

# Meeting Minutes / Report

(Attachment 5)

Last Revised: 2021-02-09  
Prepared By: Brad Dupuis

## Meeting Minutes

<b>Meeting Type:</b>	<i>Management Review Meeting – DWQMS</i>
<b>Date:</b>	<i>February 8, 2021</i>
<b>Called by:</b>	Town of Tecumseh
<b>Attendees:</b>	<b>Margaret Misek-Evans</b> - Chief Administration Officer (CAO) <b>Phil Bartnik</b> - Director, Public Works & Environmental Services <b>Brad Dupuis</b> - Manager, Water & Wastewater O.R.O. <b>Nicole Bradley</b> - DWQMS Representative/Water Operator
<b>Location:</b>	<i>Various locations – via Zoom</i>

### Agenda/Minutes:

*Item Code: AI=Action Item, DM=Decision Made, IS=Information Sharing, MRC=Management Review Committee*

Item	Item Description	Notes	Item Code	Timing/Status
A	Meeting Agenda			
	Attendance	The sign-in sheet is appended to these minutes as Attachment No. 1.	IS	No Action Required
	General	All reports mentioned are available on the shared drive for the Town of Tecumseh.	IS	No Action Required
1	Previous Management Review Meeting-DWQMS Action Items	<p>In the previous Management Review Meeting-DWQMS there were <b>05</b> Action Items (AI-01 to AI-05).</p> <p>Previous Management Review Meeting-DWQMS minutes for October 27, 2020 are appended to these minutes as Attachment No. 2.</p>	IS	No Action Required
		<b>AI-01</b> <b><i>The upcoming Internal Audit shall be completed in the calendar year of 2021</i></b> Findings will be discussed in further detail under Item 3 of this report.	IS	No Action Required

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		<b>AI-02</b> <i>Brad and Nicole to contact accredited third party to complete the 2020 external audit.</i> Findings will be discussed in further detail under Item 4 of this report.	IS	No Action Required
		<b>AI-03</b> <i>Complete FC300 Itron reading system implementation and training.</i> Findings will be discussed in further detail under Item 8 of this report.	IS	No Action Required
		<b>AI-04</b> <i>Brad and Nicole will email version 15 of the Town of Tecumseh's Water Standards to suppliers once completed.</i> Findings will be discussed in further detail under item 9 of this report.	IS	No Action Required
		<b>AI-05</b> <i>Brad and Shaun Fuerth (ICS Department) working together towards the completion of the Water &amp; Wastewater division SCADA upgrades.</i> Findings will be discussed in further detail under item 12 of this report.	IS	No Action Required
2	Incidents of Adverse Drinking Water Tests	There have been <b>(0)</b> Adverse Drinking Water Results since the last Managers Review Meeting-DWQMS (October 27, 2020).	IS	No Action Required
3	Results of Internal Audits	The upcoming Internal Audit shall be completed within the 2021 calendar year.	AI	Brad and Nicole to complete internal audit
		The previous 2020 Internal Audit was reviewed and communicated in the October 27, 2020 Managers Review Meeting-DWQMS.	IS	No Action Required

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4	Results of External Audits	<p>The results of the NSF Audit (November 6 &amp; 7, 2020) were: <b>(0) Non-Conformances (NC) and (1) Opportunity for Improvement (OFI).</b></p> <p><b>(OFI-01):</b> <i>Whereas Best Practices are addressed in the Operational Plan, adding this as an Agenda item for Management Review could ensure that it remains a focus for the Organization.</i></p> <p>“Best Practices” has been added to this Agenda as item 20 and will be discussed as its own topic.</p> <p>The 2020 NSF Audit Report and Corrective Action Report for OFI-01 are appended to these minutes as Attachment No.3.</p>	IS	No Action Required
		Review 2020 External Audit Report with Water Division operators. Training is documented.	IS	No Action Required
		<p>Annually a desktop DWQMS Verification Audit is to be completed by an accredited third party.</p> <p>Every 3 years, an On-Site DWQMS Verification Audit must be completed by an accredited third party.</p> <p>On-Site Verification Audit was completed on November 5 &amp; 6, 2020 by NSF. Due to Covid-19 restrictions it was completed remotely.</p>	AI	Nicole and Brad to schedule date to complete audit
		Annual desktop DWQMS Verification Audit to be completed within the 2021 calendar year by accredited third party.		
5	Results of MECP Inspection	<p>The Results of the 2020 MECP Inspection (December 7, 2020) were: <b>(0) Non-Compliances and (0) Best Practice Issues.</b> A Final Inspection Rating of 100% was received.</p>	IS	No Action Required

