

1

DRINKING WATER QUALITY MANAGEMENT STANDARD OPERATIONAL PLAN AND MUNICIPAL DRINKING WATER LICENSE SUBMISSION

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report dated January 13, 2009, from the Commissioner of Environmental Services.

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council receive the Drinking Water Quality Management Standard Operational Plan as endorsed by the Commissioner of Environmental Services for information.
2. Staff report back on the status of the Drinking Water Quality Management Standard following the accreditation audits in 2009.
3. The Regional Clerk forward a copy of this report to the Clerks of the nine local municipalities for information.

2. PURPOSE

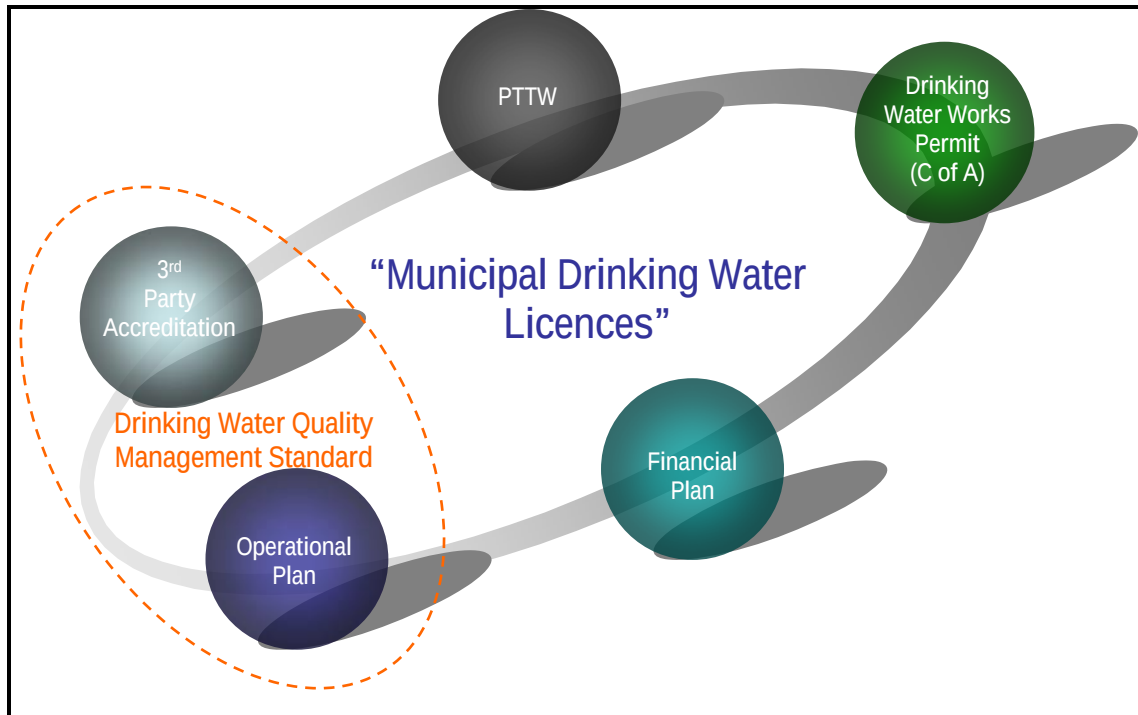
This report provides an update on the submission status for the Drinking Water Quality Management Standard (DWQMS) Operational Plan and implementation.

3. BACKGROUND

The Drinking Water Quality Management Standard (DWQMS) and the Municipal Drinking Water License (MDWL) is a regulatory requirement

The final version of the DWQMS was released in October 2007 and was legislated under Ontario Regulation 188/07. The DWQMS is based on the internationally recognized International Organization for Standardization (ISO) series of standards and will become part of the larger municipal drinking water licensing regime (Figure 1) proposed by the Ministry of the Environment. The standard requires a drinking-water system owner to identify roles and responsibilities at all levels in the organization that have input into the operation of its drinking-water system.

