
HALDIMAND COUNTY

Report ENV-01-2019 Annual Water Quality Reports

For Consideration by Council in Committee on February 26, 2019



OBJECTIVE:

To provide an annual summary of Haldimand County's Drinking Water Systems highlighting the responsibilities under the Statutory Standard of Care, Section 19 of the Safe Drinking Water Act 2002.

RECOMMENDATIONS:

1. THAT Report ENV-01-2019 Annual Water Quality Reports be received as information;
2. AND THAT Haldimand County continue to support and endorse the Quality Management Systems Operation Plan.

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Reviewed by: Jeff Oakes, Manager, Public Works Operations

Respectfully submitted: Philip Mete, P. Eng, General Manager of Public Works Operations

Approved: Donald G. Boyle, Chief Administrative Officer

EXECUTIVE SUMMARY:

The Annual Water Quality Reports address requirements identified in Ontario Regulation 170/03 under the Safe Drinking Water Act, 2002 and are intended to provide the public and Council with information about Haldimand County's drinking water systems.

The reports include Drinking Water Quality Management Standard activities, water quality sample results, a summary of water supplied by the drinking water system and a regulatory compliance summary.

BACKGROUND:

Drinking water is regulated by the Ontario Government through the Ministry of the Environment, Conservation and Parks (MECP). Ontario Regulation 170/03, under the Safe Drinking Water Act 2002, requires Haldimand County to prepare an annual report for each County drinking water system and present them to Council. These reports must be made available to the public free of charge. Copies may be obtained at any County office or from the Haldimand County website.

The purpose of the Annual Report, under Schedule 11 of Ontario Regulation 170/03, is to provide the public with drinking water system information, which includes water quality sample results for water supplied by the distribution system.

The Annual Report must:

- a) contain a brief description of the drinking water system, including a list of water treatment chemicals used by the system during the period covered by the report;
- b) summarize any reports made to the Ministry under subsection 18 (1) of the Act or section 16-4 of Schedule 16 during the period covered by the report;
- c) summarize the results of tests required under this Regulation, or an approval or order, including an Ontario Water Resources Act (OWRA) order, during the period covered by the report and, if tests required under this Regulation in respect of a parameter were not required during that period, summarize the most recent results of tests of that parameter;
- d) describe any corrective actions taken under Schedule 17 or 18 during the period covered by the report;
- e) describe any major expenses incurred during the period covered by the report to install, repair or replace required equipment; and
- f) in the case of a large municipal residential system or a small municipal residential system, include a statement of where a report prepared under Schedule 22 will be available for inspection under subsection 12(4) O.Reg. 170/03, s.11 (6).

The purpose of the Summary Report, under Schedule 22 of Ontario Regulation 170/03, is to provide the Owner, specifically the Mayor and Members of Council, with information to allow them to make informed decisions regarding the drinking water systems under their care. This report is intended as a full disclosure mechanism to ensure that Council, Senior Management, Regulatory Agencies and the public are aware of any outstanding compliance issues or operating changes within the systems.

The Summary Report must:

- a) list the requirements of the Act, the Regulations, the system's approval and any order that the system failed to meet at any time during the period covered by the report and specify the duration of the failure;
- b) for each requirement referred to in clause (a) of this section, that was not met, specify the duration of the failure and the measures that were taken to correct the failure;
- c) a summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows and daily instantaneous peak flow rates; and
- d) a comparison of the summary referred to in item (c) to the rated capacity and flow rates approved in the system's approval.

ANALYSIS:

The Statutory Standard of Care, which came into effect on December 31, 2012, extends legal responsibility to people with decision making authority over municipal drinking water systems. It requires that a level of care, diligence and skill is exercised with regard to municipal drinking water systems. To ensure due diligence, a standard of care guide has been attached to this report (Attachment 6) to provide members of Council and Senior Management with more information. A presentation will be brought forward at a future Council in Committee meeting, to further increase awareness of responsibilities under the Safe Drinking Water Act.

Haldimand County has three (3) distinct drinking water systems: the Nanticoke Drinking Water System; the Dunnville Drinking Water System; and the Caledonia and Cayuga Distribution System. As a result, Environmental Operations are required to develop water quality reports for each drinking water system.

In all drinking water systems, the County met regulatory requirements for sampling and monitoring, while consistently achieving all operational targets. There were two bacteriological sample results with the presence of total coliforms which required regulatory reporting. In both instances, re-samples were taken and results were negative for the presence of total coliforms.

In 2018, all drinking water systems experienced increases in potable water demand from the distribution systems. Although flows increased, the maximum day flow for each system was well below the rated capacity for each facility. When comparing 2017 and 2018 flows, a summary of increase is as follows:

Drinking Water System	2018 Percent Increase
Caledonia and Cayuga Distribution System	5.3%
Dunnville Drinking Water System	5.3%
Nanticoke Drinking Water System	9.7%

County Staff continue efforts to improve water accountability within the drinking water systems. In 2018 activities included, meter head replacements to improve water meter accuracy; leak detection surveys to identify water main leaks; plus develop a desktop system-wide water audit.

MECP inspections were completed for all drinking water systems. There were no non-compliance issues in the Caledonia and Cayuga distribution system or the Dunnville drinking water system. The Nanticoke drinking water system had one incident of non-compliance, which was immediately resolved by Veolia. Drinking water system inspection ratings are as follows:

Drinking Water System	2018 MECP Inspection Rating
Caledonia and Cayuga Distribution System	100%
Dunnville Drinking Water System	100%
Nanticoke Drinking Water System	96.9%

Council's continued support and endorsement of the Quality Management System (QMS) is an important requirement of the Drinking Water Quality Management Standard (DWQMS) through the Safe Drinking Water Act. The QMS Internal Audit Report and QMS Management Review Meeting Minutes are attached to this report (Attachments 4 and 5) to provide information regarding Haldimand County's QMS activities in 2018. Due to staff efforts, SAI Global (Independent Compliance Auditor) has recommended Haldimand County for continued Accreditation, which is a requirement to operate the water distribution systems.

Haldimand County and Veolia Water Canada (Haldimand's Contract Operator) are diligent in ensuring that regulatory requirements are achieved and Haldimand County residents are provided with safe, reliable drinking water.

FINANCIAL/LEGAL IMPLICATIONS:

Not applicable.

STAKEHOLDER IMPACTS:

Not applicable.

REPORT IMPACTS:

Agreement: No

By-law: No

Budget Amendment: No

Policy: No

ATTACHMENTS:

1. Caledonia and Cayuga Distribution System 2018 Annual Water Quality Report.
2. Dunnville Drinking Water System 2018 Annual Water Quality Report.
3. Nanticoke Drinking Water System 2018 Annual Water Quality Report.
4. 2018 Quality Management System (QMS) Internal Audit Report.
5. DWQMS Management Review Meeting #8, November 1, 2018.
6. Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils.
7. SAI Global Accreditation Certificate.