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		The 2020 MECP Inspection Report is appended to these minutes as Attachment No.4.		
		Review 2020 MECP Inspection Report with Water Division operators.	AI	Nicole to schedule training date to review document
		Council to be presented with Report Number PWES-2021-08 on February 9, 2021 for acceptance.	AI	Brad to present MECP Inspection Report results to Council Feb.9, 2021
6	Incidents of Non-Compliance with Applicable Regulations	There has been <b>(0)</b> Non-Compliance issues since the last Managers Review Meeting-DWQMS (October 27, 2020).	IS	No Action Required
7	Consumer Feedback	<p><b>(2)</b> Consumer complaints regarding water quality were made to the Town of Tecumseh since the last Managers Review Meeting-DWQMS (October 27, 2020).</p> <p><b>(1)</b> Dec 2, 2020 (374 Woodbridge)</p> <ul style="list-style-type: none"> <li><b>Aesthetics</b> – consumer stated that they had cloudy water and that their water pressure was not consistent. Operator responded to the consumer complaint regarding the cloudy water and pressure concerns. Operator found that there was air present in the consumers’ water lines. Operator flushed the lines until the air in the lines seemed to dissipate. Operator took a chlorine residual of 1.03ppm. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p><b>(2)</b> Jan 7, 2021 (12859 County Rd#42)</p> <ul style="list-style-type: none"> <li><b>Health Concern/Aesthetics</b> – consumers’ family member had recently been diagnosed with Legionnaires Disease.</li> </ul>	IS	No Action Required

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		<p>Consumer was concerned about the quality of water to the residence of his family member. Operator obtained a chlorine residual of 1.31ppm and advised the consumer to have the hot water tank checked for temperature and condition. (Acceptable MECP range 0.05-4.0ppm)</p> <p>Please note all actions mentioned above were following Town policy in dealing with Covid-19. Clerks division would perform standard Covid-19 screening prior to making appointment along with the operator following the same screening process upon arrival.</p>		
		<p>Manager, Water &amp; Wastewater / ORO has reviewed the Survey Monkey results from past Managers Review Meeting-DWQMS (October 27, 2020 to February 2, 2021).</p> <p>Survey Monkey Data to be reviewed twice per year to ensure that possible issues are not missed when reported.</p> <p>(0) Questionnaires were completed for <i>Water Services Customer Survey</i> stating any issue or concern.</p> <p>Results are shown below for <i>Water Services Customer Survey</i>.</p>	IS	No Action Required
		1) Billing Concern- 0 Individuals	IS	No Action Required
		2) Request for Locate- 0 Individuals	IS	No Action Required
		3) Water Leak- 0 Individuals	IS	No Action Required
		4) Water Quality- 0 Individuals	IS	No Action Required

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		5) Water Meter Issue- 0 Individuals	IS	No Action Required
		6) Connection / Disconnection of Water Service- 0 Individuals	IS	No Action Required
		7) Other (Please specify)- 0 Individuals	IS	No Action Required
8	Operational Performance	The <i>hydrant flushing program</i> is scheduled to begin early spring 2021. Every hydrant in Tecumseh will be inspected and operated.  Documentation stored in Town's shared hard drives.	IS	No Action Required
		The <i>hydrant winterizing program</i> was completed for the 2020 calendar year. Completed on November 6, 2020 and finalized spreadsheet is saved to the Town's shared hard drives. Three different checks will be completed.  Documentation stored in Town's shared hard drives.	IS	No Action Required
		The <i>valve turning program</i> for 2020 was put on hold due to Covid-19 work restrictions.	IS	No Action Required
		Current FC300 Itron reading system is being replaced by MC3Lite. Brad has been working with Shaun Fuerth (ICS Department), Wolseley, Itron and Essex Power for the implementation and training of new software. It is in final stages of completion.	IS	No Action Required
		Due to Covid-19 training was put on hold. As outside suppliers need to be onsite and 2 operators need to be in a vehicle for long durations.	AI	Brad to schedule completion once Covid-19 restrictions

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				are lifted
		<p>We have a total of 35 sample stations.</p> <p>2020- (10) units have been ordered Due to Covid-19 supplies were limited. 3 units were delivered.</p> <p>3 units were replaced in 2020. <a href="#">10 units plus the remaining 7 units from 2020 for a total of 17 units to be replaced during the 2021 calendar year.</a></p>	IS	No Action Required
		<p>Due to life cycle, service truck W6- 11 is scheduled to be replaced.</p> <p>Report number PWES-2019-07 (2019 supply of various vehicles) was approved by council March 26, 2019.</p> <p>Cavalcade Ford from Bracebridge Ontario was the awarded tender. Along with GWA for the service body.</p> <p><a href="#">Town received truck on February 5, 2021.</a></p>	IS	No Action Required
		<p>Due to life cycle, Backhoe , W7- 12 and service truck W4-12 are scheduled to be replaced.</p> <p>Report PWES-2021-07 will be brought to Council on February 9, 2021 by the Manager of Roads &amp; Fleet.</p>	IS	No Action Required

