



DRINKING WATER QUALITY MANAGEMENT SYSTEM: SUMMARY OF MANAGEMENT REVIEWS

2024 Operational Performance

Drinking Water Quality Management System: Summary of Management Reviews

2024 Operational Performance

The purpose of this summary is to provide Council with mandatory updates regarding the City of Vaughan’s drinking water system’s performance as mandated through Element 20 of the [Drinking Water Quality Management Standard](#) (DWQMS).

ELEMENT 20: MANAGEMENT REVIEW REQUIREMENTS	ACHIEVED?	CONFORMS TO DWQMS?
<p>1 Ensure that a Management Review is conducted at least once every calendar year.</p> <p>Completed on July 24, 2024 and December 3, 2024 with Top Management and the Owner Representative for the 2024 operational year.</p>	✓	✓
<p>2 Consider the results of the Management Review and identify deficiencies and action items to address the deficiencies.</p> <p>Completed. See the Management Review Summary.</p>	✓	✓
<p>3 Provide a record of any decisions and action items related to the Management Review, including the personnel responsible for delivering the action items and the proposed timelines for their implementation.</p> <p>All decisions and action items discussed during the Management Review have been captured through record of minutes. Action follow-up is tracked.</p>	✓	✓
<p>4 Report the results of the Management Review, the identified deficiencies, decisions and action items to the Owner (Council).</p> <p>Completed through this report, submitted for information on March 4, 2024.</p>	✓	✓

Management Review Summary

a) Annual Review of QMS 02- Quality Management System (QMS) Policy

The QMS Policy was reviewed with all attendees.

Action Item: No action items are pending from the 2024 reporting period.

b) Incidents of regulatory non-compliance

During the July 24, 2024 review, there was one incident of regulatory non-compliance identified with respect to Ontario Regulation 170/03 of the *Safe Drinking Water Act*. The instance was associated with a reporting anomaly where written notification was not provided to the Spills Action Centre (SAC) or York Region Public Health within 24 hours of providing the verbal notification to SAC and York Region Public Health. The reporting anomaly did not impede the initiation of corrective actions nor the reporting of issue resolution.

Continual improvement is a cornerstone of the DWQMS and is an operational approach that is embraced by the City. An internal review of the reporting anomaly was initiated and the associated standard operating procedure has been updated to include an additional level of oversight and redundancy.

Action Item: No action items are pending from the 2024 reporting period.

c) Incidents of adverse drinking water tests

Indicators of adverse water quality are immediately reported to York Region Public Health and the Ministry of Environment, Conservation and Parks (MECP) Spills Action Centre and appropriate corrective action is taken. In 2024, there were a total of 21 reportable events, all of which were immediately actioned as required by the regulation. None of these events resulted in the integrity and safety of the drinking water supply being compromised.

Action Item: No action items are pending from the 2024 reporting period.

d) Deviations from Critical Control Points (CCPs)

Critical control limits have been established based on known CCPs identified through Risk Assessment outcomes. There are four CCPs, which include: Watermain Break, Negative Pressure Event, Terrorist Threat/Vandalism and Cyber Security Threat. There was no deviation from the four identified CCPs.

Action Item: No action items are pending from the 2024 reporting period.

e) The effectiveness of the risk assessment process

Verification of risks to public health and the drinking water system is conducted at least once every calendar year and re-assessed at least once every 36 months. The Annual Verification of the Risk Assessment Outcomes was held in May and June of 2024 and resulted in minor wording updates and a decrease in overall rank for four potential hazards to the drinking water system. Terrorist Threat/Vandalism was separated into two potential hazardous event categories (Damage and/or Contamination and Cyber Security) in response to a DWQMS internal audit Opportunity For Improvement (OFI). No new CCPs were identified, and no new potential hazards were identified. The next Annual Verification of the Risk Assessment Outcomes will occur during 2025.

Action Item: No action items are pending from the 2024 reporting period.

f) Internal and third-party audit results

Internal and third-party audits assess how the City meets the requirements of the DWQMS. The 2024 Internal Audits were held on June 12 and 13, 2024 and November 14 and 15, 2024. Zero instances of non-conformance were identified and seven OFIs were identified in the first audit, which have been addressed and implemented. In the second Internal Audit, zero instances of non-conformance were identified and one OFI was identified which has been addressed and implemented. MECP-approved Drinking Water Quality Management System Auditors, Intertek SAI Global, performed a verification audit on May 9, 2024 and a re-accreditation audit on June 17 and 19, 2024. Zero instances of non-conformance were identified and three opportunities for improvement have been reviewed and have been incorporated into the QMS.

Action Item: No action items are pending from the 2024 reporting period.

g) Results of emergency response testing

Testing of emergency response ensures that staff are prepared for emergency situations and allows the City to identify what could happen in the drinking water system to cause an emergency. The DWQMS requires the City to complete emergency response testing at least once every two years. A desktop exercise was conducted for water-related emergencies on December 15 and 19, 2023. The next emergency response testing exercise will be conducted in 2025.

