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THE MUNICIPAL DRINKING WATER LICENCE AND THE DRINKING WATER QUALITY MANAGEMENT STANDARD

The Transportation and Works Committee recommends the adoption of the recommendation contained in the following report, December 13, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATION

It is recommended that staff report back to the Transportation and Works Committee and Regional Council when the Regional Water System is licensed following the finalization of the Drinking Water Quality Management Standard by the Ministry of The Environment.

2. PURPOSE

This report is to inform members of Transportation and Works Committee and Regional Council of the status of the Municipal Drinking Water Licence and the Drinking Water Quality Management Standard (DWQMS). The report also advises Council how Regional staff have prepared for the implementation in a proactive manner.

3. BACKGROUND

The Part II of the Walkerton Report recommended that the Ministry move towards an approval framework that would incorporate the concepts of the ISO 9001:2000 standard and specific industry best practices. As a result, the Ministry of the Environment developed the municipal drinking water licence program which incorporates the drinking water quality management standard. The licence program will facilitate meeting the 'Standard of Care' provision, which is a direct recommendation from Justice O'Connor as part of the Walkerton Inquiry.

The drinking water quality management standard outlines the requirements of an operational plan for water systems. It defines the roles and responsibilities of the owner of water systems while focussing on system specific management processes towards ensuring safety of water supply to the public. It further describes implementation strategies for the management systems.

On an annual basis, staff evaluate the performance of the system by conducting internal audits and hire consultants to perform independent audits. As part of the continuous improvement process, management reviews are conducted on an annual basis as well. In

addition to these audits, the Ministry of Environment will be conducting its own independent audit of the Regional Water Systems once the Drinking Water Quality Management Standard is finalized.

The Drinking Water Quality Management Standard platform is based on the quality management principals under the ISO 9001 Quality Management System and a risk management approach similar to the hazards analysis and critical control points approach.

To a large extent, the pending Drinking Water Quality Management Standard relies on internal audits, management reviews and third party accreditation toward ensuring the integrity of the program.

The risk management approach is a structured approach to assess points of weakness and establish multiple barriers at these points to protect the drinking water system.

4. ANALYSIS AND OPTIONS

York Region is a two-tier service provider responsible for providing water and wastewater services to the surrounding nine area municipalities: Aurora, East Gwillimbury, Georgina, King, Newmarket, Whitchurch-Stouffville, Markham, Richmond Hill and Vaughan. York Region is responsible for water supply, production, treatment, storage and trunk distribution of sixteen registered water systems servicing over 918,383 residents. These systems already have a Quality Management System in place which meets the requirements for ISO 9001:2000 standard. This Quality Management System was registered in 2002, and as a result has evolved into a well managed and comprehensively documented system.

Benefits of a Drinking Water Quality Management Standard include:

- A consistent operational approach.
- A demonstration of due diligence.
- Greater employee stewardship.
- Increased operational efficiencies through elimination of redundancies.

In spring 2006, staff reviewed the existing Quality Management System, and compared it to the pending Drinking Water Quality Management Standard. From this, staff produced a gap analysis that has identified a need to complete a risk assessment of the regional water systems.

This risk assessment involves a comprehensive evaluation of the regional water systems with the objectives of identifying drinking water hazards that could adversely impact public health and outline all essential activities and processes.

The Water and Wastewater Branch, through its Regulatory Compliance and Policy group, is positioned favorably to complete the risk assessment and is moving forward with a scheduled completion in January 2007.

In the summer of 2006, staff provided Ministry of the Environment officials with a demonstration of our Quality Management System. Following this, the Ministry advised staff that York Region already has a well managed and comprehensively documented system in place. Accordingly, Ministry of the Environment recommended that York Region complete the risk assessment of the water systems and submit the Operational Plan once the Ministry of the Environment finalizes the Drinking Water Quality Management System.

It is anticipated that the Drinking Water Quality Management Standard will be finalized in spring 2007. Accordingly, staff will be submitting the regional operational plan for the water systems at this time. Upon submission, York Region's Operational Plan will be audited by the Ministry. Following a successful audit, the York Region's water system will be licensed by the Ministry under the Drinking Water Quality Management Standard.

The Region is ahead of most municipalities due primarily to the well established ISO 9001:2000 certified management of its water systems.

5. FINANCIAL IMPLICATIONS

York Region's current operation already includes all costs associated with the ISO 9001:2000 Quality Management System. However, as the Ministry of the Environment will be conducting its own independent registration audit every three years on all 16 Regional Water Systems with an estimated cost between \$3,000 to \$7,000 per system. The total cost for all 16 Regional Water Systems will range from \$48,000 to \$112,000, delivered through the 2007 Water and Wastewater operating budget.

6. LOCAL MUNICIPAL IMPACT

The Drinking Water Quality Management System is one component of the licensing of the Regional Water System. All local municipalities will be responsible for licensing their water systems independently from The Regional Water System.

York Region Staff have been communicating with local municipalities through a Water Standards Committee chaired by York Region.

7. CONCLUSION

York Region is ready to submit its Operational Plan to the Ministry as soon as the Drinking Water Quality Management System is finalized. We do not foresee any change in the current management of our water system due to the pending Drinking Water Quality Management System as a result of the registration of our water system under ISO 9001:2000.

For more information on this report contact Debbie Korolnek, extension 3015, General Manager of the Water and Wastewater Branch in the Transportation and Works Department.

The Senior Management Group has reviewed this report.