

# Staff Report



Infrastructure Services Department

www.kitchener.ca

**REPORT TO:** Community and Infrastructure Services Committee

**DATE OF MEETING:** February 24, 2025

**SUBMITTED BY:** Greg St. Louis, Director, Gas & Water Utilities, 519-783-8792

**PREPARED BY:** Angela Mick, Manager, Quality Management and Water Programs, 519-783-8792

**WARD(S) INVOLVED:** Ward(s)

**DATE OF REPORT:** January 30, 2025

**REPORT NO.:** INS-2025-008

**SUBJECT:** Drinking Water Quality Management Standard (DWQMS): Management Review Summary for 2024

---

## RECOMMENDATION:

***That the City of Kitchener Drinking Water Quality Management Standard (DWQMS): Management Review Summary for 2024 Report be received for information.***

## REPORT HIGHLIGHTS:

- The purpose of this report to inform the decision-making authority about the status of the drinking water system.
- The key finding of this report is that the Kitchener distribution system meets the requirements under the *Safe Drinking Water Act*.
- There are no financial implications of this report.
- This report supports the delivery of core services.

## BACKGROUND:

The *Safe Drinking Water Act, 2002* and *Regulation 188/07*, requires the City of Kitchener to be licensed to operate and maintain Kitchener's water distribution system. Some of the licensing requirements include the development and management of a Quality Management System (QMS) and Operational Plan as well as communication to the owner. The City of Kitchener became licensed in August, 2009 with a Financial Plan submitted in July, 2010. The licence was renewed in 2024.

Section 19 of the *Safe Drinking Water Act* imposes a statutory standard of care on persons who oversee the municipal drinking water system: "...every person who, on behalf of the municipality, oversees the accredited operating authority of the system or exercises decision-making authority over the system". This standard of care includes Council since they have decision-making authority. Part of the standard of care includes requiring system owners to undertake financial planning and implement the Drinking Water Quality Management System (DWQMS). The following link is a guide for municipal councillors to help understand their responsibilities under

\*\*\* This information is available in accessible formats upon request. \*\*\*  
Please call 519-741-2345 or TTY 1-866-969-9994 for assistance.

the *Safe Drinking Water Act, 2002* and provides information on how Ontario's drinking water is safeguarded: [Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils | ontario.ca](https://www.ontario.ca/government/taking-care-of-your-drinking-water-a-guide-for-members-of-municipal-councils)

Three things to remember as a municipal councillor (as outlined in the above Guide):

- It's your duty. There are legal consequences for not acting as required by the standard of care, including possible fines or imprisonment.
- Be informed. Your decisions can have an impact on public health. You don't have to be an expert in drinking water operations, but you do need to be informed about them.
- Be vigilant. It is critical you never take the drinking water safety for granted or assume all is well with the drinking water systems under your care and direction.

## **REPORT:**

The purpose of this report is to inform Council as the decision-making authority about the status of the drinking water system on an annual basis. The Kitchener water distribution system meets the requirements under the *Safe Drinking Water Act*. There are specific areas that must be reported per regulatory requirements, which include; but are not limited to consumer feedback, results of infrastructure review, results of audits and summary of maintenance.

The DWQMS requires Top Management to "report the results of the management review, the identified deficiencies, decisions and action items to the Owner". Top Management is defined as "a person, persons or group of people at the highest management level within an Operating Authority that makes decisions respecting the QMS and recommendations to the Owner respecting the subject system or subjects systems". The Owner of the water utility is the Corporation of the City of Kitchener, represented by City Council.

The 2024 Management Review was completed with Top Management: Denise McGoldrick, General Manager, Infrastructure Services, Greg St. Louis, Director, Gas & Water Utilities, and Tammer Gaber, Manager, Operations (Gas & Water) as well as Ras Sonthisay, Supervisor, Training (Gas and Water Utilities), Angela Mick, Manager, Quality Management and Water Programs and Dean Chapman, Quality Management System Specialist. The Management Review report is attached.

