

**Ministry of the Environment,
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**Ministère de l'Environnement, de la
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August 25, 2020

File: SI-ES-LA-540

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

Attention: Mr. Truper McBride, CAO

Re: Town of Lakeshore (Tecumseh) Drinking Water System Inspection Report

Please find enclosed the Drinking Water System Inspection Report for the inspection that was conducted at the Town of Lakeshore (Tecumseh) Drinking Water System (DWS# 260004982) on August 18, 2020.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "Taking Care of Your Drinking Water: A guide for members of municipal council" found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater.

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 Summary Rating Record (IRR), included as Appendix B of the inspection report, 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. If you have any questions or concerns regarding the rating, please contact Marc Bechard, Water Compliance Supervisor, at 519-383-3778.

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: Garry Punt, Supervisor, Water Operations, Ken Robert, Water Quality Compliance/Water Operator, Nelson Cavacas, Director of Engineering &IS, Albert Dionne, Manager Environmental Services, Town of Lakeshore;

Dr. Wajid Ahmed, Medical Officer of Health (A), Theresa Marentette, Director of Health Protection, Kristy McBeth, Director of Health Protection, Phil Wong, Manager, Health Inspection Department, Victoria Peczulis, Manager, Environmental Health, Windsor-Essex County Health Unit;

Marc Bechard, Supervisor, Ministry of the Environment, Conservation and Parks.



Ministry of the Environment, Conservation and Parks

TOWN OF LAKESHORE DRINKING WATER SYSTEM - TECUMSEH DS
Inspection Report

Site Number:	260004982
Inspection Number:	1-O08G0
Date of Inspection:	Aug 18, 2020
Inspected By:	Emily Awad

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Appendix A: Key Reference and Guidance Material

Appendix B: Inspection Summary Rating Record

OWNER INFORMATION:

Company Name:	LAKESHORE, THE CORPORATION OF THE TOWN OF		
Street Number:	419	Unit Identifier:	
Street Name:	NOTRE DAME St		
City:	BELLE RIVER		
Province:	ON	Postal Code:	N0R 1A0

CONTACT INFORMATION

Type:	Main Contact	Name:	Nicole Bradley
Phone:	(519) 728-9142	Fax:	(519) 728-4110
Email:	nbradley@lakeshore.ca		
Title:	Water Quality Compliance / Water Operator		

Type:	Operating Authority	Name:	Garry Punt
Phone:	(226) 345-2079	Fax:	(519) 728-4110
Email:	gpunt@lakeshore.ca		
Title:	Water Operations Supervisor		

INSPECTION DETAILS:

Site Name:	TOWN OF LAKESHORE DRINKING WATER SYSTEM - TECUMSEH DS
Site Address:	LAKESHORE
County/District:	LAKESHORE
MECP District/Area Office:	Windsor Area Office
Health Unit:	WINDSOR-ESSEX COUNTY HEALTH UNIT
Conservation Authority:	Essex Region Conservation Authority
MNR Office:	
Category:	Small Municipal Residential
Site Number:	260004982
Inspection Type:	Announced
Inspection Number:	1-O08G0
Date of Inspection:	Aug 18, 2020
Date of Previous Inspection:	Oct 28, 2019

COMPONENTS DESCRIPTION

Site (Name):	Lakeshore (Tecumseh Water Service Area) Distribution System	
Type:	Other	Sub Type:
Comments:		

The Lakeshore (Tecumseh) Distribution System is a standalone distribution system which supplies water to the area of the Town of Lakeshore roughly bounded to the east by lot lines east of Scott Sideroad, Manning Road to the west, the King's Highway 401 to the south and Essex County Road 42 to the north. Another individual stub is located along Little Baseline Road. The distribution system boundaries were revised in December 2016 when service to Lakeshore Road 103 and Lakeshore Road 101 was switched to the Lakeshore (Belle River) water service area. According to the current drinking water system profile, a population of approximately 129 residents in 46 customer connections is served by the Lakeshore (Tecumseh) Distribution System. It therefore falls into the "small municipal residential"

category under O. Regulation 170/03.

Water is supplied from the City of Windsor drinking water system via the Tecumseh distribution system. The City of Windsor draws its source water from the Detroit River in the vicinity of Belle Isle. Water mains take treated water from the City of Windsor to the service area via 150 and 200 mm diameter connection points with Tecumseh. The elevated storage tank in the community of Tecumseh (owned by the Town of Tecumseh) maintains distribution system pressure. Secondary disinfection is provided by the City of Windsor's A.H. Weeks water treatment plant, operated by the Windsor Utilities Commission. Neither the Town of Tecumseh, nor the Town of Lakeshore provide re-chlorination.

The Tecumseh Distribution System 2018 annual report, prepared by the Town of Tecumseh, states that:

- Tecumseh entered into an agreement on May 13, 2003 (By-law 70-2003) whereby the Tecumseh distribution system supplies drinking water to the Lakeshore distribution system.
- The agreement expired on December 31, 2007 and is currently being renegotiated; the status quo is maintained until a new agreement is signed.

INSPECTION SUMMARY:

Introduction

- 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.

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.

This report is based on an inspection of a "stand alone connected distribution system". This type of system receives treated water from a separately owned "donor" system. This report contains the elements required to assess key compliance and conformance issues associated with a "receiver" system. This report does not contain items associated with the inspection of the donor system, such as source waters, intakes/wells and treatment facilities.

