

COMMITTEE OF THE WHOLE WORKING SESSION - FEBRUARY 26, 2008

DRINKING WATER UPDATE

SAFE DRINKING WATER ACT COMPLIANCE

Recommendation

The Commissioner of Engineering and Public Works recommends that:

1. For the purpose of the Operational Plan, "Corporate Top Management" be defined as the City Manager, the Deputy City Manager, the Commissioner of Engineering & Public Works, the Director of Public Works, the Director of Engineering Services, and the Director of Development/ Transportation Engineering;
2. For the purpose of the Operational Plan, "Operational Top Management" be defined as the Director of Public Works, the Manager of Environmental and Technical Services, the Supervisor of Water and the Supervisor of Compliance and Training; and,
3. The presentation by BRI International be received.

Economic Impact

There is no direct economic impact as a result of the recommendations contained in this report; however, there will be additional costs related to the lead sampling and testing requirements. These will be included in the 2008 Water Budget submission.

Communications Plan

The City's Drinking Water Quality Management Standard will form the basis for the operation of the City's water distribution system. Once finalized and approved, information will be posted on the City's web site.

Advertisements for the new lead testing program have been placed in the local newspapers and on mobile signs, asking for residents and business owners to participate in this program. Information about this program has also been posted on the City's web site.

Purpose

To update Council with respect to amendments to the Safe Drinking Water Act, and advise as to the City's steps to ensure compliance with these requirements.

Background - Analysis and Options

A. Drinking Water Quality Management Standard

As reported previously to Council in December of 2007, 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 1, 2009.

In October 2004, the Ministry of Environment issued its first draft of the Drinking Water Quality Management Standard (DWQMS). The final version of the standard was released on October of 2007 and is covered under Ontario Regulation 188/07.

The DWQMS is based on the ISO series of standards, and forms part of the municipal licensing program implemented by the province. The DWQMS requires a drinking water system owner to identify roles and responsibilities at all levels of the organization that may have input into the operation of the drinking water system.

For the past few months, BRI have conducted interviews with various City staff from a number of departments as part of a gap analysis. The purpose of the gap analysis was to determine what the City has in place already to enable it to conform to the new requirements. The gap analysis indicated that the City was already meeting approximately 35% of the new requirements that will come into effect in January, 2009. This percentage is similar to other municipalities in Ontario. Since the gap analysis was performed, BRI has been working with staff from the various departments to gather the necessary information to develop the required standards.

In accordance with Regulation 188/07, the City of Vaughan must submit Operational Plans to the MOE, and have a third party audit and accreditation by January 1, 2009. The MOE has issued a document that details the different options for third party registration for municipal drinking water system owners and operating authorities.

There are 3 options for accreditation. These include Limited Scope – Partial DWQMS, Limited scope – Entire DWQMS, and Full Scope.

The Limited Scope – Partial DWQMS requires that only 12 of the 21 elements of the DWQMS be implemented, and a tabletop audit by the accreditation body will occur upon submission of the Operational Plans. The Full Scope of the DWQMS must be submitted within 12 months of the Limited Scope accreditation, and an on-site audit would be conducted at that time.

The Limited Scope – Entire DWQMS requires that only 20 of the required elements be implemented, and similar to above, a tabletop audit would occur with submission of the Operational Plan. The Full Scope of the DWQMS would be required within 12 months of the Limited Scope Accreditation, and an on-site audit would be conducted at that time.

The Full Scope option requires that all 21 elements of the DWQMS be implemented, and an on-site audit be completed by the accreditation body at the time of the submission of the Operational Plans. The Limited Scope options are only available for the initial accreditation, and cannot be used for re-registration of the audits. The City is pursuing the Full Scope option.