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		<p><i>Winter Lead Testing</i> to be completed March 8, 2021.</p> <p><i>Summer Lead Testing</i> to be completed October 4, 2021.</p> <p>All (8) samples shall be taken within the Tecumseh distribution system.</p>		
		Results to be communicated in the 2021 fall Management Review Meeting-DWQMS.	AI	Nicole to include sample results as part of fall meeting
9	Changes to Services, Activities, Regulations, etc. that could affect DWQMS	<p>There have been changes in the services and/or activities performed by the Town of Tecumseh since the last Management Review Meeting-DWQMS.</p> <p><b>Due to Covid-19:</b></p> <ul style="list-style-type: none"> <li>- Extra monitoring was implemented in areas such as schools, Town Hall, Arenas and other Town facilities.</li> <li>-Operator training was slowly transitioned to on-line from hands-on.</li> <li>-Town policies implemented: 1 person per vehicle unless barriers are present.</li> <li>-Covid-19 Screening of residents by Town operators prior to entry on property.</li> <li>-Public access to Town facilities restricted.</li> <li>-Daily Covid-19 screening of Water Division Operators.</li> </ul>	IS	No Action Required
		<p>Town's Current Schedule to Water Rates 2021 are found in By-Law No.2020-75.</p> <p>In comparison to 2020 rates, base charges increase by \$0.96 per month. Water rates increased by \$0.01 per cubic meter.</p>	IS	No Action Required

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		Report Number PWES-2020-36 <i>Water and Wastewater Rates</i> was brought to Council December 8, 2020.		
		Report Number FS-2020-18 reflects Administration Fees and Charges.		
		Town of Tecumseh water standards Version 15 is in the final stages. Shaun Fuerth (ICS Department) is working on diagrams to reference within the document. Once completed, Version 15 will be put on the website and emailed to all suppliers.  <a href="#">Staff shortages and work restrictions due to Covid-19 have created delays.</a>	AI	Brad and Nicole will email version 15 to suppliers once completed
		A capital works plan is created each year and is submitted to Council for approval. Report Number PWES-2020-33 2021 <i>Public Works &amp; Environmental Services Capital Works Projects</i> was endorsed by Council (December 08, 2020). <a href="#">Current capital works for 2021 are underway.</a>	IS	No Action Required
		A revised version of the <i>Watermain Disinfection Procedure-August 1, 2020</i> was released by the MECP. Full implementation of this revised document is to be completed by February 2021. <a href="#">Document has been reviewed and all required changes to in-house documents and procedures have been made and are in use.</a>	IS	No Action Required
10	Infrastructure Review Results	Currently <b>(2)</b> major infrastructure jobs are underway.	IS	No Action Required
		<b>(1)</b> Contractor, Shea Rock Highway No.3 / Walker Road watermain replacement. <a href="#">Due to Covid-19 delays, this project had started on November 9, 2020 and is currently on-going. Weather permitting this</a>	IS	No Action Required

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		<p>project is set to be completed by March 2021.</p> <p>Project consists of replacing the existing 200mm Ductile watermain with a 300mm PVC.</p> <p>The N/E corner will now have improved water quality through the removal of the existing dead-end watermain.</p> <p>Operators completed locates for entire project and ensured operation for all valves in scope of project.</p>		
		<p><b>(2)</b> County of Essex is installing a roundabout at the intersection of Walker Rd and South Talbot Rd.</p> <p>Previous valve placement aligned in the centre of new constructed roadway creating dangerous conditions for operators to maintain and operate.</p> <p>Water Division staff completed valve relocation on May 25-26, 2020.</p>	IS	No Action Required
		<p>There have been a total of (5) broken watermain repairs through October 27, 2020 to February 1, 2021:</p> <p>(3) in former Tecumseh Hamlet area (1) in former St. Clair Beach area (1) in former Sandwich South area</p>	IS	No Action Required
11	Currency of Operational Plan	<p>Review of Operational Plan version 10 completed and revisions were implemented into the current Operational Plan version 11.</p>	IS	No Action Required
		<p>Operational Plan version 11 will be brought to Council on February 23, 2021 for endorsement.</p>	AI	Brad to bring Oper. Plan ver.11 to Council for endorsement

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		Revisions and updates to the Operational Plan to be reviewed with the operators. Attendance will be documented.	AI	Nicole to schedule training date to review documents
		The necessary changes to address the Opportunity for Improvement identified in the NSF Audit were reviewed during the meeting.	IS	No Action Required
12	Deviations from CCP Limits	<p>The SCADA system has been configured to have a low alarm and a high alarm. The low alarm is considered an initial warning while the high alarm is considered to be the Critical Control Point (CCP).</p> <p>Documentation of these alarms can be found on the Town's SCADA system.</p> <p>ONYX Engineering was the awarded contractor and is currently working with ICS and the Water &amp; Wastewater division to implement the upgrades.</p>	AI	Brad and Shaun Fuerth (ICS Department) working together towards completion
13	Effectiveness of Risk Assessment Process	<p>Every three years a full comprehensive review shall be completed.</p> <p>Full Comprehensive review was completed on January 24, 2019.</p>		
		Risk Assessment Annual Review shall be completed with all operators during the review for the Operational Plan version 11.	AI	Nicole to schedule training date to review document
14	Emergency Preparedness	Emergency Response Plan version 12 will be reviewed and revised to version 13. Emergency Response Plan version 13 to be scheduled for review with operators along with 2 mock exercises within the 2021 calendar year.	AI	Nicole to schedule training date to review document

