

## Report to Civic Works Committee

**To:** Chair and Members  
Civic Works Committee

**From:** Kelly Scherr, P.Eng., MBA, FEC  
Deputy City Manager, Environment and Infrastructure

**Subject:** 2021 External Audit of London's Drinking Water Quality  
Management System and 2021 Management Review

**Date:** March 1, 2022

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following report on the 2021 External Audit of London's Drinking Water Quality Management System, and the subsequent 2021 Management Review, BE RECEIVED for information.

## Executive Summary

### Purpose

Ontario's Safe Drinking Water Act, 2002, requires that operators of municipal drinking water systems conduct annual Management Reviews of their Quality Management Systems. The results of these reviews are required to be reported to the system owner.

This report satisfies that regulatory requirement and provides a summary of the June 2021 Surveillance Audit completed on London's drinking water quality management system.

### Context

Ontario's municipal drinking water systems may only be operated by accredited Operating Authorities. Accreditation is achieved and maintained through the implementation of Quality Management Systems that comply with the provincial standard. Annual third-party external audits verify compliance, and annual Management Reviews are required to evaluate the continuing suitability, adequacy, and effectiveness of the Quality Management System.

## Linkage to the Corporate Strategic Plan

This report supports the 2019 – 2023 Strategic Plan through the strategic focus area of Leading in Public Service, by demonstrating leadership and accountability in the management and provision of quality programs and services.

## Analysis

### 1.0 Background Information

#### 1.1 Previous Reports Related to this Matter

2020 External Audit of London's Drinking Water Quality Management System and 2020 Management Review, Civic Works Committee, March 2, 2021.

#### 1.2 Context

Quality Management Systems (QMSs) can be defined as sets of interrelated elements (e.g., policies and procedures) that direct and control the way a facility operates with regard to quality. A QMS is a way of ensuring that an organization is consistently in

control of the quality of the product or services that it supplies. The QMS for London's drinking-water system is documented in an Operational Plan.

In June 2021, an Off-site Surveillance Audit was conducted on London's Drinking Water Quality Management System by SAI Global Assurance Services. In October 2021, the Top Management of the Operating Authority for London's drinking-water system conducted the annual Management Review for the system.

## **2.0 Discussion and Considerations**

### **2.1 Audit Findings**

If auditors discover instances where the water system is not being operated according to the approved Operational Plan, these are reported as either major or minor non-conformances. When non-conformances are identified in an audit report, the water system operators are required to submit Non-conformance Reports to the auditor, detailing the root cause of the non-conformance, the action(s) taken to correct the incident and contain the problem, and the systemic (long term) corrective action(s) planned or taken to eliminate the root cause and prevent recurrence.

No issues of non-conformance were identified in London's 2021 external audit.

In addition to instances of non-conformance, auditors also draw upon their expertise and experience to report Opportunities for Improvement, which are suggestions as to how the Operational Plan might be improved.

No Opportunities for Improvement were identified in London's 2021 external audit.

### **2.2 Management Review**

On October 25, 2021, the Top Management team for London's water system (the Director – Water, Wastewater, and Stormwater and the Division Managers of Water Engineering and Water Operations) held their annual Management Review for London's Drinking Water Quality Management System. The results of the Management Review are summarized in Appendix 'A'.

## **Conclusion**

In June 2021, an Off-site Surveillance Audit was completed by a third-party auditor for the quality management system of London's drinking-water system. No incidents of Non-conformance and no Opportunities for Improvement were identified in the audit report.

The Top Management team for London's water system held the required annual Management Review for London's Drinking Water Quality Management System in November 2021 and have communicated the results of that review in this report.

**Prepared by:** John Simon, P.Eng.  
Division Manager, Water Operations

**Submitted by:** Scott Mathers, MPA, P. Eng., Director, Water,  
Wastewater, and Stormwater

**Recommended by:** Kelly Scherr, P. Eng., MBA, FEC  
Deputy City Manager, Environment and Infrastructure

CC: Dan Huggins, Water Quality Manager  
Aaron Rozentals - Division Manager, Water Engineering

## Appendix A

| <b>RESULTS OF THE 2021 MANAGEMENT REVIEW</b> |  |
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| Summary of Management Review                 | <p>The 2021 Management Review meeting was held on October 25, 2021. The meeting was attended by Scott Mathers, Director – Water, Wastewater, and Stormwater, Aaron Rozentals, Division Manager – Water Engineering, John Simon, Division Manager – Water Operations, and Dan Huggins, Water Quality Manager and QMS Representative. The agenda items discussed were, a) Incidents of regulatory non-compliance, b) Incidents of adverse drinking water tests, c) Deviations from critical control point limits and response actions, d) Efficacy of the risk assessment process, e) Results of audits (internal and external), and effectiveness of recent corrective and preventive actions, f) Results of relevant emergency response testing, g) Operational performance, h) Drinking water quality trends, i) Follow-up action items from previous management reviews, j) Status of management action items identified between reviews, k) Changes that could affect the QMS, l) Summary of consumer feedback, m) Resources needed to maintain the QMS, n) Results of the infrastructure review, o) Operational Plan currency, content and updates, p) Summary of staff suggestions, and q) New Business.</p>  |
| Action Items Identified                      | <ol style="list-style-type: none"> <li>1) Provide DWQMS Awareness Training to new staff, noting that this training has been delayed due to limits on in-person training caused by the pandemic.</li> <li>2) Evaluate the performance of the two (2) Adjustable Speed Drives to be delivered and installed at the Southeast Pumping Station and develop an action plan for the two (2) other pumps at this location that also require new drive units.</li> <li>3) Water Operations to develop a standardized form to record all of the required information prescribed by Section 4 of Ontario's Watermain Disinfection Procedure relating to new watermain installations. These forms should clearly identify the disinfection methods employed, disinfection start and stop times, chlorine readings, percentage drop of chlorine concentration, and all other required elements.</li> <li>4) Water Operations to develop a Standard Operating Procedure for the replacement of lead water service pipes.</li> <li>5) Construct approved upgrades to the rechlorination facility at Springbank Reservoirs #1 &amp; 2 to provide inflow chlorination capacity in addition to the current outflow chlorination capacity to further improve the ability to provide stable chlorine levels.</li> </ol> |

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|  | <p>6) Enhance the City of London valve exercising program through incorporation into the new Computerized Maintenance Management System.</p> <p>7) Coordinate with Corporate Security to discuss how the Alert London system could be used in the event of a drinking-water advisory or requests for reduction of water consumption in the event of a supply interruption.</p> <p>8) Monitor taste and odour complaints received in the fall of each year to determine any trends associated with delayed fall cooling of Lakes Huron and Erie.</p> |
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