demands and supply and consideration of available funding sources. The Region's Financial Plan is updated every 5 years.

RESPONSIBILITIES AND DUTIES

Drinking water system operation, maintenance and alteration are governed by the MDWL and DWWP conditions, applicable acts, regulations, codes of practice, and industry standards. These requirements place responsibilities on the Region and they are relevant to all water infrastructure projects and vary depending on the scope of work. The legal owner of any part of the drinking water system, or any person authorized to carry out work on the drinking water system, is expected to comply with the QMS and with the following:

The Regional Municipality of Peel is committed to supplying safe and clean drinking water that meets all applicable legislative and regulatory requirements to the consumer, and is committed to the maintenance and continual improvement of the Quality Management System.

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- ✓ Anyone who operates or works on their system is properly trained and certified. Only persons holding a valid Ministry approved operator's certification can operate a municipal drinking water system.
- ✓ No work associated with operation of the drinking water system shall permit the discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect. It is also not permitted to discharge any material of any kind into or in any waters or on any shore or bank thereof or in any place that may impair the quality of the water of any waters. Certain discharges of water from the drinking water system associated with the maintenance and repair of the system are exempt. Please contact the Region when planned work may involve discharge and prior to release for more information and need for approvals and permits.
- ✓ Conditions specific to the drinking water system alteration, include:
 - watermain addition, modification, replacement and system extension (new development or existing watermain renewal program);
 - minor modifications to the water system components such as raw water pumps and treatment pumps, coagulant feed systems, including location number of dosing points;
 - Instrumentation and controls, including SCADA system and software associated with these devices;
 - Filter media, backwashing equipment, and under drains in the treatment system; or spill containment works excluding fill containment, but including chemical and water containment

The appropriate approvals must be in place prior to commencement of work to construct or to alter the drinking water system. The Region has the authority to approve most of the system alteration projects through the DWWP by completing the Ministry mandated forms (Form 1, Form 2 and Form 3).

Where works cannot be approved by the Region, a formal application for approval to the Ministry must be submitted and approval received prior to commencement of work to construct or to alter the drinking water system. Amendments to the Region's drinking water approvals must be made in direct consultation with the Region's staff.

- ✓ It is required by the Ministry approval program that alterations to the drinking water systems are documented and system drawings/plans/diagrams updated to reflect the modification within one year of the substantial completion of the alteration. Also required may be updates to operational manuals that reflect changes associated with water treatment and/or distribution processes.

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- ✓ The Region's internal standards, which may be more stringent than the Ministry's minimum requirements, must be followed in respect to availability of drawings and process flow diagrams to allow staff to effectively operate the water system.
- ✓ It is also required that all parts of the drinking water system that come into contact with drinking water that are added, modified, replaced, extended and those taken out of service for inspection or repair are disinfected in accordance with the [Ministry Watermain Disinfection Procedure](#) and other applicable [AWWA](#) Standards prior to being placed in service. For disinfection of the Region's water assets the Region's criteria outlined in the [Contractor Disinfection Checklist](#) must be considered. The Region's asset disinfection procedural documentation (e.g. disinfection plans and forms) must be used to demonstrate regulatory compliance.
- ✓ All chemicals and materials used in the alteration or operation of the drinking water system that come into contact with drinking water must meet all applicable standards set by AWWA and the [ANSI](#) safety criteria standards NSF/60, NSF/61 and NSF/372. Exemptions to this condition apply for some components, including:
 - Pipe and pipe fittings that meet AWWA specifications made from ductile and cast iron, PVC, fibre and/or steel wire reinforced cement pipe or HDPE
 - Articles made from stainless steel, glass, HDPE or Teflon, cement mortar for watermain lining, gaskets made from NSF approved materials, and
 - Food grade oils and lubricants, food grade antifreeze and other food grade chemicals and materials that are compatible for drinking water use. The Region may be contacted for a full list of the components exempt from compliance with this condition.

Quality Management System

The Region has implemented a Quality Management System (QMS) for its drinking water systems. This ensures the policies and procedures are in place to effectively manage the drinking water operations, continuously test and check and make improvements to all aspects of water treatment and distribution, from source to tap.

The Region's commitment to drinking water quality is summarized in the QMS policy below:

- Supply safe and clean drinking water to the consumer
- Meeting all applicable legislative and regulatory requirements and
- Maintenance and continual improvement of the Quality Management System

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The Region delivers on its commitments by ensuring quality and integrity of supplies and services acquired. All purchasing is in accordance with the Region's Purchasing By-laws, supplemented with internal procedures that outline resources that are necessary for the delivery of safe drinking water. The Region's expectations on quality of products and service delivery are communicated through tender documentation, purchasing agreements and contracts. Performance of vendors retained by the Region is monitored and evaluated through a Vendor Satisfaction Survey to ensure that goods and services comply with established requirements.

Disclaimer

While efforts have been made to ensure accuracy and completeness, this document provides an overview of legal requirements and is intended for general guidance on approvals provisions and does not replace or supersede provincial legislation, applicable regulations, licenses, or permits. Since these requirements are subject to change, please check back periodically for updates.

The Region of Peel's QMS does not change or impact current contracts and agreements. It conveys the commitment to quality; safe drinking water supply and your support is required by supporting this commitment with your high-quality standards.

More information on the precise duties governing drinking water system owners and operating authorities can be found at the [Ministry website](#). Copies of licences and permits referenced in this document may be obtained from the Region of Peel upon request. Any queries regarding this document should be raised with the Region's Water and Wastewater Regulatory Compliance staff via email at DWQMS@peelregion.ca or via telephone at 905-791-7800, ext. 4685