The Corporation of the City of Kawartha Lakes

Council Report

Report Number WWW2019-005

Date:March 26, 2019Time:2:00 p.m.Place:Council Chambers

Ward Community Identifier: ALL

Title: 2018 Annual Waterworks Summary Report

Description: Summary of Mandatory Schedule 22 and Section 11 Drinking Water Reports for Municipal Drinking Water Systems in the City of Kawartha Lakes

Author and Title: Julie Henry, Quality Management and Policy Coordinator

Recommendation(s):

That Report WWW2019-005 Annual Waterworks Summary Report, be received; in accordance with reporting requirements of Ontario Regulation 170/03 Schedule 22 and Section 11 under the *Safe Drinking Water Act*, 2002 for the following municipal residential drinking water systems (DWS) owned by the City of Kawartha Lakes.

- Birchpoint Estates DWS
- Bobcaygeon DWS
- Canadiana Shores DWS
- Fenelon Falls DWS
- Janetville DWS
- King's Bay DWS
- Kinmount DWS
- Lindsay DWS
- Manilla DWS (Woods of Manilla)
- Manorview DWS
- Mariposa Estates DWS
- Norland DWS
- Omemee DWS (Victoria Glen)
- Pinewood DWS
- Pleasant Point DWS

Department Head:

Financial/Legal/HR/Other:_____

Chief Administrative Officer:_____

- Sonya DWS
- Southview DWS
- Victoria Place DWS
- Western Trent DWS
- Woodfield DWS
- Woodville DWS

Background:

At the Council Meeting of March 20, 2018, Council adopted the following resolution for the 2017 Annual Waterworks Summary Reports to meet legislative requirements:

11.1.16 WWW2018-005

2017 Annual Waterworks Summary Report

Julie Henry, Quality Management and Policy Coordinator

CR2018-143

That Report WWW2018-005, 2017 Annual Waterworks Summary

Report, be received; in accordance with reporting requirements of Ontario Regulation 170/03 Schedule 22 under the Safe Drinking Water Act, 2002 for the following Municipal Residential Drinking Water Systems (DWS) owned by the City of Kawartha Lakes:

- Birchpoint Estates DWS
- Bobcaygeon DWS
- Canadiana Shores DWS
- Fenelon Falls DWS
- Janetville DWS
- King's Bay DWS
- Kinmount DWS
- Lindsay DWS
- Manilla DWS (Woods of Manilla)
- Manorview DWS
- Mariposa Estates DWS
- Norland DWS
- Omemee DWS (Victoria Glen)
- Pinewood DWS
- Pleasant Point DWS
- Sonya DWS
- Southview Estates DWS
- Victoria Place DWS
- Western Trent DWS
- Woodfield DWS
- Woodville DWS

CARRIED

This report addresses the requirements under the *Safe Drinking Water Act,* 2002 (SDWA) and Section 11 and Schedule 22 of Ontario Regulation 170/03 for the 2018 reporting year, which requires owners of Large and Small Municipal Residential Drinking Water Systems to prepare an annual report that includes information on various aspects of the operations of the drinking water system(s) throughout the preceding calendar year. In years past the information has been captured in two separate reports (Section 11 and Schedule 22), as both have different reporting deadlines. In order to streamline the reporting process, it was decided to prepare one comprehensive report that contains all of the required information under both sections of the regulation, being completed on the earlier date of February 28, 2019.

Section 11 requires that the report must contain a brief description of the drinking water system, including a list of water treatment chemicals used by the system during the reporting period. It must also contain a summary of all reports made to the Ministry of Environment, Conservation and Parks (MECP) under section 16-4 of Schedule 16 of the regulation, for any other observation(s) (other than adverse results which are reported upon immediately), that could possibly indicate improper disinfection.

A description of all corrective actions taken during this period is also included in the report. The report includes a summary of all results from tests required through the regulation covering the reporting period, as well as test results from previous periods of testing if testing was not required within the current reporting period.

It is required for operating authorities to make Section 11 reports available to the public free of charge. It is also required that reports for systems that serve more than 10,000 residents be published on the City of Kawartha Lakes website by February 28th of the year following the reporting period. This is only applicable to the Lindsay DWS, however, all drinking water system reports are made available on the City's website for residents. Combined Section 11 and Schedule 22 (see below) reports are also made available through the Water and Wastewater Division upon request.

Schedule 22 reports must be reported to Council annually, and not later than March 31st of the year following the reporting period. The reports must include a list of requirements of the *Safe Drinking Water Act*, the regulations, the system's approval and any order that the system failed to meet at any time during the reporting period. The report must also include the duration of any failure of the system as well as a description of the measures taken to correct said failures.

The report includes information that can be used for the purpose of enabling the owner to assess the capability of the drinking water system to meet existing and planned demands. This type of information includes a summary of quantities, flow rates of water supplied (including monthly averages), maximum daily flows and daily instantaneous peak flow rates. This information must be compared to the rated capacity and flow rates defined in the system's approval.

Rationale:

The Ministry of Environment, Conservation and Parks (MECP) conducts unannounced and announced inspections at the twenty-one (21) municipallyowned drinking water systems annually. The current reportable inspection cycle is from April 01, 2018 to March 31, 2019. Twenty (20) of the Water Treatment Plants are operated by Ontario Clean Water Agency (OCWA) while the Water and Wastewater Division operates the Lindsay Drinking Water System (treatment and distribution), and the other twenty (20) distribution systems owned by the City of Kawartha Lakes.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains up to fourteen (14) inspection modules and consists of up to one hundred and twenty (120) regulatory questions. The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring, record keeping and other related matters.

Every three years the Ministry reviews their risk-rating methodology for inspections.

