

Committee of the Whole (2) Report

DATE: Tuesday, April 18, 2023 **WARD(S):** ALL

TITLE: DRINKING WATER QUALITY MANAGEMENT SYSTEM
STANDARD OF CARE AND OPERATIONAL PLAN
ENDORSEMENT

FROM:
Zoran Postic, Deputy City Manager, Public Works

ACTION: DECISION

Purpose

The purpose of this report is to provide an overview of the City's obligations as Owner of the municipal drinking water system, request endorsement of the City's Drinking Water Quality Management System Operational Plan, and seek confirmation that the Director of Environmental Services, or designate, shall act as the Owner Representative of the City of Vaughan's drinking water system. This report and its attachment are intended to support Council in meeting its statutory standard of care under the *Safe Drinking Water Act, 2002* and show Council's commitment to the City's Drinking Water Quality Management System in alignment with the Drinking Water Quality Management Standard.

Report Highlights

- The *Safe Drinking Water Act, 2002* includes a statutory Standard of Care which came into effect on December 31, 2012, and applies to Council, as the Owner of the drinking water system.
- The City's Operational Plan was first endorsed by Council in 2010 and requires re-endorsement by Council at the beginning of each new term per the Drinking Water Quality Management Standard.

Recommendations

1. THAT the Drinking Water Quality Management System Operational Plan (Attachment 1) be endorsed by Council, as the Owner of the drinking water system; and
2. THAT Council confirm the Director of Environmental Services, or designate, shall act as the Owner Representative of the drinking water system.

Background

The *Safe Drinking Water Act, 2002* mandates a legislative framework for all municipal drinking water systems and provides a consistent set of Province-wide standards to help safeguard drinking water.

Drinking water and drinking water systems are regulated by the Province through the Ministry of the Environment, Conservation and Parks (MECP).

The *Act* recognizes that people are entitled to expect their drinking water to be safe, high quality, and reliable. It provides for the protection of human health and prevents drinking water health hazards through a multi-faceted approach to control and regulate drinking water systems and drinking water testing.

A Standard of Care came into effect under the *Safe Drinking Water Act, 2002* on December 31, 2012, which expressly extends legal responsibility to people with decision-making authority over municipal drinking water systems.

Under Section 19 of the *Act*, those with decision-making authority over the system are mandated to exercise the level of care, diligence, and skill with regard to a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation and to act honestly, competently, and with integrity with a view to ensuring the protection and safety of the users of the municipal drinking water system.

The Standard of Care legislation applies to members of Council as Owners of the drinking water system and those who exercise decision-making authority over the drinking water system. Council, through its decision-making role, protects the City's residents and businesses by demonstrating diligence and prudent oversight of the supply and distribution of drinking water.

Statutory Standards of Care address the need to provide diligent oversight and the *Safe Drinking Water Act, 2002* describes the duties of Council, as the Owners of regulated drinking water systems.

Section 11 of the *Act* describes the duties of the Owners of a municipal drinking water system. Owners and operating authorities are legally responsible for ensuring their drinking water systems:

- Provide water that meets all prescribed drinking water quality standards;
- Operate in accordance with the *Act* and its regulations, and are kept in a fit state of repair;
- Are appropriately staffed and supervised by qualified persons;
- Comply with all sampling, testing and monitoring requirements; and
- Meet all reporting requirements.

Ontario has an integrated system of procedures, processes, and tools that collectively prevent or reduce the risk of contamination in drinking water to protect public health.

This multi-faceted approach to protecting drinking water in Ontario was a key recommendation in Justice O'Connor's report on the Walkerton tragedy in 2000.

Elements of this approach include source water protection, health-based standards, regular and reliable testing, strong legislative and regulatory framework, mandatory certification and training of drinking water operators, a Provincial inspection and enforcement program, and implementation of an Operational Plan and Drinking Water Quality Management System based on the Drinking Water Quality Management Standard.

Multiple barriers protect the public and ensure that preventative and corrective actions are taken to address potential risks.

The Drinking Water Quality Management Standard complements the legislative and regulatory framework set out in the *Safe Drinking Water Act, 2002* by endorsing a proactive and preventive approach to assuring drinking water quality.

The Drinking Water Quality Management Standard is based on a “plan, do, check and improve” methodology.

“Plan” requirements of the standard typically specify policies and procedures that must be documented in the Operational Plans for the drinking water system. “Do” requirements specify the policies and procedures that must be implemented. “Check” and “Improve” are reflected in the requirements to conduct internal audits and Management Reviews.

In Ontario, all municipal drinking water systems must have a license from the Ministry of the Environment, Conservation and Parks.

The MECP's Municipal Drinking Water Licensing Program requires owners and operating authorities of drinking water systems to integrate the concepts of quality management into system operation and management.

Licenses are valid for a five-year period and must be renewed. For a drinking water system to receive or renew its license, the owner and operating authority must have in place:

- A Drinking Water Works Permit;
- An Operational Plan endorsed by the Owner of the drinking water system;
- An accredited Operating Authority;
- A financial plan; and
- A Permit to Take Water.

