

MUNICIPALITY OF THAMES CENTRE

REPORT NO. PW-ES-002-24

TO:Mayor and Members of CouncilFROM:Environmental Services SuperintendentMEETING DATE:March 25, 2024SUBJECT:2023 Drinking Water Systems Summary Reports

RECOMMENDATION:

THAT Report No. PW-ES-002-24 be received for information;

AND THAT the 2023 Drinking Water Systems Summary Reports for the Dorchester and Thorndale Drinking Water Systems **BE RECEIVED** as required under Section 11 of O. Reg 170/03.

PURPOSE:

The purpose of this report is to inform Council and satisfy the regulatory requirements of the Safe Drinking Water Act (SDWA) and O. Reg. 170/03 Drinking Water Systems Schedule 22. Specifically, that a report is presented to system owners (Council) no later than March 31 of each year, providing an overview of activities in the Dorchester and Thorndale Drinking Water Systems for the preceding calendar year. The prepared 2023 Summary Reports for Dorchester and Thorndale meet the requirements of O. Reg 170/03, Schedule 22 of the Safe Drinking Water Act (SDWA), 2002.

BACKGROUND:

Section 19 of the SDWA extends the legal responsibility to the owners of the drinking water system (Council) and requires that they exercise a level of care, diligence, and skill with regard to that drinking water system. The Drinking Water Summary Reports (attachments A and B) are a compilation of water quality results, operational performance, and ministry objectives for council to review.

COMMENTS:

The primary purpose of an MECP inspection is to confirm compliance with relevant legislation and evaluate conformance with Ministry drinking water policies and guidelines. Inspections include reviewing treatment processes, distribution system components, operations, manuals, consumer relations, staff certification, and overall water quality. Provincial MECP officers may enter municipal property at any reasonable time to conduct

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these inspections, traditionally on an annual basis. Upon inspection completion, each water system is assigned an Inspection Summary Rating Record (IRR), which provides the Ministry and Local Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and water quality testing performance. The following highlights the Non-compliance and Best Management Practices items from the two MECP inspections.

MECP Compliance Inspections

Dorchester Drinking Water System

Staff participated in an MECP inspection at the Dorchester Drinking Water System on December 14, 2023. There were two (2) Non-compliance items identified related to the addition of an Operations Manual procedure and also a record keeping requirement. The report also included a Best Management Practice (BMP) recommendation of:

"It is strongly recommended that the individuals who exercise decision-making authority over the Dorchester Drinking Water System implement further disinfection byproduct reduction measures forthwith."

The MECP has been kept well informed that beginning in 2022 and during the time of this inspection, staff has taken various actions to reduce the disinfection byproduct levels (THM and HAA) in the Dorchester Drinking Water System. Disinfection byproducts are formed when a disinfectant (chlorine) reacts with naturally occurring organics in the source water. Operationally, staff have been successful in reducing these levels to marginally below the limit prescribed by the Ontario Drinking Water Quality Standards by increased testing and blending at the water plant as well as implementing a systematic flushing program in the distribution system that reduces the time these formations can occur. The Walkerton Clean Water Centre (WCWC) were contacted by staff to complete a pilot project to help reduce the natural organic matter thus lowering the disinfection by-products (THMs and HAAs) from October 2022 to the presentation of their final report in November 2023. Stantec Consulting, using the WCWC data, is drafting a report with THM and HAA reduction options. That report is scheduled to be delivered by April this year and will contain recommended options along with cost estimates that will be presented to Council for future budget considerations. In addition to these operational studies and reports, staff are also drilling exploratory wells to increase the level of quality and quantity of water supply.

The Dorchester Drinking Water System received an Inspection Rating Record (IRR) of 96.40% for the inspection period (attachment C).

Thorndale Drinking Water System

Staff participated in an MECP inspection at the Thorndale Drinking Water System on June 15, 2023. There was one (1) Non-compliance items identified related to a flow rate exceedance in the MDWL. This condition was immediately corrected and approved by the MECP. The report also included a Best Management Practice (BMP) recommendation that staff implemented immediately as well.

The Thorndale Drinking Water System received an Inspection Rating Record (IRR) of 96.25% for the inspection period (attachment D).



STRATEGIC PLAN LINK

Pillar: Community Communications & Engagement

Goal: Increase communications between the municipality (Council and Staff) and the public

REFERENCES:

O. Reg. 170/03, Schedule 22 of the Safe Drinking Water Act, 2002.

ATTACHMENTS:

attachment A Dorchester DWS 2023 Summary Report attachment B Thorndale DWS 2023 Summary Report attachment C Dorchester Drinking Water System MECP Inspection Report attachment D Thorndale Drinking Water System MECP Inspection Report

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Reviewed by: D. Barrick, Chief Administrative Officer