



Town of Newmarket
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2020 Annual Water Quality Summary Report Staff Report to Council

Report Number: 2021-19

Department(s): Water/Wastewater

Author(s): Manager, Water/Wastewater

Meeting Date: March 22, 2021

Recommendations

1. That the report entitled 2020 Annual Water Quality Summary Report dated 22 March 2021 be received; and,
2. That the Town of Newmarket 2020 Annual Water Quality Summary Report, and its associated attachments, referenced herein be posted online at newmarket.ca, and be made available by request at the customer service counter, 395 Mulock Drive, as well as at the Newmarket Operations Centre, 1275 Maple Hill Court; and,
3. That Staff be authorized and directed to do all things necessary to give effect to this resolution

Executive Summary

This information contained within this Staff Report, and its associated attachments, are intended to satisfy the annual reporting requirements stipulated within the O.Reg 170/03 of the *Ontario Safe Drinking Act, 2002*.

This Staff Report, and its associated attachments, contains information with respect to the Town's drinking water system as well as the primary legislative and regulatory requirements that are applicable to the Town's drinking water system.

This Staff Report, and its associated attachments also contains information pertaining to adverse water quality incidents (AWQI's); the annual Ministry of Environment Conservation and Parks (MECP) inspection results; water quantity and flow rate data; as well as water quality data; as it relates to the Town of Newmarket's drinking water

system for the 2020 reporting period which covers January 1st to December 31st of the 2020 calendar year.

Purpose

The purpose of the 2020 Drinking Water Summary Report, and its associated attachments, is to satisfy the annual reporting requirements stipulated within the O.Reg 170/03 of the *Ontario Safe Drinking Act, 2002*; specifically the requirements specified within Section 11 and Schedule 22 of O.Reg. 170/03. The information contained within this Information Report, and its associated attachments, pertains to the Town of Newmarket's drinking water system for the 2020 reporting period which covers January 1st to December 31st of the 2020 calendar year. The information contained within this Information Report and its associated attachments can assist the Mayor and Council, as the Owners of the Town's drinking water system, in meeting their respective Standard of Care requirements as identified within the *Safe Drinking Water Act, 2002*.]

Background

Drinking Water System Description

A detailed description of the Town's drinking water system can be located within the "Drinking Water System Description" section of the attached "Town of Newmarket 2020 Drinking Water Summary Report"

Drinking Water System Monetary Expenses

Information regarding the major expenses incurred by the Town during the period associated with this report to install, repair and/or replace drinking water system infrastructure can be found within "Attachment Two: 2020 Ontario Drinking Water Systems Regulation Annual Report".

Legislative & Regulatory Requirements

The primary legislative and regulatory requirements that directly affect the operation of the Town's drinking water distribution system can be located within the "Legislative & Regulatory Requirements" section of the attached "Town of Newmarket 2020 Drinking Water Summary Report". Please note that the information contained within this attachment is not an exhaustive list of legislative and regulatory requirements applicable to the operation of a large municipal residential drinking water system.

Discussion

2020 Adverse Water Quality Incidents (AWQI's)

In 2020 a total of 99 AWQI events occurred, 97 were related to low chlorine residuals, 1 (one) was related to the presence of Total Coliform and 1 (one) was related to the Presence of E.coli and Total Coliform.

The AWQI involving E.Coli and Total Coliform was an isolated incident and associated with 1 (one) specific sample station. The corrective actions necessary to resolve this AWQI were completed by the Town in a timely fashion once the Town was informed of this AWQI. All the necessary corrective actions and reporting were completed, with respect to this AWQI, to the satisfaction of the local Medical Officer of Health (MOH) and Ministry of Environment Conservation and Parks (MECP).

The AWQI involving Total Coliform was an isolated incident and associated with 1 (one) specific sample location. The corrective actions necessary to resolve this AWQI were completed by the Town in a timely fashion once the Town was informed of this AWQI. All the necessary corrective actions and reporting were completed, with respect to this AWQI, to the satisfaction of the local Medical Officer of Health (MOH) and Ministry of Environment Conservation and Parks (MECP).

