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ROLES AND RESPONSIBILITIES AS PART OF THE REGULATED DRINKING WATER QUALITY MANAGEMENT STANDARD

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, December 4, 2007, from the General Manager, Water and Wastewater:

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council approve the roles and responsibilities recommended in this report as required for the Ministry of the Environment's Drinking Water Quality Management Standard (DWQMS).
2. Regional Council endorse the proposed structure and schedule for submission of The Regional Municipality of York's Drinking Water Quality Management Standard (DWQMS) Operational Plans to the Ministry of the Environment.
3. Regional Council authorize the General Manager of Water and Wastewater to endorse the Operational Plans for each drinking-water system.
4. Regional staff report back to Council on the status of the DWQMS implementation in late spring 2008 and prior to submission of Operational Plans to the MOE.
5. The Regional Clerk forward a copy of this report to the Clerks of the nine local municipalities for information.

2. PURPOSE

This report recommends roles and responsibilities for The Regional Municipality of York's Drinking Water Quality Management Standard.

3. BACKGROUND

In October 2004, the MOE released the first draft of the DWQMS and the final version of the standard was released in October 2007 and enshrined in a regulatory framework under Ontario Regulation 188/07. The DWQMS is based on the internationally recognized ISO series of standards and it is a part of the larger municipal licensing regime. It requires a drinking-water system owner to identify roles and responsibilities at

all levels in the organization that have input into the operation of the drinking-water system.

In December 2004 and January 2006 staff reports were submitted that provided comments on the draft versions released by the MOE.

4. ANALYSIS AND OPTIONS

4.1 The roles and responsibilities of Owners and Operators of drinking-water systems under the DWQMS

The *Safe Drinking Water Act (2002)* defines owner and operating authority in the following manner:

- “owner” includes, in respect of a drinking-water system, every person who is a legal or beneficial owner of all or part of the system, but does not include the Agency or any of its predecessors where the Agency or predecessor is registered on title as the owner of the system;
- “operating authority” means, in respect of a drinking-water system, the person or entity that is given responsibility by the owner for the operation, management, maintenance or alteration of the system;

The Operational Plans for York Region’s drinking-water systems are in the development stages. A gap analysis has been conducted on the current Quality Management System (ISO 9001:2000) to which the drinking-water systems are registered and the requirements of the DWQMS. A draft Operational Plan template has been developed and the outstanding requirements include:

- Definitions of roles and responsibilities as approved by the Owner.
- Drinking-water system descriptions.
- Risk assessments.

4.1.1 Who are the Owner and the Operating authority in York Region’s drinking-water systems?

Under the DWQMS, the definition of owner and operating authority is required as it relates to York Region. Some owner roles, responsibilities and authorities, for the purpose of the DWQMS may be delegated to various staff, departments, or committees within the organization.

Table 1 conveys the requirements of the DWQMS for the Owner and Operating Authority and those requirements translated for York Region.

Table 1
DWQMS Roles and Responsibilities in York Region

DWQMS Role	DWQMS Responsibilities	York Region Role
Owner	• Endorses Operational Plan • Submits Operational Plan to MOE • Ensures operating authority is accredited • Monitors DWQMS and the need for resources to support it	York Region (the corporation) is defined as the owner and Regional Council acts on its behalf
Operating Authority	• Prepares Operational Plan • Endorses Operational Plan • Submits Operational Plan • Implements the DWQMS • Obtains accreditation from third party • Communicates with owner on DWQMS and resources	The Water and Wastewater Branch is defined as the operating authority

4.1.2 What does 'Top Management' mean?

In the DWQMS, top management is responsible for endorsing and communicating the requirements of the DWQMS. Top management is a group of people that irrespective of other duties:

- Are at the highest management level within the operating authority as defined by the operating authority.
- Make decisions about the DWQMS.
- Make recommendations to the owner about the drinking water system.

Section 20 of the DWQMS, entitled 'Management Review' requires that a procedure be documented to provide Top Management with the resources that allows them to 'evaluate (the DWQMS) for continuing suitability and the adequacy and effectiveness of the DWQMS'. There are a number of items that the operating authority is required to report on within Section 20 of the DWQMS that provides information for Top Management to make decisions on the state of the DWQMS.

As previously stated, within the Operational Plan the owner has been defined as The Regional Municipality of York and Regional Council (who acts on behalf of the corporation), it is recommended that the following definitions appear with regards to Top Management:

1. Corporate Top Management

Corporate Top Management has been defined as the General Manager, Water and Wastewater, the Commissioner of Transportation and Works, the CAO and the members of Regional Council. The General Manager will act as the agent between the Operational Top Management and the Corporate Top Management. On an annual basis, a report will be provided to Corporate Top Management on the continuing suitability, adequacy and effectiveness of the DWQMS.

2. Operational Top Management

Operational Top Management has been defined as the management team for the Water and Wastewater branch including (but not limited to) the General Manager, the Manager of Operations and the Manager of Regulatory Compliance and Policy. The Operational Top Management will meet a minimum of twice yearly and provide decisions on the day-to-day operation of the continuing suitability, adequacy and effectiveness of the DWQMS. The General Manager will act an agent for Corporate Top Management and liaise between both groups.