The City of Vaughan's Municipal Drinking Water License expires on May 22, 2024 and a renewal application will be submitted to the MECP by the MECP's application submission deadline of December 23, 2023.

Previous Reports/Authority

[2019 Drinking Water Quality Management System \(DWQMS\) Standard of Care Presentation, Endorsement of Operational Plan and Top Management Review](#)

[2022 Annual Drinking Water System Report](#)

Analysis and Options

The Drinking Water Quality Management Standard sets the framework upon which Operational Plans are developed and Operating Authorities are accredited.

The City's Operational Plan documents the Drinking Water Quality Management System that is specific to Vaughan's drinking water system and meets the requirements of the Drinking Water Quality Management Standard.

The Drinking Water Quality Management Standard is comprised of 21 elements and emphasizes the importance of:

- A proactive and preventative approach to management strategies that identify and manage risks to public health;
- Establishing and documenting management procedures;
- Clearly identifying roles and responsibilities; and
- Continual improvement of the management system.

The Operational Plan was first introduced to the City in 2010 as part of the legislative requirements implemented by the MECP and, in 2012, Council approved a recommendation that the Operational Plan shall be submitted to each new Council every four years for endorsement. The City's Operational Plan was most recently re-endorsed by Council in 2019. As the 2022-2026 Term of Council has begun, the Drinking Water Quality Management System Operational Plan requires Council endorsement, as the Owner of the drinking water system.

The City's Operational Plan documents all 21 elements of the Drinking Water Quality Management Standard and provides an understanding of the drinking water system, the responsibilities of the Owner and Operating Authority of the water system, and a commitment to the provision of safe drinking water.

The Operational Plan describes the methods by which the City of Vaughan implements the Drinking Water Quality Management System. The Operational Plan notes that Owners and Operators of the City of Vaughan's drinking water system are committed to:

- Providing safe and clean drinking water to residents and businesses;
- Complying with application legislation and regulations related to the provision of safe drinking water; and
- Implementing and continually improving the effectiveness of the Drinking Water Quality Management System.

The Operational Plan must be reviewed by Top Management annually to evaluate the continued suitability, adequacy, and effectiveness of the Drinking Water Quality Management System. In 2022, two Top Management Reviews were held (July 27, 2022 and December 15, 2022).

The City's Drinking Water Quality Management System was re-accredited on June 22, 2021 followed by an external surveillance audit of the City's Operational Plan on May 19, 2022. The audit identified zero instances of non-conformance and three opportunities for improvement (OFI). The OFIs have been reviewed and are being incorporated in the System.

Ministry of the Environment, Conservation and Parks' (MECP) inspections show the City is achieving strong and consistent operational performance levels and the City received a 100% inspection rating on the MECP's 2021-2022 Chief Drinking Water Inspector's Report.

Ontario's Chief Drinking Water Inspector releases an Annual Report rating drinking water systems across the Province. The 2021-2022 Chief Drinking Water Inspector's

Annual Report includes in-depth information on the performance of Ontario's drinking water systems and licensed laboratories.

The 2021-2022 Chief Drinking Water Inspector's Report gave the City the highest possible inspection rating of 100%.

For comparison purposes, eight of the nine local area municipalities in York Region received an inspection rating of 100%, with the remaining one receiving an inspection rating of 98.29%. Of the 657 municipal residential drinking water systems in Ontario, 78% received an inspection rating of 100%. This illustrates that the operation and management of the City's drinking water system is amongst the best in the Province.

Financial Impact

In May 2019, Council approved the [Long Term Water Financial Plan for 2020 to 2031](#), committing to the long-term financial sustainability of the City's drinking water system and ensuring continuous delivery of safe drinking water. The Plan identifies the financial support required to operate, maintain, and perform asset management planning on the drinking water system and was a component in the City's Municipal Drinking Water License renewal submission to the MECP.

Operational Impact

No new operational impacts are expected as a result of this Report.

Broader Regional Impacts/Considerations

None.

Conclusion

This report and its attachment provide an overview of Council's statutory Standard of Care under Provincial drinking water regulations and allows Council to demonstrate its due diligence in exercising informed decision making.

This report also satisfies the requirement for the City's Operational Plan to be endorsed by Council at the beginning of each new term per the Drinking Water Quality Management Standard.

The City's drinking water system is subject to strict regulations implemented by the Province to keep drinking water safe. The 2022 Annual Drinking Water System Report confirmed the City's drinking water system is performing well under the City's Drinking Water Quality Management System Operational Plan. These results are attributed to

Council's commitment and duty to provide safe drinking water to the City's residents and businesses.

For more information, please contact: Emilie Alderman, Director, Environmental Services, ext. 6116

Attachment

1. Drinking Water Quality Management System Operational Plan

Prepared by

Emilie Alderman, Director, Environmental Services, ext. 6116

Emily Fahlgren, Acting Supervisor, Compliance and Training, ext. 6175

Approved by



Zoran Postic, Deputy City Manager
Public Works

Reviewed by



Nick Spensieri, City Manager