Action Item: No action items are pending from the 2024 reporting period.

h) Operational performance

Annual MECP inspections ensure the City meets the requirements identified in applicable legislation and regulations. An announced inspection was held on August 29, 2024 covering the July 5, 2023 to August 5, 2024 inspection period. The MECP inspection included a site visit to the Maplewood Booster Station on August 29, 2024, followed by a comprehensive review of the City's operational documents and records. The City received a 100% inspection rating following the inspection that took place on August 29, 2024.

Action Item: No action items are pending from the 2024 reporting period.

i) Raw water supply and drinking water quality trends

The Annual Water Quality Report and Annual Summary Report provide data on drinking water quality trends within the City's drinking water. The 2024 Annual Water Quality Report and Annual Summary Report will be posted on the City's website prior to February 28, 2025 and March 31, 2025, respectively. The City has an exemption under the Municipal Drinking Water Licence (MDWL) for lead sampling from plumbing systems.

Action Item: No action items are pending from the 2024 reporting period.

j) Follow-up on action items from previous management reviews

The previous Management Review was held on November 22, 2023. There were a total of seven action items identified at that time, majority of which have been actioned; however, there is one action item outstanding from the 2024 reporting period.

Action Item: A DWQMS Awareness session will be offered to the Infrastructure Development Portfolio. The session is being planned for Q1 2025.

k) The status of management action items identified between reviews

Weekly drop-in sessions were initiated in November 2024 between the Water Services team and the Compliance and Training team following the last Management Review. More information can be found in r) Review of Best Management Practices.

Action Item: No action items are pending from the 2024 reporting period.

l) Changes that could affect the Quality Management System (QMS)

The City's Municipal Drinking Water Licence (MDWL) was renewed and issued on May 15, 2024 (Issue 9). New requirements focusing on source water protection have been identified below: where the drinking water system, or a portion thereof, is located in a source protection area as defined in the *Clean Water Act, 2006*, the owner shall prepare an "Assessment of Fuel Storage and Handling" (the "Assessment") on or before May 22, 2025.

On May 10, 2024, the City met with the MECP'S Environmental Permissions Branch to review the new source water protection conditions in the MDWL. It was confirmed through the Source Protection Information Atlas mapping tool that the fuel storage at Maplewood Booster Station (11201 Keele St.) is not located within a source protection area, and no further action is required.

Action Item: No action items are pending from the 2024 reporting period.

m) Consumer feedback

Consumer feedback allows the City to identify if the water system is operating effectively. In 2024, there were a total of 111 calls that were received related to water odour, taste, colour and quality inquiries. All concerns/inquiries were addressed appropriately and in a timely manner. Resolutions included field investigations, testing and sharing information and laboratory results.

Action Item: No action items are pending from the 2024 reporting period.

n) Resources needed to maintain the QMS

Adequate resources are in place to maintain the QMS. Water Operations staff were trained for DWQMS Awareness in Q4 of 2024.

Action Item: No action items are pending from the 2024 reporting period.

o) The results of the infrastructure review

The physical condition of water infrastructure is regularly evaluated to maintain a state of good repair. Capital projects were identified by Environmental Services and Infrastructure Delivery via the City's capital budget process. In 2024, there were 13 watermain breaks. Preventative maintenance of the drinking water system included the following during 2024: 3,000 valves were visited for preventative maintenance programming, and 26 anti-stag valves (ASVs), 19 pressure regulating valves (PRVs) and 10,145 hydrants were maintained. **Action Item:** No action items are pending from the 2024 reporting period.

p) Operational Plan currency, contact and updates

The Operational Plan has been revised to reflect the majority of the OFIs from the 2024 External and Internal Audits.

Action Items: No action items are pending from the 2024 reporting period.

q) Staff suggestions

Staff continue to provide input and assist in the development of Standard Operating Procedures through the Standard Operating Procedure Review Committee.

A OneDrive folder is maintained with meeting minutes, which captures staff discussions and suggestions.

Action Item: No action items are pending from the 2024 reporting period.

r) Review of Best Management Practices (BMPs)

There was one BMP identified during the 2024 reporting period.

Weekly drop-in sessions were initiated in November 2024 between the Water Services team and the Compliance and Training team to capture staff suggestions, answer questions related to Compliance and Training initiatives, and track continual improvement.

Action Item: No action items are pending from the 2024 reporting period.

s) New business

None identified.

Action Item: No action items are pending from the 2024 reporting period.

t) Date of next meeting

The DWQMS dictates that a Management Review meeting must be held at least once every calendar year.

Action Item: No action items pending from the 2024 reporting period.

Conclusion

The Management Review is recognized as a best practice for continual improvement for the City’s DWQMS, drinking water system and associated monitoring and maintenance programs.

The ongoing maintenance of the QMS and focus on continual improvement provides assurance to Council, as the Owner of the municipal drinking water system, that its duties, responsibilities and standard of care under the Act are being met.