This report is based on a "focused" inspection of the system. Although the inspection involved fewer activities than those normally undertaken in a detailed inspection, it contained critical elements required to assess key compliance issues. This system was chosen for a focused inspection because the system's performance met the ministry's criteria, most importantly that there were no deficiencies as identified in O.Reg. 172/03 over the past 3 years. The undertaking of a focused inspection at this drinking water system does not ensure that a similar type of inspection will be conducted at any point in the future.

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.

Specifically, this review includes an assessment of compliance/conformance in relation to the following:

- Drinking Water Systems Regulation (O. Reg. 170/03)
- Drinking Water Operator and Water Quality Analyst Certification Regulation (O. Reg. 128/04)
- Drinking Water System Licence 031-101, Issue Number 2, issued June 6, 2016
- Drinking Water Works Permit 031-201, Issue Number 4, issued June 6, 2016
- Ontario Drinking Water Quality Standards (ODWQS; O. Reg. 169/03) based on water quality data generated since the previous inspection.

The inspection was conducted on an announced basis on August 18, 2020. Due to restrictions caused by the COVID-19 pandemic, no physical inspection was conducted. The inspection included a review of the documentation provided and interview of operational staff. The inspection covers the period from November 1, 2019 to July 31, 2020.

Treatment Process Monitoring

- **The secondary disinfectant residual was measured as required for the distribution system.**

Secondary disinfection is supplied entirely by the City of Windsor drinking water system via the Tecumseh distribution system. No rechlorination takes place after entering the Lakeshore 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

Treatment Process Monitoring

from 0.59 to 1.54 mg/L during the inspection period.

Operations Manuals

- **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, available on six tablets, with more to come. 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 recently been incorporated onto the GIS distribution maps. Hydrant and valve asset data are also hyperlinked.

- **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. The SOPs were provided with the documentation and the three SOPs that were updated during this inspection period were reviewed.

Copies of the Municipal Drinking Water System Licence and Drinking Water Works Permit are kept in a separate binder available to operators.

Logbooks

- **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.

- **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.

Security

- **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.

Certification and Training

- **The overall responsible operator had been designated for each subsystem.**

The overall responsible operator (ORO) for the distribution system holds a Class 3 certification; exceeding the water distribution subsystem class 1 certification of the Lakeshore (Tecumseh) distribution system.

- **Operators-in-charge had been designated for all subsystems which comprised 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, however, this is not always completed for the distribution system.

Certification and Training

- All operators possessed the required certification.

Water Quality Monitoring

- All microbiological water quality monitoring requirements for distribution samples prescribed by legislation were being met.

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 generally 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.

- All haloacetic acid water quality monitoring requirements prescribed by legislation are being 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). Samples were taken as required, and within the prescribed time frame. The running annual average (RAA) for the inspection period is 8.9 ug/L (based on previous 3 samples). With the inclusion of the July 30, 2019 sample, the RAA is 9.53 ug/L.

- 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). Samples were taken as required, and within the prescribed time frame. The running annual average for the inspection period is 17.9 ug/L (based on previous 3 samples). With the inclusion of the July 30, 2019 sample, the RAA is 18.9 ug/L.

- Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

Water Quality Assessment

- 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).

NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

Not Applicable

SUMMARY OF RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

Not Applicable

SIGNATURES

Inspected By:

Emily Awad

Signature: (Provincial Officer)

Reviewed & Approved By:

Marc Bechard

Signature: (Supervisor)

Review & Approval Date:

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.



Stakeholder Appendix

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/drinkingwater



PUBLICATION TITLE	PUBLICATION NUMBER
FORMS: Drinking Water System Profile Information Laboratory Services Notification Adverse Test Result Notification	012-2149E 012-2148E 012-4444E
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	Website
Procedure for Disinfection of Drinking Water in Ontario	Website
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	Website
Filtration Processes Technical Bulletin	Website
Ultraviolet Disinfection Technical Bulletin	Website
Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments	Website
Certification Guide for Operators and Water Quality Analysts	Website
Guide to Drinking Water Operator Training Requirements	9802E
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	Website
Drinking Water System Contact List	7128E01
Ontario's Drinking Water Quality Management Standard - Pocket Guide	Website
Watermain Disinfection Procedure	Website
List of Licensed Laboratories	Website



Inspection Rating Record

Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2020-2021)

DWS Name: TOWN OF LAKESHORE DRINKING WATER SYSTEM - TECUMSEH DS
DWS Number: 260004982
DWS Owner: Lakeshore, The Corporation Of The Town Of
Municipal Location: Lakeshore

Regulation: O.REG 170/03
Category: Small Municipal Residential System
Type Of Inspection: Adhoc
Inspection Date: August 18, 2020
Ministry Office: Windsor Area Office

Maximum Question Rating: 146

Inspection Module	Non-Compliance Rating
Operations Manuals	0 / 28
Logbooks	0 / 18
Certification and Training	0 / 28
Water Quality Monitoring	0 / 51
Treatment Process Monitoring	0 / 21
TOTAL	0 / 146

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%

Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2020-2021)

DWS Name: TOWN OF LAKESHORE DRINKING WATER SYSTEM - TECUMSEH DS
DWS Number: 260004982
DWS Owner: Lakeshore, The Corporation Of The Town Of
Municipal Location: Lakeshore

Regulation: O.REG 170/03

Category: Small Municipal Residential System

Type Of Inspection: Adhoc

Inspection Date: August 18, 2020

Ministry Office: Windsor Area Office

Maximum Question Rating: 146

Inspection Risk Rating	0.00%
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FINAL INSPECTION RATING:	100.00%
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