



DEVELOPMENT & INFRASTRUCTURE SERVICES – PUBLIC WORKS SERVICES  
TOWN OF NEWMARKET  
395 Mulock Drive  
P.O. Box 328  
Newmarket, ON L3Y 4X7  
www.newmarket.ca  
info@newmarket.ca  
905.895.5193

March 5, 2015

**DEVELOPMENT & INFRASTRUCTURE SERVICES REPORT  
PUBLIC WORKS SERVICES 2015 - 22**

TO: Committee of the Whole

SUBJECT: 2014 Newmarket Water Distribution System Annual Water Quality Summary Report

ORIGIN: Director, Public Works Services

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**RECOMMENDATIONS**

**THAT the Development & Infrastructure Services – Public Works Services – Report PWS 2015-22 dated March 5, 2015 regarding the 2014 Newmarket Water Distribution System Annual Water Quality Summary Report be received and the following recommendations(s), be adopted:**

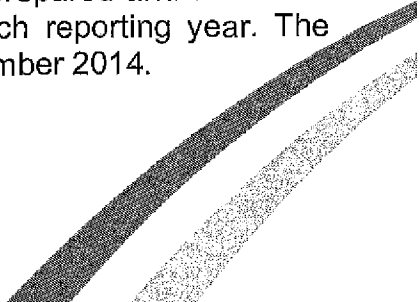
- 1. THAT the 2014 Newmarket Water Distribution System Annual Water Quality Summary Report for the period of 1 January 2014 to 31 December 2014 be received for information;**
- 2. AND THAT the information in the Annual Water Quality Summary report be available for public viewing on the Town's website at <http://www.newmarket.ca/en/townhall/resourcelibrary/2014WQSummaryReportFinal.pdf> , at the Customer Service counter at 395 Mulock Drive and the Operations Centre at 1275 Maple Hill Court.**

**COMMENTS**

**ANNUAL REPORT**

The **2014 Newmarket Water Distribution System Annual Water Quality Summary Report** is required under Ontario's Drinking Water Systems Regulation (O.Reg. 170/03), made under the Safe Drinking Water Act, 2002 which requires that the owner of a municipal drinking water system prepare an annual report on the operation of the system and the quality of its water.

Schedule 22 of Ontario Regulation 170/03 also requires that a report be prepared and submitted to the members of Council by March 31<sup>st</sup> of the following year, for each reporting year. The reporting period covered in this year's report is 1 January 2014 to 31 December 2014.



The report contains an overview of water distribution system, water quality sampling, system maintenance, replacement and repairs, Part III of the General Requirements for the water distribution system and the Monthly Water Flows and Daily Consumptions for Newmarket.

The report was prepared by the Acting Compliance Coordinator in conjunction with the designated Overall Responsible Operator (ORO) for the water distribution system and Manager of Water/Wastewater.

The report contains the water quality reports (samples taken) for the dates between 1 January 2014 and 31 December 2014. In 2014 Public Works Services' provincially certified Water Operators took 1,197 Microbiological samples and 16 samples for lead for submission to the York Durham Regional Environmental Laboratory for analysis. Operators also tested 7,710 Chloramine (disinfectant) residuals in the field. Water quality within the Town of Newmarket's distribution system is tested 7 days a week, 365 days per year.

From January 1, 2014 to December 31, 2014, the Town of Newmarket reported 142 Adverse Water Quality Incidents (AWQI's) in the Newmarket Water Distribution System (WDS). Most of these were as a result of disinfectant (chloramine) residuals dropping below the regulated minimum of 0.25mg/L combined chlorine. The AWQI Table in the Annual Water Quality Summary Report outlines all of the AWQI's for 2014, the response/action taken by operators and the corresponding re-sampling results. **At no time was public safety at risk and staff document and implement procedures to ensure corrective actions are taken immediately.**

In an effort to address the ongoing challenges in the Newmarket WDS in regards to disinfectant residual decay, the Town:

- Maintained the services of Stantec Consulting to create a hydraulic model of the Newmarket WDS to model water quality trends/scenarios. This model has been instrumental in addressing water quality challenges, and has been noted as being one of the most advanced water system models created to date in North America.
- Additional Residual samples were taken as part of a proactive approach to system monitoring. An additional 6149 operational samples were taken above the regulated requirements.
- Enhanced our Unidirectional Flushing and Swabbing programs
- Contracted Corix Water Services to assist with watermain flushing for water quality
- Continues to work closely with industry experts, the Local Medical Officer of Health, the Ministry of the Environment, the Region of York, and the Town of East Gwillimbury in trying to address our ongoing challenges and come up with both short and long-term solutions

The laboratory results of the water samples taken during 2014 shows that The Town of Newmarket and its operators have provided safe drinking water and excellent customer service to its residents.

The report also highlights major work performed on the water distribution system during 2014.

## **DWQMS**

The Drinking Water Quality Management Standards (DWQMS) requires that the relevant aspects of the Standard and its effectiveness be communicated by Top Management to the Owner, the Corporation of the Town of Newmarket along with the results of the Management Review no later than the 31<sup>st</sup> of March each year.

The Onsite Annual External Audit was performed by SAI Global on January 13, 2015 which identified 4 non-conformities. Each of these has since been addressed. A copy of both the off-site and on-site audits is available upon request from Public Works Services.

## **BUSINESS PLAN AND STRATEGIC PLAN LINKAGES**

The Community Strategic Plan for the Town of Newmarket articulates the goals of:

- Living well... focusing on health, safety and the environment to promote activity and enrich lives;
- Well-equipped and managed... implement policy and processes that reflect sound and accountable governance for fiscal responsibility, service excellence, and management of assets and services to meet operational demands

## **CONSULTATION**

Consultation is not required for this report.

## **HUMAN RESOURCE CONSIDERATIONS**

None required for this report.

## **BUDGET IMPACT (CURRENT AND FUTURE)**

The utility rate portion of the operating and capital budget provides the funding required for the regulatory requirements under the Safe Drinking Act. The additional costs incurred as a result of flushing to maintain water quality are currently under review/negotiation with the Region of York.

## CONTACT

For more information on this report, contact; Bill Wilson, Manager of Water/Wastewater, at 905-953-5300, ext. 2553 or email at [bwilson@newmarket.ca](mailto:bwilson@newmarket.ca).

Prepared by: Blair Saunders  
Blair Saunders,  
Acting Compliance Coordinator

Reviewed by: Bill Wilson  
Bill Wilson,  
Manager, Water/Wastewater

Approved by: Christopher Kalimootoo  
Christopher Kalimootoo, B.A., P Eng., MPA, PMP  
Director, Public Works Services

Approved by: Peter Noehammer  
Peter Noehammer,  
Commissioner, Development & Infrastructure Services