The Owner of the water system is the Corporation of the City of Vaughan and Council, with Council acting on behalf of the Corporation. The “Standard of Care” Provisions in the *Safe Drinking Water Act* would apply to Owner/Council and Top Management. In relation to drinking water, it requires they exercise a level of care, diligence and skill that a reasonably prudent person would be expected to exercise in a similar situation. DWQMS provides Council and Top Management with tools to continually assess the City’s drinking water systems and to help ensure “Standard of Care” Provisions are met. Part of the Owner’s role is to:

- Create formal Council resolutions as required
- Implement a QMS in accordance with the DWQMS
- Receive and review regular update reports from Senior Management
- Ensure the system is being operated by an Accredited Operating Authority
- Ensure compliance with the Terms and Conditions of the License and its components

As part of the Operation Plan, certain levels of management are outlined. For the purposes of the Operational Plan, it is recommended that the following definitions appear to define Top Management:

“Corporate Top Management” be defined as the City Manager, the Deputy City Manager, the Commissioner of Engineering and Public Works, the Director of Public Works, the Director of Engineering Services, and the Director of Development/Transportation Engineering. Corporate Top Management must meet once annually and review the report from the Operational Top management with respect to the suitability, adequacy, and effectiveness of the DWQMS.

“Operational Top Management” be defined as the Director of Public Works, the Manager of Environmental and Technical Services, the Supervisor of Water and the Supervisor of Compliance and Training. This group must meet at least twice annually and provide decisions on the operation, suitability, adequacy and effectiveness of the DWQMS. The Director of Public Works will act as the agent for the Corporate Top Management, and act as a liaison between the Corporate Top Management and the Operational Top Management.

B. Mandatory Lead Testing Program

In July 2007, the Ontario Government revised Regulation 170/03 for Drinking Water Systems to mandate the testing of drinking water at private taps within buildings, and additional testing on the municipal water system.

The government developed this Lead Testing Program to address the concern of lead in drinking water. The source of the lead can be from many sources including: municipal lead service connections, lead plumbing, brass fixtures, and lead soldered joints in copper plumbing. The City replaced the last of the municipal lead service connections in the early 1990's.

The remaining sources of lead in drinking water are from lead plumbing, brass fixtures and lead soldered joints in copper plumbing. These sources are all components of a private plumbing system.

Starting December 15, 2007, all municipalities in Ontario are required to initiate a water sampling and testing program in private homes, Industrial/Commercial/Institutional (ICI) establishments, and the municipal water system, to detect the presence of lead in the drinking water.

To facilitate testing in private residences and Industrial/Commercial/Institutional (ICI) establishments, the City of Vaughan requires the cooperation of owners willing to allow City staff into their premises to obtain water samples. The Regulation requires that samples be taken from the faucet that is most frequently used as the source of drinking water, and by-pass any filters, softeners and other devices.

In accordance with the Regulation, samples are taken twice per year from each location during the periods of December 15/07 to April 15/08 and June 15/08 to October 15/08. The focus of the program are buildings constructed earlier than 1991, when lead in solder was still in use.

In accordance with the MOE requirements, the City is required to obtain 100 sample locations from the Vaughan water system, and 40 from the Kleinburg system. Each location may require up to one hour to complete the procedures in accordance with the MOE's requirements. The testing must be done twice per year.

The City has advertised for volunteer sampling locations from both businesses and residents. Advertisements have been placed in the local newspapers, and mobile signs have been used as well. Information about this program is also available on the City's web site.

Relationship to Vaughan Vision 2020

This report is consistent with the priorities previously set by Council and ties specifically to the following Vaughan Vision objectives:

- Pursue Excellence in Service Delivery
- Enhance and Ensure Community safety, Health & Wellness
- Maintain Assets & Infrastructure
- Plan and Manage Growth & Economic Vitality
- Ensure Financial Sustainability
- Support the Professional Development of Staff

Regional Implications

As has been noted in previous reports, the Region must also develop similar plans for their drinking water systems. BRI Inc. is the City's consultant on this project, and they are also working with a number of other area municipalities and the Region in the development of these plans. Although each owner must develop their own plans, staff of the area municipalities and the Region meet regularly to discuss drinking water and DWQMS related issues

Conclusion

The Act requires the City to define Top Management as it related to its drinking water system. The definitions contained in the recommendations will meet the needs of the City and its Operational Plan.

In accordance with the MOE's Regulations, the City is mandated to provide lead testing to 140 business and residential locations across the City. As a result, there will be additional costs for sampling and testing. These costs will be included in the 2008 Water Budget submission.

Attachments

N/A

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Respectfully submitted,

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