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15	Trends in Quality of Raw Water & Drinking-Water Supply	<p>The Town of Tecumseh receives an Annual Report from the Windsor Utilities Commission in regard to the water that is supplied to the town.</p> <p>The Town of Tecumseh receives an Annual Report from the Town of Lakeshore in regard to the water that is supplied to the town.</p> <p>The Town of Tecumseh is connected to the Town of LaSalle through Meter Chamber 12 (MCT-12). The valve remains off until an agreement has been made between Windsor and LaSalle. As part of the construction of the Herb Gray Parkway, the supply watermain to the Howard Avenue metering facility (MCT-12) was re-routed through the Town of LaSalle. Subsequent to the re-routing of the supply watermain, the connection has been closed and the supply of potable water to the Town of Tecumseh through MCT-12 is currently not utilized.</p> <p>Annual Reports received from neighbouring Municipalities are kept on the Town's shared hard drive.</p> <p>The Town of Tecumseh 2020 Annual Report and The Town of Tecumseh 2020 Summary Report will be communicated to Council through PWES-2021-09 on February 09, 2021.</p> <p>The Town of Tecumseh 2020 Annual and Summary Reports are appended to these minutes as Attachment No.5.</p>	IS	No Action Required
16	Resources needed for DWQMS Maintenance	Nothing is needed at this time.	IS	No Action Required
17	Town of Tecumseh website	Brad Dupuis reviewed the town website, ensuring the water information is current.	IS	No Action Required
18	Retention Table	Brad Dupuis and Nicole Bradley have reviewed the retention table along with the documents	IS	No Action

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		pertaining to it.		Required
19	Comments / Suggestions made by Personnel	No suggestions or feedback was given.	IS	No Action Required
20	Review of Best Practices	Review of related and appropriate industry material, memberships in water industry organizations such as Ontario Municipal Water Association and Municipal Water, Wastewater Regulatory Committee and continued networking with neighbouring Municipalities allow for the continuous review of current Best Practices.	IS	No Action Required
		Discussion of relevant Best Practice items with Water Division Operators is on-going during the daily tailgate meetings.	IS	No Action Required

Attachment No. 1



WATER DIVISION  
DWQMS – MANAGEMENT REVIEW

SIGN-IN SHEET

PURPOSE: TOWN OF TECUMSEH DWQMS MANAGEMENT REVIEW MEETING

DATE: FEBRUARY 8, 2021

NAME (PRINT)	POSITION	SIGNATURE
MARGARET MISEK-EVANS	CHIEF ADMINISTRATIVE OFFICER	<i>Marg Misek-Evans</i>
PHIL BARTNIK	DIRECTOR, PUBLIC WORKS & ENVIRONMENTAL SERVICES	<i>Phil Bartnik</i>
BRAD DUPUIS	MANAGER, WATER & WASTEWATER / ORO	<i>Bradley Dupuis</i>
NICOLE BRADLEY	WATER OPERATOR/DWQMS REPRESENTATIVE	<i>Nicole Bradley</i>

**Management Review Commitment and Endorsement Statement**

This statement is intended to capture the commitment and endorsement of top management through the management review committee. Below are the definitions of commitment and endorsement represented within the context of the management review minutes referenced within this statement.

**Commitment**


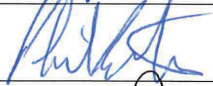


- 1) To represent that the committee has been given access to participated and/or reviewed the inputs covered within the minutes.
- 2) That the content of the minutes meets the input requirements of the Town of Tecumseh DWQMS management review meeting.
- 3) That the committee is aware of actions assigned to appropriate resources as a results of the management review meeting.
- 4) To provide objective evidence of top management's participation and commitment to the management review program.

**Endorsement**

- 1) That the management review committee endorses the commitments made within the associated management review minutes including:
  - a) Resources allocated to the items.
  - b) Within the timelines committed to in the meeting.
- 2) Approval to empower the DWQMS represented to ensure that commitments are followed through with the authority of the management review committee.
- 3) Where timelines cannot be met or where previous actions have not been verified by the management review committee as complete, a corrective action will be required.

Commitment and Endorsement Record

Minutes Referenced: **October 27, 2020**

Name / Delegate Name	Title	Signature	Date
Margaret Misek-Evans	Chief Administrative Officer (CAO)		2021-02-08
Phil Bartnik	Director of Public Works & Environmental Services		2021-02-08
Brad Dupuis	Manager , Water & Wastewater		2021-02-08
Nicole Bradley	DWQMS Representative		2021-02-08

# Meeting Minutes / Report

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Last Revised: 2020-10-27

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## Meeting Minutes

<b>Meeting Type:</b>	<i>Management Review Meeting – DWQMS</i>
<b>Date:</b>	<i>October 27, 2020</i>
<b>Called by:</b>	Town of Tecumseh
<b>Attendees:</b>	<b>Margaret Misek-Evans</b> - Chief Administration Officer (CAO) <b>Phil Bartnik</b> - Director, Public Works & Environmental Services <b>Brad Dupuis</b> - Manager, Water & Wastewater O.R.O. <b>Nicole Bradley</b> - DWQMS Representative/Water Operator
<b>Location:</b>	<i>Various locations – via Zoom</i>

