

August 30, 2022

File: SI-ES-LA-540

Town of Lakeshore
419 Notre Dame St.
Belle River, ON N0R 1A0

Attention: Mr. Truper McBride, CAO

**Re: Municipality of Lakeshore Drinking Water System – Tecumseh Distribution System;
Inspection Report**

Please find enclosed the Inspection Report for the inspection of the Lakeshore (Tecumseh) Distribution System (DWS# 260004982) on July 20, 2022.

The format of the enclosed report has been updated, and you will note that the non-compliance and/or non-conformance items are now detailed at the beginning of the report. All questions that were assessed are included in the Inspection Details Section.

In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Rating Report (IRR) provides the Ministry, the system owner and the local Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspectors' Annual Report.

Please note that due to a change in IT systems, the Inspection Rating Report (IRR) cannot be generated at the same time as the inspection report. The IRR will be sent separately and prior to any public release (typically within 1-2 month of the completion of the inspection).

If you have any questions or concerns regarding this report, please call me at (226) 280-1406.

Yours truly,



Emily Awad
Water Inspector, Provincial Officer #1823
Drinking Water and Environmental Compliance Division
Sarnia/Windsor District

Encl.

cc: Kyle Davis, Water Compliance, Krystal Kalbol, Corporate Leader – Operations, Albert Dionne, Division Leader – Water Management, Municipality of Lakeshore;
Nicole Dupuis, Chief Executive Officer, Kristy McBeth, Director of Health Protection, Elaine Bennett, Manager, Environmental Health, Victoria Peczulis, Manager, Environmental Health, Windsor-Essex County Health Unit;
Marc Bechard, Supervisor, Ministry of the Environment, Conservation and Parks.



MUNICIPALITY OF LAKESHORE DRINKING WATER SYSTEM -
TECUMSEH DS

Inspection Report

System Number: 260004982
Entity: MUNICIPALITY OF LAKESHORE
Inspection Start Date: 07/18/2022
Inspection End Date: 08/17/2022
Inspected By: Emily Awad
Badge #: 1823



(signature)

NON-COMPLIANCE/NON-CONFORMANCE ITEMS

This should not be construed as a confirmation of full compliance with all potential applicable legal requirement and BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	MRDW1001001	Question Type	Information
Question: What was the scope of this inspection?			
Legislative Requirement	Not Applicable		
Observation			
<p>The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.</p> <p>This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.</p> <p>This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.</p> <p>This unannounced focused inspection was conducted on July 20, 2022 for the inspection period July 1, 2021 to June 30, 2022.</p>			

Question ID	MRDW1000001	Question Type	Information
Question: Does this drinking water system provide primary disinfection?			
Legislative Requirement	Not Applicable		
Observation This Drinking Water System provides for only secondary disinfection and distribution of water. Primary disinfection is undertaken by another regulated Drinking Water System which provides treated water to this Drinking Water System.			

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Question ID	MRDW1034001	Question Type	Legislative
Question: Is the secondary disinfectant residual measured as required for the small municipal residential distribution system?			
Legislative Requirement	SDWA O. Reg. 170/03 7-2 (5); SDWA O. Reg. 170/03 7-2 (6);		
Observation The secondary disinfectant residual was measured as required for the small municipal residential distribution system. Secondary disinfection is supplied entirely by the City of Windsor Drinking Water System via the Tecumseh Distribution System. No re-chlorination takes place after entering the Lakeshore (Tecumseh) Distribution System. Logs show that distribution system chlorine residuals were taken and measured seven times per week as required; taken on two different days, 48 hours apart, at four and then three stations. Free chlorine measurements ranged from 0.33 to 1.56 mg/L during the inspection period. Chlorine residuals were measured at sample station LT-04 during the inspection on July 20, 2022: free = 0.87 and total = 1.13 mg/L.			

Question ID	MRDW1099001	Question Type	Information
Question: Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03)?			
Legislative Requirement		Not Applicable	
Observation Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03).			

Question ID	MRDW1082001	Question Type	Legislative
Question: For SMR systems, are all microbiological water quality monitoring requirements for distribution samples prescribed by legislation being met?			

Legislative Requirement	SDWA O. Reg. 170/03 11-2 (1); SDWA O. Reg. 170/03 11-2 (2);
Observation	
<p>All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a small municipal residential system were being met.</p> <p>For a Small Municipal Residential drinking water system, O. Regulation 170/03 requires the owner and operating authority to take a minimum of one sample every two weeks from the distribution system. All samples must be analysed for E. coli, total coliforms and heterotrophic plate count (HPC). The distribution system was sampled at a minimum of two locations every week, from four routine sample locations, resulting in 8 to 10 samples per month. Each of the samples taken was analysed for HPC.</p>	

Question ID	MRDW1096001	Question Type	Legislative
Question:			
Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?			
Legislative Requirement	SDWA O. Reg. 170/03 6-3 (1);		
Observation			
Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.			

