

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING OF DECEMBER 4, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	2017 EXTERNAL AUDIT OF LONDON'S DRINKING WATER QUALITY MANAGEMENT SYSTEM AND 2017 MANAGEMENT REVIEW

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following report on the 2017 external audit of London's Drinking Water Quality Management System, and the subsequent 2017 Management Review meeting, **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

[2015 External Audit of London's Drinking Water Quality Management System and 2015 Management Review](#)

[2016 External Audit of London's Drinking Water Quality Management System and 2016 Management Review](#)

2015 – 2019 STRATEGIC PLAN

The following report supports the 2015 – 2019 Strategic Plan through the strategic focus area of *Leading in Public Service*, through open, accountable, and responsive government, and providing excellent service delivery.

BACKGROUND

Purpose

Ontario's Safe Drinking Water Act, 2002, requires that operators of municipal drinking water systems conduct annual management reviews that evaluate the continuing suitability, adequacy, and effectiveness of their Quality Management System, and that the results of those reviews are reported to the system owner.

This report satisfies that regulatory requirement and provides a summary of the June, 2017 external off-site surveillance audit completed on London's drinking water quality management system.

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 formally ensuring that an organization is consistently in control of the quality of the product or services that it supplies.

Following the Walkerton tragedy of May 2000, Justice Dennis O'Connor recommended

that Ontario “*should initiate the development of a drinking water quality management standard for Ontario.*” A provincial Drinking Water Quality Management Standard (DWQMS) was therefore developed, which combined elements of existing ISO 9001 and HACCP standards. Through the Municipal Drinking Water Licensing Program, the Ontario government requires that municipal drinking water systems be operated by “accredited Operating Authorities”. Accreditation is achieved by implementing Quality Management Systems that meet the requirements of the DWQMS.

The City of London’s Water Engineering and Water Operations Divisions form the accredited Operating Authority for London’s drinking-water system. Accreditation is maintained through successful external audits, which are performed annually by one of two auditing firms approved by the Province of Ontario. These external audits take the form of On-Site Verification Audits, which are performed every three years, and Off-Site Surveillance Audits which are performed in the intervening years. In June, 2017, an Off-Site Surveillance Audit was conducted on London’s Drinking Water Quality Management System by SAI Global Assurance Services.

Section 19 of the *Safe Drinking Water Act, 2012* imposes a statutory standard of care on the “owner of a municipal drinking water system, and every person who, on behalf of the municipality, oversees the accredited operating authority of the system or exercises decision-making authority over the system”. In recommending the Standard of Care provision, Justice O’Connor stated that “*the fact that a municipality has an accredited operating agency will do much to satisfy the standard of care.*”

DISCUSSION

Following the 2017 off-site surveillance audit, SAI Global reported that “*The overall effectiveness of The Corporation of the City of London’s Quality Management System is considered effective*” and recommended “*Maintenance of existing accreditation.*”

If the auditors find instances where the water system is not being operated according to the approved Operational Plan, then 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 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 to prevent recurrence.

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

There were no non-conformances identified in the 2017 audit report. Three opportunities for improvement were identified as follows:

- Within the Operational Plan, there is an opportunity to consider re-issuing Appendix 4-A (QMS Representative Appointment) to indicate the current members of Top Management occupying the identified roles
- There is an opportunity to consider identifying how the coverage of an alternate Overall Responsible Operator (QMS-11 Section 2.1.3) will be communicated to Top Management and applicable Operating Authority personnel (e.g. email, memo, etc.)

- There is an opportunity to clarify, within the Water Supply Sampling Schedule, the subject system's applicability to quarterly Haloacetic acids (HAA) sampling and testing

On October 17, 2017, the Top Management team of the accredited Operating Authority for London's water system (the Director - Water and Wastewater, and the Division Managers of Water Engineering and Water Operations) held the annual Management Review for London's Drinking Water Quality Management System. The results of the Management Review are summarized in Appendix 'A'.

CONCLUSIONS

In June, 2017, an off-site surveillance audit was completed for the quality management system of London's drinking water system. The auditor reported that *"The overall effectiveness of the Corporation of the City of London's Quality Management System is considered effective"* and recommended *"Maintenance of existing accreditation"*. There were no non-conformances identified by the auditor.

Acknowledgements

This report has been prepared with input from Dan Huggins, Water Quality Manager and QMS Representative.

PREPARED BY:	REVIEWED & CONCURRED BY:
JOHN SIMON, P. ENG. DIVISION MANAGER WATER OPERATIONS	SCOTT MATHERS, P. ENG. MPA DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	

Attachment: Appendix 'A' – Report on QMS to Council

CC: Martin Hayward – City Manager
 Aaron Rozentals – Division Manager, Water Engineering
 Dan Huggins – Water Quality Manager