**Agenda/Minutes:**

*Item Code: AI=Action Item, DM=Decision Made, IS=Information Sharing, MRC=Management Review Committee*

Item	Item Description	Notes	Who Responsible / Code	Timing / Status
A	Meeting Agenda			
	Attendance	<p>The sign-in sheet is appended to these minutes as Attachment No. 1.</p> <p>Shawn Laporte was DWQMS Rep for the period covering January 13, 2020 to June 12, 2020. June 13, 2020 he returned to the water operator position.</p> <p>Beginning, August 19, 2020 to present, Nicole Bradley assumed the role of DWQMS Rep.</p>	IS	No Action Required
1	Previous Management Review Meeting Action Items	In the previous Management Review Meeting there were <b>09</b> Action Items (AI-01 to AI-09).	IS	No Action Required
		<b>AI-01</b> <b>Brad and Shawn to complete the internal audit towards the end of the summer / early fall.</b> <p>Internal Audit completed on October 8 &amp; 9, 2020 by Acclaims Environmental. Final Audit Report is available on the shared drive.</p> <p>Findings will be discussed in further detail under Item 3 of this report.</p>	IS	No Action Required

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		<b>AI-02</b> <i>Brad and Shawn to contact accredited third party to complete the external audit mid-fall.</i> Findings will be discussed in further detail under Item 4 of this report.	IS	No Action Required
		<b>AI-03</b> <i>Brad to present MECP Inspection results to Council Feb 25, 2020.</i> Report Number PWES-2020-13 was presented to Council February 25, 2020.	IS	No Action Required
		<b>AI-04</b> <i>Complete Annual hydrant flushing program in the Spring.</i> Hydrant flushing completed. Details will be discussed under item 8 of this report.	IS	No Action Required
		<b>AI-05</b> <i>Brad and Shawn will email version 15 of the Town of Tecumseh's Water Standards to suppliers once completed.</i> Details will be discussed under item 9 of this report.	IS	No Action Required
		<b>AI-06</b> <i>Brad present Operational Plan Version 10 to council for endorsement Feb 25, 2020.</i> Report Number PWES-2020-13 was presented to council February 25, 2020.  <i>Brad and Shawn to review operational plan and risk assessment with operators once endorsed.</i> Operators reviewed Operational Plan and Risk Assessment on October 1 & 2, 2020 with Brad & Nicole. Proof of attendance is documented.	IS	No Action Required

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		<b>AI-07</b> <i>Brad and Shaun Fuerth (IT department) working together towards the completion of the Water &amp; Wastewater division SCADA upgrades.</i> <a href="#">Details to be discussed further under item 12 of this report.</a>	IS	No Action Required
		<b>AI-08</b> <i>Brad and Shawn to complete and review Water Division Emergency Response Plan Version 12 with operators along with two mock exercises.</i> <a href="#">Water Division Emergency Response Plan Version 12 reviewed with operators by Brad &amp; Nicole. Mock scenarios completed on October 1 &amp; 2, 2020. Proof of attendance is documented. Discussed in further detail under item 14 of this report.</a>	IS	No Action Required
		<b>AI-09</b> <i>Brad to present annual summary report to council February 25, 2020.</i> <a href="#">The Town of Tecumseh Annual Summary Report (PWES-2020-12) was presented to Council February 25, 2020.</a> <a href="#">Reports saved to the Town's shared drive and posted on Town's website.</a>	IS	No Action Required
2	Incidents of Adverse Drinking Water Tests	There have been <b>(0)</b> Adverse Drinking Water Results since the last managers meeting (February 11, 2020).	IS	No Action Required
3	Results of Internal Audits	<p>The 2020 internal audit was completed on October 8 &amp; 9, 2020. The Final Internal Audit Report listed <b>(0) Non-Conformances and (2) Opportunity for Improvements.</b></p> <p><b>(OFI-1)</b> Consider addressing the existing staff shortage issue (supporting Element 11).</p> <p><a href="#">During Management Review, general discussions relating to the issues with staff shortages took place.</a></p>	IS	Record notes regarding staffing to fulfill requirements of 2020 Internal Audit

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		Current job posting for Water Operator posted on October 26, 2020.		
		<p><b>(OFI-2)</b> Consider updating the existing Corrective Action Report / Opportunity for Improvement form to include reference to preventative actions throughout (supporting Element 21 PLAN c).</p> <p>Forms were revised to show the audit recommendations, saved and reviewed.</p>	IS	No Action Required
		<p>Internal Audit Report is appended to these minutes as Attachment No.3.</p> <p>Positive findings in <i>commitment, culture of improvement, risk-based thinking and competencies</i> were noted throughout the audit process. The level of communication and the working relationship between the operating authority and the system owners was commended by the auditor.</p>	IS	No Action Required
		The upcoming Internal Audit shall be completed in the calendar year of 2021.	AI	Brad and Nicole to complete the 2021 internal audit
		<p>Through the Internal Audit process Best Management Practices were reviewed and implemented when required.</p> <p>All reports mentioned above are available on the shared drive for the Town of Tecumseh.</p>	IS	No Action Required
4	Results of External Audits	<p>Every three years, an <i>On-Site</i> DWQMS Verification Audit must be completed by an accredited third party.</p> <p>Brad &amp; Nicole have been in contact with NSF (accredited third party) to schedule the 2020 on-site Verification Audit. Waiting on correspondence relating to date.</p>	AI	Brad and Nicole to contact accredited third party to complete the external audit

