

Report To:	Chair and Members of the Planning and Public Works Committee
From:	Mitch Zamojc, P. Eng., Commissioner, Public Works
Date:	November 27, 2013
Report No. - Re:	PW-43-13 - 2013 Drinking Water Quality Management System Management Review, Verification Audit and Accreditation Update

RECOMMENDATION

THAT Report No. PW-43-13 re: “2013 Drinking Water Quality Management System Management Review, Verification Audit and Accreditation Update” be received for information.

REPORT

Executive Summary

- Halton Region’s Drinking Water Quality Management System is evaluated annually in accordance with the *Safe Drinking Water Act, 2002*.
- These annual reviews include a formal internal Management Review and in 2013 also included a comprehensive external Verification Audit.
- The 2013 findings from the Management Review and external Verification Audit of our Quality Management System were excellent and resulted in no significant changes to Halton’s Operational Plan.
- All minor issues requiring action identified during the Management Review and Verification Audit of the Quality Management System are being addressed by staff.
- Halton received official accreditation of its Drinking Water Systems Quality Management System for each of its four drinking water systems on June 21, 2013.

Background

In accordance with the *Safe Drinking Water Act, 2002*, the Drinking Water Quality Management Standard developed by the Ministry of the Environment requires that the findings from the annual evaluation of Halton’s Drinking Water Quality Management System be reported to Council as the Municipal Drinking Water System Owner. This report summarizes the 2013 evaluation of Halton’s Drinking Water Quality Management System including findings from the Management Review and external onsite Verification Audit.

The Drinking Water Quality Management System Management Review is an annual evaluation of Halton Region's Water Quality Management System to ensure its continuing suitability, adequacy and effectiveness and to identify any opportunities to further enhance the provision of safe drinking water to Halton Region's residents and businesses. The annual evaluation includes staff led internal audits of Halton's Drinking Water Quality Management System which serve to assess the overall effectiveness and value of the Quality Management System to Halton Region and form part of the Management Review process.

The Management Review ensures that staff responsible for overseeing the water system and defined as "top management" by the Drinking Water Quality Management System stay involved in the Quality Management System and provide direction for continual improvement.

Under the *Safe Drinking Water Act, 2002*, Halton Region as an owner of a Municipal Drinking Water System must be accredited as an Operating Authority. To achieve accreditation, an Operating Authority must establish, maintain and undergo external Verification Audits of its Drinking Water Quality Management System to ensure that prescribed Drinking Water Quality Management Standard requirements are met. These onsite Verification Audits must be performed by a Ministry of the Environment approved accreditation body.

The Ministry of the Environment has recently transitioned accreditation bodies from the Canadian General Standards Board to a pair of independent quality management system certification organizations, i.e. NSF International Strategic Registrations and SAI Global Limited. Municipalities were asked to choose one of these accreditation bodies and report that decision to the Ministry. Accordingly, Halton selected NSF International Strategic Registrations based on the organization's long standing experience with drinking water product certification and testing.

NSF International Strategic Registrations completed Halton's first external Quality Management System Verification Audit in April 2013.

Discussion

Management Review

Halton Region's most recent Management Review was conducted on March 19, 2013 with participation from the following staff:

- Commissioner, Public Works,
- Director, Water Services,
- Water Treatment and Distribution Managers and Supervisors,
- Water Compliance and Laboratory Supervisors,
- Support Coordinators,
- Drinking Water Quality Management System Management representatives, and
- Manager, Water Planning.

All inputs required by the Drinking Water Quality Management System Standard, including preventative or corrective action requests identified during the internal audit of Halton's Drinking Water Quality Management System, were presented, reviewed and discussed. The 2013 Management Review summary, including the internal audit report, are available for review in the Councillors' Library.

Based on the findings of the Management Review, there were a number of continuous improvement initiatives identified which are being implemented, and there are no significant changes required for the Operational Plan which outlines Halton's Quality Management System.

Quality Management System Accreditation

The first onsite external Verification Audit of Halton's Drinking Water Quality Management System occurred during the week of April 1, 2013. The scope of the Audit included all four of the Halton Region Drinking Water Systems and their conformance to the 21 Elements of the Drinking Water Quality Management Standard (Report PPW84-08).

Due to the comprehensive scope of the audit, participation was required from the following departments:

- Public Works
 - Business & Technical Services
 - Water Services
 - Strategic Initiatives & Organizational Development – Commissioner's Office
- Legislative & Planning Services
 - Asset Management
 - Legal Services
- Finance
 - Financial & Purchasing Services

A total of four corrective actions were identified during the external Verification Audit which are being addressed by staff as follows:

- Water system records and documents will need to be made more readily retrievable and centrally stored at a defined storage location to ensure regular and consistent access to record information (i.e. maintenance calibration records).
- Documentation of NSF certification, as required by the Ministry of the Environment, for essential equipment and products used in our drinking water system will be reviewed upon receipt and a process will be initiated to validate a supplier's NSF documentation. (NSF is a third party international standards development and certification agency.)
- Staff are to ensure that all water parameter measurement instrumentation is calibrated at an appropriate frequency consistent with Halton's scheduled preventative maintenance procedures.
- Although illegal hydrant water taking is governed under the Region's Waterworks By-law No. 131-10 and contravention is enforced by staff, it was requested that the Risk Assessment procedure of Halton's water system be updated to acknowledge that illegal hydrant use can occasionally occur.

These findings post no significant risk to the water system and are not critical to the water treatment process or the delivery of safe drinking water. They aim to make the system more robust and improve upon the current state of operational practices and related documentation.

Action items from the 2013 external audit report are available for review in the Councillors' Library.

All Drinking Water Quality Management System corrective actions are being addressed in order to conform to the Ontario Drinking Water Quality Management Standard. Accordingly, Halton was issued official certificates of accreditation for the Quality Management Systems for each of its four drinking water systems on June 21, 2013 (see Attachment #1).

Next Steps

As part of the ongoing Drinking Water Quality Management System Accreditation process, NSF International Strategic Registrations or another Ministry of the Environment accredited auditing organization, will administer future surveillance audits of our system documentation in 2014 and 2015 and a comprehensive onsite Verification Audit in 2016 of Halton's Quality Management System.

These mandatory system audits will continue to ensure the consistent production and delivery of safe drinking water that meets all regulatory requirements through the effective implementation of the Drinking Water Quality Management System and continued effort of all involved Halton staff.

FINANCIAL/PROGRAM IMPLICATIONS

The cost of the Management Review and Full Scope Accreditation is funded from the Water Operating Budget.

RELATIONSHIP TO HALTON REGION'S 2011-2014 ACTION PLAN

Key Initiative

Enhance, protect and maintain quality, quantity and safety of groundwater and surface water.

Priority Area

Environmental Protection and Conservation of Water – Protect water quality and the natural environment through effective treatment, source protection conservation and adherence to regulations.

Respectfully submitted,



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Director, Water Services



Mitch Zamojc P.Eng.
Commissioner, Public Works

Approved by



Jane MacCaskill
Chief Administrative Officer

If you have any questions on the content of this report,
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Attachments: Attachment #1 – Certificates of Registration of Halton's Four Drinking Water Systems