Figure 1
Components of the Municipal Drinking Water License



Previous staff reports on the DWQMS and the MDWL

Previous staff reports to Regional Council on the DWQMS in 2008 include:

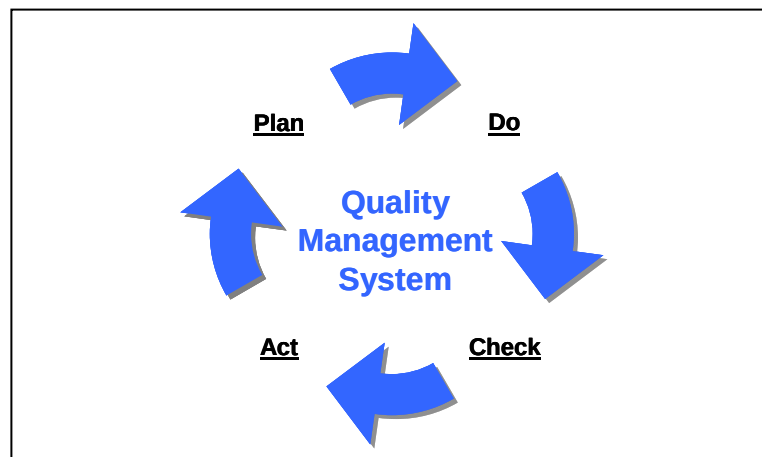
- Transportation and Works Committee Report No. 9 dated November 20, 2008, *'Drinking Water Quality Management Standard Implementation and Municipal Drinking Water License Update'* detailing the status on outstanding items for the Operational Plan and recommending delegation of Operational Plan and MDWL endorsement to the Commissioner of Environmental Services.
- Transportation and Works Committee Report No. 6 dated June 19, 2008, *'Drinking Water Quality Management Standard Implementation Update'* providing updates to roles and responsibilities in the DWQMS as a result of departmental reorganization.

4. ANALYSIS AND OPTIONS

Internal Audits and the Management Review were completed in November 2008.

In general, management systems have a 'PLAN-DO-CHECK-ACT' philosophy that fosters continual improvement (Figure 2).

Figure 2
Management Systems Philosophy



Management systems are founded on the principles of 'PLAN' business processes and activities, 'DO' or carry out the plan, 'CHECK' that what is being carried out is the same as what is planned to be done, and 'ACT' on anything that is not congruent with the plan or change the plan. This cycle is mirrored in the DWQMS where the actual Operational Plan is the 'PLAN-DO' portion and the Internal Audits and Management Review constitute the 'CHECK-ACT' portions of the philosophy.

Internal Audits were carried out in November 2008 to determine the conformity of the DWQMS Operational Plan to the standard. All findings from the audits were addressed, reported at the Management Review meeting, incorporated into the final version of the Operational Plan and are identified in the Management Review Meeting Minutes (*see Attachment 1*).

In accordance with the DWQMS (Element 20), Management Review must be conducted annually (at a minimum) for the Top Management. The agenda for this review is documented in the DWQMS and below:

- a) Incidents of regulatory non-compliance.
- b) Incidents of adverse drinking-water tests.

- c) Deviations from CCP limits and response actions.
- d) Efficacy of the risk assessment process.
- e) Internal and Third-Party Audits.
- f) Results of emergency response testing.
- g) Operational performance.
- h) Raw water supply and drinking water quality trends.
- i) Follow-up action items from previous management reviews.
- j) Status of management actions identified between reviews.
- k) Changes that could affect the quality management system.
- l) Consumer Feedback.
- m) Resources needed to maintain the DWQMS.
- n) Results of infrastructure review.
- o) Operational Plan: currency, content, and updates.
- p) Staff Suggestions and recommendations for improvement.

The Management Review meeting was held on November 18, 2008 by members of the Compliance team, Environmental Promotion and Protection Branch. The Operational Plan indicates that members of “Operational Top Management” are to be in attendance and that the meeting cannot be carried out without the DWQMS Representative, the Director of Operations, Maintenance and Monitoring and the Commissioner. The Commissioner of Environmental Services is also delegated the authority to represent ‘Corporate Top Management’ and the Owner. The Management Review Report and meeting minutes are attached (*see Attachment 1 and Attachment 2*).

The Operational Plan was finalized and endorsed by the Commissioner of Environmental Services on December 11, 2008 (*see Attachment 3*). The Operational Plan contains the Integrated Management System Policy that meets the requirements of the DWQMS, as well as the ISO 9001:2000 and 14001 programs which the Operations, Maintenance and Monitoring Group in the Environmental Services Department have been registered since 1999 and 2001 respectively.