Additional information regarding the AWQI's that occurred in 2020 can be located within the "2020 Adverse Water Quality Incidents (AWQI's)" section of the "Town of Newmarket 2020 Drinking Water Summary Report" as well as "Attachment Two: 2020 Ontario Drinking Water Systems Regulation Annual Report"

2020 Annual MECP Inspection Results

The Town undergoes an annual inspection of its drinking water system by the MECP. The primary focus of the annual MECP drinking water system inspection is to confirm the Town is complying with applicable legislative and regulatory requirements that fall under the jurisdiction of the MECP.

During the 2020 inspection the MECP identified 2 (two) incidents of non-compliance with regulatory requirements. Schedule 22 of O.Reg. 170/03 requires that all non-compliance(s) with applicable legislation be documented within the Summary Report; "Table One: Incidents of Regulatory Non-Compliance and Actions Required" describes in detail the regulatory non-compliances identified during the 2020 MECP inspection.

Table One: Incidents of Regulatory Non-Compliance and Actions Required

Non-Compliance	MECP Observation	Action(s) Required	Additional Information
1. The Owner/ Operating Authority was not in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water	Seven (7) Form 1 documents were provided by the Town, regarding new watermain installations in May 2019 and March 2020. Part 4 of the forms were observed to be missing	A draft procedure is currently undergoing review to ensure forms include all required information. No further action required.	The Town is in the process of creating a procedure/process to ensure that this regulatory requirement is better adhered to moving forward in order to prevent repeat occurrences of this

Works Permit during the inspection period.	information, such as the date and the Owners signature. This was discussed with the Town, who advised it has been flagged internally as an issue.		regulatory non-compliance.
2. All changes to the system registration information were not provided within ten (10) days of the change.	The Town underwent recent staffing changes, which are not reflected in the system registration information.	An email dated September 28 th , 2020 was sent to waterforms@ontario.ca to update the contacts in the system registration information to reflect the recent staffing changes. No further actions required.	The Town plans on creating a procedure/ process to ensure that this regulatory requirement is better adhered to moving forward in order to prevent repeat occurrences of this regulatory non-compliance.

The Town received a final inspection rating of 97.57% as a result of the 2020 MECP inspection. The final inspection rating received during the 2020 MECP inspection was an improvement over the final inspection rating of 91.39% received in relation to the 2019 MECP Inspection. The full details regarding the 2020 MECP inspection are located within “Attachment One: 2020 MECP Newmarket Distribution System Inspection Report”.

2020 Water Quantity & Flow Rate Data

The 2020 water quantity and flow rate data is located within “Attachment Three: 2020 Town of Newmarket Water Quantity & Flow Rate Data”.

2020 Water Quality Data

The 2020 water quality data is located within “Attachment Two: 2020 Ontario Drinking Water Systems Regulation Annual Report”.

Specific Information regarding the summary of the most recent water testing results that occurred during the reporting period associated with this report, as required under O.Reg. 170/03 and the Town’s respective Municipal Drinking Water License, can be found within “Attachment Two: 2020 Ontario Drinking Water Systems Regulation Annual Report”.

Specific information regarding any lead sampling that took place during the reporting period associated with this report can also be found within “Attachment Two: 2020 Ontario Drinking Water Systems Regulation Annual Report”.