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		<p>Annually a desktop DWQMS Verification Audit is to be completed by an accredited third party.</p> <p>Through the External Audit process Best Management Practices were reviewed and implemented when required.</p>	IS	No Action Required
5	Results of MECP Inspection	Details of the 2019 MECP inspection were discussed at previous Management Review (February 11, 2020).	IS	No Action Required
		All reports mentioned above are available on the shared drive for the Town of Tecumseh.	IS	No Action Required
6	Incidents of Non-Compliance with Applicable Regulations	There are currently no Non-Compliance issues.	IS	No Action Required
7	Consumer Feedback	<p>(6) Consumer complaints regarding water quality were made to the Town of Tecumseh since the last Manager's Review Meeting held in 2019 (2020-02-11) and (2) between (2019-10-09 to 2020-02-11).</p> <p>(1) Jan 20, 2020 (13156 Meadowland)-</p> <ul style="list-style-type: none"> <li><b>Black Flakes</b> – consumer stated that intermittently there were black flakes present in water. Operator responded to the consumer complaint regarding the black flakes. Operator found nothing at the time of investigation, however, it is noted that there is PVC main at road and Copper service at house. Operator took a chlorine residual of 1.27ppm. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p>(2) Jan 20, 2020 (2369 Docherty)-</p> <ul style="list-style-type: none"> <li><b>Aesthetics</b> – consumer stated they had</li> </ul>	IS	No Action Required

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		<p>cloudy water. Operator found that when the line was flushed there was air present creating air bubbles. Obtained a chlorine residual of 1.53ppm. (Acceptable MECP range 0.05-4.0ppm)</p> <p><b>(3) March 9, 2020 (13025 St. Thomas)-</b></p> <ul style="list-style-type: none"> <li>• <b>Colour</b> – consumer stated discolored water coming from taps. Richardson Fire performing flow tests in the area. Operator attended consumers’ residence and instructed consumer to flush their lines until visually clear. Obtained a chlorine residual of 1.44ppm in residence house. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p><b>(4) May 23, 2020 (104 Cove)-</b></p> <ul style="list-style-type: none"> <li>• <b>Colour</b> – consumer stated discoloured water coming from taps. Operator investigated and discovered that consumers’ water softener failed, plugging the lines. Consumer arranging for plumber to repair softener and blow out lines. Operator was able to flush downstairs bathroom tap and obtain a chlorine residual of 0.84ppm. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p><b>(5) May 27, 2020 (2264 St. Alphonse)-</b></p> <ul style="list-style-type: none"> <li>• <b>High pressure-</b> Consumer reporting an increase in water pressure in the home. Operator found that the new hot water tank was building pressure until it could be released from the taps. Consumer was advised by plumber and water operator to install an expansion tank.</li> </ul> <p><b>(6) June 16, 2020 (216 Cada)-</b></p>		
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# Meeting Minutes / Report

(Attachment 3)

Last Revised: 2020-10-27  
Prepared By: Brad Dupuis

		<ul style="list-style-type: none"> <li>• <b>Colour</b> – consumer reported discoloured water coming from taps throughout the home. Operator investigated and did not find any relevant issues or concerns at time of visit. Possible spike in line pressure could have loosened sediment causing discolouration. Operator flushed sinks in the home and the water cleared quickly. Operator took a chlorine residual of 1.16ppm. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p>(7) July 15, 2020 (13580 Tecumseh Rd)-</p> <ul style="list-style-type: none"> <li>• <b>Aesthetics</b> – consumer stated concern with air pockets in cold water. Operator flushed hydrant at back of property and found no air in it. Advised consumer to talk to building maintenance. Operator took a chlorine residual of 1.17ppm. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p>(8) Oct 19, 2020 (319 St. Marks)-</p> <ul style="list-style-type: none"> <li>• <b>Sediment</b>- Consumer stated toilet has a black sediment in it. Operator flushed lines and noted no sediment in sinks. Operator checked toilet tank and noted there was sediment in tank. Consumer was advised to clean toilet tank and bowl and monitor. Operator took a chlorine residual of 1.40ppm. (Acceptable MECP range 0.05-4.0ppm)</li> </ul> <p>Please note all actions mentioned above were following Town policy in dealing with Covid-19. Clerks division would perform standard Covid-19 screening prior to making appointment along with the operator following the same screening process upon arrival.</p>		
		Manager, Water & Wastewater / ORO has reviewed the Survey Monkey results from past	IS	No Action Required