York Region is one of the first Municipalities in Ontario to submit their Operational Plan under ‘Full Scope – Entire DWQMS’

In accordance with Ontario Regulation 188/07, the Operational Plan for York Region’s drinking water systems is required to be submitted by January 1, 2009.

The Operational Plan was finalized and endorsed by the Commissioner of Environmental Services in December 2008. Following the endorsement, the Operational Plan was submitted to the Ministry of the Environment and the Canadian Goods and Standards Board (CGSB) in mid December 2008. The Ministry of the Environment has contracted the CGSB as the sole accrediting body for the DWQMS.

The Operational Plan was submitted under the ‘Full Scope – Entire DWQMS’ option according to the Ministry of the Environment’s Accreditation Protocol (July 2007). This

option requires full implementation of the entire DWQMS and will require a full system audit, which includes an off-site documentation audit by the CGSB and an on-site verification audit for each drinking water system. The on-site audit could be conducted as early as February 2009, reliant on CGSB scheduling.

With selection of 'Full Scope – Entire DWQMS' option, York Region's Operational Plan is one of the first such plans in Ontario to undergo an entire DWQMS audit by the CGSB.

Municipal Drinking Water License applications were completed and endorsed by the Commissioner of Environmental Services and submitted with the Operational Plan to the Ministry of the Environment in December 2008

The Operational Plan and its accreditation is a portion of the Ministry of the Environment's Municipal Drinking Water License program. As part of the Municipal Drinking Water License program, an application was made along with the Operational Plan for the Municipal Drinking Water License itself and the Drinking Water Works Permit. The Drinking Water Works Permit will replace the Certificate of Approval process for the drinking water systems that currently exists today.

5. FINANCIAL IMPLICATIONS

Costs for DWQMS accreditation audits are estimated to be \$52,000

The CGSB has released an estimated schedule of fees (Table 1).

Table 1
Estimated Fees for Accreditation Audits based on the
Fee Structure Provided by the Third Party Auditor (CGSB)

Drinking Water System	Estimated Fee
Ansnoerveldt	\$2,600
Ballantrae	\$3,100
Georgina and Keswick	\$7,500
King City	\$3,100
Kleinburg	\$3,100
Mount Albert	\$3,100
Newmarket/Holland Landing/Aurora/York Water	\$8,000
Nobleton	\$3,100
Schomberg	\$3,100
Stouffville	\$4,400
Auditor(s) Travel Fees	\$11,600
Total Estimated Fees	\$52,700

The estimated fees were included in the 2009 budget cycle.

The CGSB has indicated that the off-site, documentation audit will be a single audit of the Operational Plan and it will not require ten reviews of the Operational Plan documentation based on the ten drinking water systems in York Region.

The CGSB has not determined at this time how the on-site audits will be carried out, which may impact the cost and the schedule based on the amount of time the auditors may be required to allocate.

6. LOCAL MUNICIPAL IMPACT

Each local municipality is required to submit an Operational Plan for their drinking water systems. In accordance with Ontario Regulation 188/07, the local municipalities will begin their staged submissions starting January 1, 2009 with the City of Vaughan.

Each local municipality will be responsible for their own audit and accreditation costs. Costs may vary across municipalities depending on their complexity and serviced population.

York Region staff will continue to meet with the local municipalities to co-ordinate the DWQMS as required through various stakeholder committees including the DWQMS Liaison group (currently meeting on a quarterly basis) and the Waterworks Liaison Committee (meeting at least semi-annually).

7. CONCLUSION

Completion of the internal audits and the Management Review meeting concluded the 'PLAN-DO-CHECK-ACT' cycle or full cycle of the DWQMS implementation.

The Operational Plan and MDWL applications were submitted to the Ministry of the Environment in December 2008 and the 'Full Scope – Entire DWQMS' option was selected. It is anticipated that York Region will be one of only a few municipalities in Ontario to submit for accreditation under this option at this time.

The CGSB will be conducting accreditation audits in early 2009 and staff will report back on the recommendations from the audit when it is completed.

For more information on this report, please contact Laura McDowell, Director of Environmental Promotion and Protection at Ext. 5077.

The Senior Management Group has reviewed this report.

(The three attachments referred to in this clause are attached to this report.)