Question ID	MRDW1086001	Question Type	Legislative
Question:			
Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?			
Legislative Requirement	SDWA O. Reg. 170/03 13-6.1 (1); SDWA O. Reg. 170/03 13-6.1 (2); SDWA O. Reg. 170/03 13-6.1 (3); SDWA O. Reg. 170/03 13-6.1 (4); SDWA O. Reg. 170/03 13-6.1 (5); SDWA O. Reg. 170/03 13-6.1 (6);		
Observation			
All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.			
As required under Sch. 13-6.1 of O. Regulation 170/03, samples must be taken and analysed for haloacetic acids in every calendar quarter (60 to 120 days apart). The Running Annual Average (RAA) was 12.3 ug/L.			

Question ID	MRDW1087001	Question Type	Legislative
Question: Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?			
Legislative Requirement	SDWA O. Reg. 170/03 13-6 (1); SDWA O. Reg. 170/03 13-6 (2); SDWA O. Reg. 170/03 13-6 (3); SDWA O. Reg. 170/03 13-6 (4); SDWA O. Reg. 170/03 13-6 (5); SDWA O. Reg. 170/03 13-6 (6);		
Observation All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. As required under Sch. 13-6 of O. Regulation 170/03, samples must be taken and analysed for Trihalomethanes in every calendar quarter (60 to 120 days apart). The RAA was 27 ug/L.			

Question ID	MRDW1113000	Question Type	Legislative
Question: Have all changes to the system registration information been provided to the Ministry within ten (10) days of the change?			
Legislative Requirement		SDWA O. Reg. 170/03 10.1 (3);	
Observation All changes to the system registration information were provided within ten (10) days of the change.			

Question ID	MRDW1059000	Question Type	Legislative
Question: Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?			
Legislative Requirement	SDWA O. Reg. 128/04 28;		
Observation The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system. Water distribution operators have access to maps produced on the owner's GIS system on			

their own tablet. The GIS maps identify locations of mains, hydrants and valves. Curb-stops are also entered each summer to complete the map set, although locating services and old archived maps are still needed for identifying older services. All as-built drawings are scanned into electronic files and hyperlinks to those files have been incorporated onto the GIS distribution maps. Hydrant and valve asset data are also hyperlinked.

Question ID	MRDW1060000	Question Type	Legislative
Question: Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?			
Legislative Requirement	SDWA 31 (1);		
Observation The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA. The master copy of the standard operating procedures (SOPs) is maintained at the Lakeshore DWS Belle River water plant. Selected procedures are maintained in the "Lakeshore Water Supply System - Operations & Maintenance/Contingency Plan Manual" binder maintained for the distribution group. Three SOPs were updated to include a Critical Control Point (CCP) for distribution residual to trigger flushing and documentation. All SOPs are also available to operators electronically in the Compliance Science Program. Copies of the Municipal Drinking Water System Licence and Drinking Water Works Permit are kept in a separate binder available to operators.			

Question ID	MRDW1061001	Question Type	Legislative
Question: Are logbooks properly maintained and contain the required information?			
Legislative Requirement	SDWA O. Reg. 128/04 27 (1); SDWA O. Reg. 128/04 27 (2); SDWA O. Reg. 128/04 27 (3); SDWA O. Reg. 128/04 27 (4); SDWA O. Reg. 128/04 27 (5); SDWA O. Reg. 128/04 27 (6); SDWA O. Reg. 128/04 27 (7);		
Observation Logbooks were properly maintained and contained the required information. Operators conducting compliance and operational testing record their activities in a Daily Operational Log, used as a shift log. Work orders, repair records and log sheets are used to document details of these activities. The Watermain Commissioning Form and Distribution Repair Form have been updated as per the last MECP inspection. Training was provided			

on these new and updated forms to all distribution operators.

Question ID	MRDW1062001	Question Type	Legislative
Question: Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?			
Legislative Requirement		SDWA O. Reg. 170/03 7-5;	
Observation Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5. Free chlorine residual monitoring is conducted by Lakeshore Water Distribution/Treatment operators, all of whom are properly certified.			

Question ID	MRDW1071000	Question Type	BMP
Question: Has the owner provided security measures to protect components of the drinking water system?			
Legislative Requirement	Not Applicable		
Observation The owner had provided security measures to protect components of the drinking water system. This is a standalone distribution system with no treatment, rechlorination, booster or storage facilities. All sampling stations and boundary meters are locked.			

Question ID	MRDW1073001	Question Type	Legislative
Question: Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
Legislative Requirement	SDWA O. Reg. 128/04 23 (1);		
Observation			

The overall responsible operator had been designated for each subsystem.

The overall responsible operator (ORO) for the distribution system holds Class 3 certification, exceeding the water distribution subsystem Class 1 certification of the Lakeshore (Tecumseh) Distribution System.

Question ID	MRDW1074001	Question Type	Legislative
Question: Have operators-in-charge been designated for all subsystems for which comprise the drinking water system?			
Legislative Requirement	SDWA O. Reg. 128/04 25 (1);		
Observation Operators-in-charge had been designated for all subsystems which comprise the drinking water system. Operators-in-charge (OIC) for each shift are required to be identified in a designated field in the Daily Operational Log book.			

Question ID	MRDW1075001	Question Type	Legislative
Question: Do all operators possess the required certification?			
Legislative Requirement	SDWA O. Reg. 128/04 22;		
Observation All operators possessed the required certification.			