# Meeting Minutes / Report

(Attachment 3)

Last Revised: 2020-10-27  
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		<p>managers meeting (February 11, 2020 to October 23, 2020).</p> <p>Survey Monkey Data to be reviewed twice per year to ensure that possible issues are not missed when reported.</p> <p>(0) Questionnaires were completed for <i>Water Services Customer Survey</i> stating any issue or concern.</p> <p>Results are shown below for <i>Water Services Customer Survey</i>.</p>		
		1) Billing Concern- 0 Individuals	IS	No Action Required
		2) Request for Locate- 0 Individuals	IS	No Action Required
		3) Water Leak- 0 Individuals	IS	No Action Required
		4) Water Quality- 0 Individuals	IS	No Action Required
		5) Water Meter Issue- 0 Individuals	IS	No Action Required
		6) Connection / Disconnection of Water Service- 0 Individuals	IS	No Action Required
		7) Other (Please specify)- 0 Individuals	IS	No Action Required
8	Operational Performance	<p>Nicole Bradley is now the current DWQMS Rep. (August 19, 2020 to present) Brad Dupuis is the alternate.</p> <p>Shawn Laporte was DWQMS Rep for the period covering January 13, 2020 to June 12, 2020. June 13, 2020 he returned to the water operator position)</p>	IS	No Action Required

# Meeting Minutes / Report

(Attachment 3)

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		<p>The <i>hydrant flushing program</i> is scheduled to begin early spring 2020. Every hydrant in Tecumseh will be inspected and operated</p> <p>Flushing program for Tecumseh was completed in early July 2020.</p> <p>A new program was created with the GIS division allowing operators to have access to required information 'live' on their truck mounted computers.</p> <p>Documentation stored in shared hard drives.</p>	IS	No Action Required
		<p>The first check of the <i>hydrant winterizing program</i> is currently underway for the winter season of 2020.</p> <p>Three different checks will be completed.</p> <p>Documentation stored in shared hard drives.</p>	IS	No Action Required
		<p>The <i>valve turning program</i> is underway for 2020. Program beginning in the north end of town, working west to east.</p> <p>There are 2524 valves in the system.</p> <p>105 valves were exercised in 2019 using the new valve turning unit.</p>	IS	No Action Required
		<p>Current FC300 Itron reading system is being replaced by MC3Lite. Brad has been working with Shaun Fuerth (IT department), Wolseley, Itron and Essex Power for the implementation and training of new software.</p>	IS	No Action Required

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		It is in final stages of completion <a href="#">Due to Covid-19 training was put on hold. As outside suppliers need to be onsite and 2 operators need to be in a vehicle for long durations.</a>	AI	Brad to schedule completion once COVID restrictions are lifted
		We have a total of 34 sample stations.  2020- (10) units have been ordered <a href="#">Due to Covid-19 supplies were limited. 3 units were ordered.</a> <a href="#">3 units have been replaced</a>	IS	No Action Required
		Due to life cycle, service truck W6- 11 is scheduled to be replaced.  Report number PWES-2019-07 (2019 supply of various vehicles) was approved by council March 26, 2019.  Cavalcade Ford from Bracebridge Ontario was the awarded tender. Along with GWA for the service body.  <a href="#">Due to Covid-19 delays, new approximate delivery is end of 2020</a>	IS	No Action Required
		Due to life cycle, service truck W4- 12 is scheduled to be replaced.  A report will be brought to Council by the Manager of Roads & Fleet for the 2020 supply of various vehicles. <a href="#">Only one quote was received at \$23,000 over budget. As per Fleet Manager &amp; Purchasing Officer, this will be re-tendered early 2021</a>	IS	No Action Required
		<i>Winter Lead Testing</i> was completed January 23,	IS	No Action

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		<p>2020.</p> <p>All (4) samples taken in the distribution system found to be well below the threshold.</p> <p><i>Summer Lead Testing was completed on October 5, 2020.</i></p> <p>Results for all (4) samples taken throughout the distribution system were well below the allowable threshold.</p>		Required
9	Changes to Services, Activities, Regulations, etc. that could affect DWQMS	<p>There have been changes in the services and/or activities performed by the Town of Tecumseh since the last management review meeting.</p> <p><i>Due to Covid-19:</i></p> <ul style="list-style-type: none"> <li>- Extra monitoring was implemented in areas such as schools, Town Hall, Arenas and other Town facilities.</li> <li>-Operator training was slowly transitioned to on-line from hands-on.</li> <li>-Town policies implemented: 1 person per vehicle unless barriers are present.</li> <li>-Covid-19 Screening of residents by Town operators prior to entry on property.</li> <li>-Public access to Town facilities restricted.</li> <li>-Daily Covid-19 screening of Water Division Operators.</li> <li>-Water billing interest for delinquent accounts put on hold until September 30, 2020 as per Council reports: FS-2020-13COVID-19 and CAO-2020-01.</li> </ul>	IS	No Action Required
		<p>Town's Current Schedule to Water Rates By-Law No.2019-81 has changed, whereas base charges increase by \$0.90 per month. Water rates increased by \$0.03 per cubic meter.</p> <p>Report Number PWES-2019-53 <i>Water and Wastewater Rates</i> was brought to Council December 10, 2019.</p>	IS	No Action Required