In 2020 nine (9) exceedances were observed by the Town with respect to sodium concentrations in drinking water samples that were collected from the distribution system; based upon the 2020 drinking water sample results the sodium concentrations within the Town’s distribution system ranged from 14.1 – 24.8 mg/L. A drinking water sample with a result indicating that the concentration of sodium exceeds 20 mg/L is prescribed as an adverse result of a drinking water test for the purpose of Section 18 of the SDWA, 2002; and must therefore be reported accordingly. A result indicating that the concentration of sodium exceeds 20 mg/L in a drinking water sample must be reported under Section 18 of the SDWA, 2002 if a report has not been made in respect to sodium in the preceding 57 months. The last report that the Town made with respect to a sodium exceedance was April 11th, 2016, therefore the next reporting date with respect to an adverse result for sodium in the Town’s drinking water is January 7th, 2021. Any sodium exceedances that may be observed by the Town in the future will be reported and responded to in accordance with all applicable legislative and regulatory requirements. The Town continues to meet all legislative and regulatory response obligations with respect to sodium exceedances identified within drinking water samples, no further actions are required by the Town at this time in relation to this subject matter.

Sodium is a natural occurring element in the environment that may be present naturally in both groundwater and surface water sources. Sodium levels in groundwater and surface water sources may also be influenced by road salt application practices. Sodium levels within municipal drinking water may also be influenced by the addition of water treatment/conditioning chemicals, such as sodium silicate and sodium hypochlorite; both of which are added to the drinking water supplied to the Town by York Region. Additional information regarding sodium in drinking water can be located on the “Drinking Water Quality and Monitoring” page of York Regions website.

Conclusion

The 2020 Drinking Water Summary Report, and its associated attachments, satisfies the applicable annual reporting requirements stipulated within O.Reg. 170/03 of the *Safe Drinking Water Act, 2002*.

The information contained within this Information Report and its associated attachments can assist the Mayor and Council, as the Owners of the Town’s drinking water system, in meeting their respective Standard of Care requirements as identified within the *Safe Drinking Water Act, 2002*.

The Town’s drinking water system, as well as the Owner and Operating Authority, are subject to strict legislative and regulatory requirements to keep drinking water safe.

Results from the 2020 reporting year help to demonstrate the Town's commitment to the consistently delivery of safe drinking water through compliance with applicable legislative and regulatory requirements.

Copies of the Town of Newmarket 2020 Drinking Water Summary Report have been made available to the public at:

- Robert N. Shelton Operations Centre (1275 Maple Hill Court)
- Newmarket Municipal Offices, Customer Service Counter (395 Mulock Drive)
- Online at www.newmarket.ca

Please note that Newmarket's 2020 Annual Water Quality Summary Report will only be available to the public at the Robert N. Shelton Operations Centre and Newmarket Municipal Offices (Customer Service Counter) once public access has been permitted to these locations.

Business Plan and Strategic Plan Linkages

The 2018-2022 Council Strategic Priorities identifies "Environmental Stewardship" as strategic priority. The 2020 Town of Newmarket Drinking Water Summary Report and its associated attachments have linkages to this strategic priority by 'supporting highly effective partnerships with the MECP and York Region'.

Consultation

Key stakeholders that contributed to the content of this Staff Report and its associated attachments include:

- Operating Authority Personnel
- The Ministry of Environment, Conservation and Parks
- The Regional Municipality of York

Human Resource Considerations

No human resource considerations are directly associated with this Staff Report and its associated attachments.

Budget Impact

No budget impacts are directly associated with this Staff Report and its associated attachments.

Attachments

This Staff Report includes the following attachments:

- Town of Newmarket 2020 Annual Water Quality Summary Report
- Attachment One: 2020 MECP Newmarket Distribution System Inspection Report
- Attachment Two: 2020 Ontario Drinking Water Systems Regulation Annual Report

- Attachment Three: 2020 Town of Newmarket Water Quantity & Flow Rate Data

Approval

Rob Gillis, Manager, Water/Wastewater

Mark Agnoletto, Director, Public Works Services

Peter Noehammer, Commissioner, Development & Infrastructure Services

Contact

For more information regarding this report, please contact Rob Gillis, Manager of Water/Wastewater, at 905-953-5300 ext. 2553 or by email at rgillis@newmarket.ca.