Highlights of the report are:

- The Summary Water Report-2024 (INS-2025-029) confirmed that the drinking water system was in compliance with regulatory water sampling requirements during 2024. The DWQMS Management Review confirms the continuing adequacy and effectiveness of the quality management system which includes compliance, customer feedback, operational performance, audit information etc. as outlined in this report.
- The Water Infrastructure Program (WIP) maintenance achievements (specific areas of improvement identified by WIP):
  - Cleaned approximately 135km of watermain in 2024.
  - Water quality complaints increased slightly in 2024. There were 140 complaints total with 28 discoloured water complaints for 2024; which has increased slightly from 2023. The majority of complaints are internal issues (e.g. low pressure from a water softener).
  - 20 broken valves and/or failing valves were either replaced or removed which allows for quicker isolation for water emergencies. This number does not include

- the majority of valve replacements through road reconstruction projects. Broken valves are tracked in real time and the majority are addressed within weeks (except for winter or if they are part of future reconstructions).
- Approximately 1,877 valves were proactively operated (23%); the majority were within the watermain cleaning area and the 2024 reconstruction areas. Operating valves ensures that they will work when they are needed in an emergency or for construction activities.
  - Completed spring and fall maintenance of fire hydrants.
  - Underground utility locates – continued to meet regulatory requirements with a combination of in-house and contract staff (approximately 14,300 locates completed).
  - 2,295 services are protected by Backflow Prevention Devices (BFP) – the focus is on high-risk use. These devices prevent cross connections and potential contamination of the distribution system. A dashboard was developed to track customer notification by grids and compliance.
  - Lead testing program was completed in spring and fall.
- Air relief valves in chambers inspections/chamber pump outs (approximately 1020) were not completed in 2024; however they have been started in 2025. There were 2 boulevard style air reliefs installed in 2024 to eliminate flooding risk within the chambers.
  - There were 55 watermain breaks in 2024, which is lower than the 5-year average of 66. The 5-year average also dropped from 73 to 66/year.
  - Approximately 1,115 aging/problem water meters were replaced. A new process was developed for metering large buildings under construction. The process to install new build meters was streamlined which resulted in faster billing for consumption.
  - Approximately 350 hydrants were painted as part of the corrosion protection program, painting will continue in 2025. Hydrants are also stencilled with the watermain diameter for the Fire Department.
  - Unaccounted for water was 4.5% which is significantly lower than the average. The unaccounted for water generally fluctuates around 10% (9-12%), with 10% being the approx. 10 year average). This significant drop is under further investigation.
  - Pressure reducing valve maintenance was completed.
  - Replaced watermains as outlined in the 2024 City of Kitchener Engineering & Water Utility Capital Forecast.
  - The Drinking Water Licence was renewed.
  - External audit determined that the management system is effectively implemented and maintained and recommended continued certification of accreditation for the municipal drinking water system.
  - As a result of a locating process review, council approved the new positions of: Supervisor, Damage Prevention, four new Locators, Damage Prevention and one new Draftsperson. These positions allowed the corporation to respond in more timely manner in accordance with the new Ontario One Call Regulations. All positions except for the Draftsperson were filled.
  - Watermain Break App was modified to include the most critical infrastructure information (water and gas) to staff via Smartphones or tablets.
  - Developed a SharePoint site to manage watermain commissioning as well as emergency response.

- Commenced the water component of the Official Plan to identify any water upgrades required and /or potential limitations for future growth.

Continuing Areas of Focus are:

- Continue with the mapping QA/QC for the remainder of the City.
- Build upon the success of the hydrant spring mobile field inspections and develop a fall mobile field inspection.
- Proceed with new mapping solution to replace ArcReader infrastructure mapping.
- Various system upgrades including SAP and CityWorks (work management system).
- On-going work related to the Water Asset Management Plan including Levels of Service, Risk and Lifecycle Management.

**STRATEGIC PLAN ALIGNMENT:**

This report supports the delivery of core services.

**FINANCIAL IMPLICATIONS:**

The recommendation has no impact on the Capital or Operating Budgets.

**COMMUNITY ENGAGEMENT:**

INFORM – This report has been posted to the City’s website with the agenda in advance of the council / committee meeting. The Drinking Water Quality Management Policy is available on the Kitchener Utilities website.

**PREVIOUS REPORTS/AUTHORITIES:**

There are no previous reports/authorities related to this matter; however the Management Review Summary Reports are provided on an annual basis with the last report being INS-2024-050.

**APPROVED BY:** Denise McGoldrick, General Manager, Infrastructure Services

**ATTACHMENTS:**

Attachment A – Drinking Water Quality Management Standard Review - 2024