When assessing compliance, there are several key areas addressed by the Ministry. These are: Capacity Assessment, Treatment Processes, Operations Manuals, Logbooks, Certification and Training, Water Quality Monitoring, Reporting and Corrective Actions and Treatment Process Monitoring. A Compliance Inspection Rating (CIR) of less than 100% is not necessarily an indication that drinking water was unsafe during the year. Percentage could be lost from a range of items such as documentation or reporting.

The summary table below (Table 1.) provides a year over year comparison of facility compliance inspection ratings given following the annual MECP inspection. Those facilities listed as "In Progress" had recently undergone their inspection and were awaiting their reports from the MECP at the time of this report. The results of the inspections for these facilities will be made available when inspection reports are complete.

It is important to note that all systems owned by the City of Kawartha Lakes provided healthy and safe drinking water to the public throughout the year. Of the 20 facilities that have received their inspection ratings for 2018-2019, 19 of them received a rating of 100%. This clearly illustrates the dedication and hard work of City and OCWA staff and their commitment to providing safe and reliable drinking water to the residents of the City of Kawartha Lakes. The one facility (Woodville) that received marginally less than 100% was a result of a manufacturer issue with the filters (which is further described in the following section), and was addressed immediately. It is also of note that the test results had never indicated there was a health concern with the water and it was safe to drink.

Table 1.

21 Drinking Water Systems	Compliance Rating (2017 – 2018)	Compliance Rating (2018-2019)	Status as of March 2019 (Complete/In progress)
Birchpoint Estates	100%		In Progress
Bobcaygeon	100%	100%	Complete
Canadiana Shores	100%	100%	Complete
Fenelon Falls	100%	100%	Complete
Janetville	100%	100%	Complete
King's Bay	100%	100%	Complete
Kinmount	100%	100%	Complete
Lindsay	100%	100%	Complete
Manilla	100%	100%	Complete
Manorview	100%	100%	Complete
Mariposa Estates	95.43%	100%	Complete
Norland	100%	100%	Complete
Omemee	100%	100%	Complete
Pinewood	100%	100%	Complete
Pleasant Point	100%	100%	Complete
Sonya	100%	100%	Complete
Southview	100%	100%	Complete
Victoria Place	100%	100%	Complete
Western Trent/Palmina	100%	100%	Complete
Woodfield	100%	100%	Complete
Woodville	100%	96.97%	Complete

A summary of the non-compliances received during the 2018-2019 inspection period are listed below. All instances of non-compliance have been resolved to the satisfaction of the MECP.

2018-2019 Non Compliances:

As indicated above, the MECP issued one non-compliance to OCWA with regards to the Woodville Drinking Water Facility that affected the CIR (Compliance Incident Report.)

As per the MECP final inspection report:

Records did not indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.

During the inspection is was discovered that the 1 micron absolute cartridge filters (model number FGF012EHS) currently in use are not ANSI/NSF Standard 53 certified as per Schedule E of Municipal Drinking Water Licence (number 141-115 and therefore the credit assignment to meet the minimum log removal/inactivation required for Cryptosporidium Oocysts and Giardia Cysts would not be satisfied.

Action(s) Required:

By no later than July 27, 2018 the Owner/Operating Authority shall replace the cartridge filters currently in use with cartridge filters that are ANSI/NSF Standard 53 (or equivalent) certified and provide a copy of the certification to the undersigned Provincial Officer. The Owner/Operating Authority shall ensure that the most recent copy of the ASNI/NSF Standard certificate is made available at all times.

Noted in the final report (published three weeks after the inspection):

It should be noted that the Operating Authority immediately reported and implemented corrective actions as per the local Health Unit and the Spills Action Centre in regards to the uncertified cartridge filters. Corrective actions include; installing 5 new filters and 7 used filters and a treated water bacteriological sample was collected and chlorine residual increased above 2.0 mg/L. Three bacteriological samples will be collected every week until confirmed NSF 53 filters are installed.

Action(s) Taken: Treated water bacteriological samples were collected and the chlorine residual was increased until the required filters were received and installed. NSF 53 certified filters were received and installed on July 5, 2018. All non-NSF 53 certified filters were removed from the facility and disposed of.

Action(s) taken satisfy MECP requirements.

Other Alternatives Considered:

Not applicable as this is an information report required by legislation.

Financial/Operation Impacts:

There are no financial implications associated with this report.

Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:

The 2018 Annual Waterworks Summary Report shows a commitment from the Water and Wastewater Division to protecting and enhancing water quality. As such, this report relates to strategic priorities through Goal 3 – A Healthy Environment and Goal 2 – An Exceptional Quality of Life. This report also addresses the action item 3.6.1 in the City Strategic Plan to Protect and Enhance Water Quality.

Consultations:

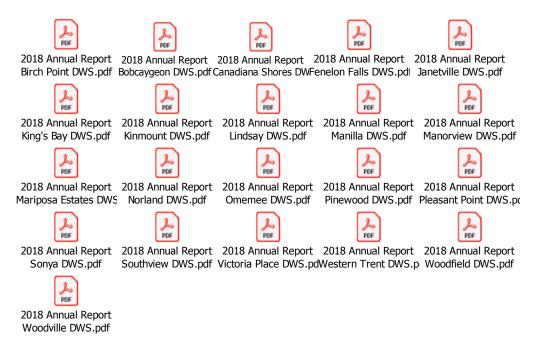
Director of Public Works Manager of Environmental Services Supervisor, Water and Wastewater Operations Contract Coordinator

Attachments:

Appendix A – City of Kawartha Lakes DWS Summary



Appendix B – 2018 Annual Water Works Summary Reports



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