4.2 Submission of Operational Plans are required by January 1st, 2009

In accordance with O.Regulation 188/07, the Regional Municipality of York is required to submit Operational Plans to the MOE as well as the third party accreditation body by January 1st, 2009.

A document entitled *Accreditation Protocol (July 2007)* was released by the MOE and it details the different options for third party registration for municipal drinking-water systems owners and operating authorities.

O.Regulation 188/07 defines a number of accreditation options for drinking-water system owners including:

1. Limited Scope – Partial DWQMS

This option requires only 12 elements of the DWQMS be implemented and a desktop audit by the accreditation body will occur upon submission of Operational Plans. The Full Scope of the DWQMS is required to be submitted within 12 months of Limited Scope accreditation and an onsite audit will be conducted at that time.

2. Limited Scope – Entire DWQMS

This option requires only 20 elements of the DWQMS be implemented and a desktop audit by the accreditation body will occur upon submission of Operational Plans. The Full Scope of the DWQMS is required to be submitted within 12 months of Limited Scope accreditation and an onsite audit will be conducted at that time.

3. Full Scope

The Full Scope option requires implementation of all 21 elements of the DWQMS and includes an onsite audit by the accreditation body at the time of submission of Operational Plans.

The Limited Scope options are only available to drinking-water system owners at initial accreditation and will not be acceptable for any re-registration audits.

4.2.1 Operational Plan Submission for Council Endorsement in fall 2008

Each drinking-water system in York Region will require an operational plan. The MOE has indicated that each system that has a physical connection to another is to be considered one drinking-water system. Below is a list of drinking-water systems that are anticipated to be individually accredited to the DWQMS and have their own operational plans:

- York Water System/Aurora/Newmarket/East Gwillimbury system
- Ansnorveldt Well system
- Ballantrae Wells system
- Georgina Water Treatment Plant
- Keswick Water Treatment Plant
- King City Wells system
- Kleinburg Wells system
- Nobleton Wells system
- Mount Albert Wells system
- Stouffville Wells system

The division of the drinking-water systems will also be part of the MOE's drinking-water license regime. This will replace the current Certificate of Approval process but will be very similar in nature.

The Operational Plans require the endorsement of the Owner. At this time, it is recommended that the General Manager act on behalf of Council and endorse the final Operational Plans. A report will be prepared and submitted to Council prior to the submission of the Operational Plans to the MOE.

5. FINANCIAL IMPLICATIONS

Similar to an ISO registered system, a third party auditor is required to accredit each drinking-water system to the DWQMS. Although a third party accreditation body has yet to be named, the MOE has estimated that an accreditation audit will cost in the range of \$3000 to \$7000 per site depending on system size. Third party accreditation costs include:

- Application fee
- Document review
- On-site verification
- Listing fee

It is estimated that the accreditation process could cost upwards of \$70,000 (\$7000 x 10 drinking-water systems). Accreditation is not required until the Operational Plan has been submitted to both the accreditation body and the MOE, which is currently scheduled for January 1, 2009. The funding required will be budgeted in the 2009 budget.

6. LOCAL MUNICIPAL IMPACT

The local municipalities, as with all other drinking-water system Owners and Operators, are required to implement the MOE's DWQMS. The timelines for implementation vary depending on the size of the municipality and are detailed in O. Reg. 188/07 (Table 2).

Table 2
Operational Plan Submission Deadlines for Local Municipalities in York Region
as required by Ontario Regulation 188/07

Operational Plan Submission Deadline	Local Municipality
January 1 st , 2009	City of Vaughan
February 1 st , 2009	Town of Markham
	Town of Richmond Hill
August 1 st , 2009	Town of Aurora
	Town of East Gwillimbury
	Town of Georgina
	Township of King
	Town of Newmarket
	Town of Whitchurch-Stouffville

A working group chaired by Regional staff will be used to provide all the municipalities an opportunity to discuss concerns and issues. Regional staff will be present at each session and will provide feedback on their own experiences related to both the DWQMS and the ISO 9000 program implementation. The meetings are scheduled quarterly but can be convened on an as-needed basis.

Additionally, the DWQMS requires any interconnections with other owners be described. Regional staff will be working with the local municipalities, as well as the City of Toronto and Region of Peel to detail the drinking-water system relationships.

7. CONCLUSION

Ontario Regulation 188/07 requires The Regional Municipality of York to register its drinking-water systems to the DWQMS and submit its Operational Plans to the MOE and the third party accreditation body by January 1, 2009. At this stage in the implementation of the DWQMS, roles and responsibilities must be defined and endorsed by the owner and operating authority of the drinking-water systems.

Regional staff continue to work on the DWQMS implementation and will report back to Council in late spring 2008 and fall 2008.

For more information on this report contact Michele Maitre, Manager Regulatory Compliance and Policy, Water and Wastewater Branch in Environmental Services, at extension 5097.