

COMMITTEE OF THE WHOLE – DECEMBER 3, 2007

DRINKING WATER QUALITY MANAGEMENT STANDARD – DEVELOPMENT AND PROGRESS

Recommendation

The Commissioner of Engineering and Public Works recommends that this report be received for information.

Economic Impact

The Ministry of the Environment (MOE) requires that the City develop a Drinking Water Quality Management Standard (DWQMS) to obtain accreditation as the Operating Authority under the Safe Drinking Water Act (2002) by January 2009, and that updates be provided annually. The cost associated with the development of the Standard was approved in the 2007 Capital Budget and that project is underway. The MOE requires maintenance of the DWQMS on an ongoing basis and that the standard be reviewed and updated on an annual basis. To maintain the Standard requires ongoing department staff time, and review by Senior Management annually.

Communications Plan

To obtain accreditation as the Operating Authority under the Safe Drinking Water Act (2002) Council must endorse the DWQMS prior to submission to the Ministry on January 2009. Council will be required to endorse the plan annually to maintain accreditation as the Operating Authority. The Standard must be made available to the public, but would exclude any information that is considered a safety or security matter.

Purpose

The purpose of this report is to provide information to Council on the development and progress of the DWQMS.

Background - Analysis and Options

The City's water distribution services must meet the Ministry of the Environment's licensing program. The City will be required to develop an Operational Plan(s) and to obtain accreditation as the Operating Authority under the *Safe Drinking Water Act (2002)*. The City operates two drinking water systems, the Vaughan Drinking Water System which is a surface water system serving most of the City, and the Kleinburg Drinking Water System which is a ground water (well-based) system that operates independent of the Vaughan system. Public Works will be required to develop two Operational Plans, yet some elements of the plans will be common to both. For example, the budget process (Element 14), document and records control (Element 5), management review (Element 20), etc., are the same, regardless of which system is being dealt with. However, the areas that need to be separated, for example the risk assessment chart, will be broken down into the 2 distinct systems, and the description of the drinking water systems will be specific to each of the two drinking water systems.

Prior to the *Safe Drinking Water Act (SDWA)*, there were far fewer regulated procedures and standards. However, Public Works has developed numerous programs and procedures necessary to comply with the regulations made under the *Safe Drinking Water Act*. To understand whether the existing practices and procedures meet the requirements of the Drinking Water Quality Management Standard, a Gap Analysis was undertaken to compare what is existing, against the specific requirements of the DWQMS.

The Gap Analysis performed for Vaughan's Drinking Water Systems was based on the specific requirements of the *Safe Drinking Water Act (2002)* and the DWQMS (October 2006), and, was based on the 21 elements of the DWQMS, and included both the "Plan" and "Do" components of each of the elements. In addition, existing Regulations (O. Reg. 170/03 and O. Reg. 188/07) and Director's Directions, Minimum Requirements for Operational Plans (July 2007) and Accreditation Protocol (July 2007), were reviewed, and the applicable information incorporated into the Gap Analysis report. This gap analysis required meetings with various departments within the City, including Finance, Human Resources, Legal, Engineering, Public Works etc.

The gap analysis provided a percentage completion (i.e. how large is the gap between what exists and what is required), for the 21 elements of the DWQMS. The percentages take into account whether each element has been developed, documented, implemented and audited. It should be noted there is no approved Quality Management System in place in a municipality that meets the requirements of the DWQMS at this time.

The total percentage of completion for the overall Quality Management for Vaughan is estimated to be 35%. This percentage is comparable with other municipalities in the Province who have undertaken similar gap analyses. For several of the requirements of the standards, only minor work is required to increase the percentages, as there are practices in place. Most procedures are written, but some need to be formally documented. As well, there is currently no internal audit process used to ensure "we are doing what we say we do". Once an internal audit is completed to ensure conformance with the QMS, each requirement will automatically receive an additional 10%. Due to legislative requirements, some elements of the DWQMS (i.e., records, competencies, sampling, testing & monitoring) received a higher percentage complete since existing practices and procedures have already been established and only require formal documentation in some cases. Once these procedures are documented, the gaps will be reduced substantially.

There are some elements (e.g., continual improvement, internal audit, QMS policy, etc.), that are new for municipalities to address as part of their drinking water systems. As such, there are identified gaps for several of the DWQMS requirements, as there is no formal process or documented procedure currently in place.

The City must obtain 100% as an overall score in order to ensure the Operational Plans meet the requirements of the DWQMS and 21 elements have been developed, documented (where applicable), implemented, and audited. The Quality Management System must also exist beyond being a documented manual, and must be the current practice for the City's drinking water systems. In other words, it is to be a living document.

To complete the Quality Management System and to meet the requirements of the DWQMS, these programs and practices need to be translated into documented procedures. With the aid of the BRI International (our consultants), this will be done in time to ensure compliance with all applicable legislation.

A further update on the relevant drinking water legislation and requirements will be presented to Council at a future Working Session.

Relationship to Vaughan Vision 2007

This report is consistent with the priorities previously set by Council. Specifically, this initiative ties into Vaughan Vision:

- A-1 "Pursue Excellence in Service Delivery",
- A-2 "Enhance and Ensure Community Safety, Health & Wellness", and
- C-3 "Maintain Assets & Infrastructure Integrity".

Regional Implications

Although the Region of York is the wholesaler of water to the City, the Region must develop its own Drinking Water Quality Management Standard. Staff from the Region and the City do meet regularly to ensure that both plans are consistent in matters of mutual concern

Conclusion

Public Works staff are activity working with BRI International to develop the DWQMS for adoption by Council to meet the Ministry of Environment's date of January 2009. This report is to meant update Council on the status of this project.

Attachments

N/A

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