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		Report Number FS-2019-14 reflects Administration Fees and Charges. <a href="#">2021 rates are currently being discussed through budget processes.</a>		
		Town of Tecumseh water standards Version 15 is in the final stages. Shaun Fuerth (IT department) is working on diagrams to reference within the document. Once completed, Version 15 will be put on the website, and emailed to all suppliers. <a href="#">Staff shortages and work restrictions due to Covid-19 have created delays.</a>	AI	Brad and Nicole will email version 15 to suppliers once completed
		A capital works plan is created each year and is submitted to Council for approval. Report Number PWES-2019-49 <i>Public Works &amp; Environmental Services Five Year Capital Works Plan</i> was endorsed by Council (December 10, 2019). <a href="#">Current capital works for 2021 is underway.</a>	IS	No Action Required
		<a href="#">All reports mentioned above are available on the shared drive for the Town of Tecumseh.</a>	IS	No Action Required
10	Infrastructure Review Results	Currently <b>(2)</b> major infrastructure jobs are underway.	IS	No Action Required
		<b>(1)</b> Contractor, Shea Rock Highway No.3 / Walker Road watermain replacement. <a href="#">Due to Covid-19 delays, this project is set to now start on November 9, 2020.</a>  Project consists of replacing the existing 200mm Ductile watermain with a 300mm PVC.  As well as increasing water quality by removal of existing dead-end watermain	IS	No Action Required

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		<p>found on the N/E corner.</p> <p>Operators completed locates for entire project and ensured operation for all valves in scope of project.</p>		
		<p><b>(2)</b> County of Essex is installing a roundabout at the intersection of Walker Rd and South Talbot Rd.</p> <p><a href="#">Construction of roundabout delayed due to Covid-19.</a></p> <p>Previous valve placement aligned in the centre of new constructed roadway creating dangerous conditions for operators to maintain and operate.</p> <p><a href="#">Water Division staff completed valve relocation on May 25-26, 2020</a></p> <p>Watermain needs to be lowered in one location to ensure proper cover for the relocation of box culvert.</p>	IS	No Action Required
		<p>There have been a total of (7) broken watermain repairs in 2020</p> <p>(3) in former Tecumseh Hamlet area (3) in former St. Clair Beach area (1) in former Sandwich South area</p>	IS	No Action Required
11	Currency of Operational Plan	<p>The necessary changes to address the Non-conformances identified in the NSF Audit as well as the Internal Audit were reviewed during the meeting.</p> <p>Additional changes made to the operational plan to address changes to business processes were also reviewed.</p>	IS	No Action Required

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		<p>Revisions were made to the operational plan to address changes in business processes, these were reviewed with operators.</p> <p>The results of risk assessment have been added to the operational plan (version 10).</p> <p>Revisions and updates to the Operational Plan and the Risk Assessment were completed with the operators on October 1 &amp; 2, 2020.</p> <p>Attendance is documented.</p> <p>Operational Plan brought to Council on February 25, 2020 and endorsed.</p>		
		All reports mentioned above are available on the shared drive for the Town of Tecumseh.	IS	No Action Required
12	Deviations from CCP Limits	<p>The SCADA system has been configured to have a low alarm and a high alarm. The low alarm is considered an initial warning while the high alarm is considered to be the Critical Control Point (CCP).</p> <p>Documentation of these alarms can be found on the Town's SCADA system.</p> <p>RFQ (request for quote) has been completed for SCADA system upgrades.</p> <p>ONYX Engineering was the awarded contractor and is currently working with IT and the Water &amp; Wastewater division to implement the upgrades.</p>	AI	Brad and Shaun Fuerth (IT department) working together towards completion
13	Effectiveness of Risk Assessment Process	<p>Every three years a full comprehensive review shall be completed.</p> <p>Full Comprehensive review was completed on January 24, 2019.</p> <p>Risk Assessment shall be completed with all</p>	IS	No Action Required

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(Attachment 3)

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		<p>operators during the review for the Operational Plan Version 10</p> <p>On October 2, 2020 Risk Assessment was reviewed with all operators as part of the Operational Plan review. Proof of attendance is documented.</p>		
14	Emergency Preparedness	<p>Emergency Response Plan Version 12 to be created and scheduled for review with operators along with 2 mock exercises prior to coming spring.</p> <p>Water Division Emergency Response Plan version 12 reviewed with operators on October 2, 2020.</p> <p>Two desktop scenarios were also completed by the operators.</p> <p>Scenarios covered the topics:</p> <ul style="list-style-type: none"> <li>a) Watermain break in the Distribution System</li> <li>b) Biological Contamination</li> </ul> <p>Proof of attendance is documented.</p>	IS	No Action Required
		<p>All reports mentioned above are available on the shared drive for the Town of Tecumseh.</p>	IS	No Action Required
15	Trends in Quality of Raw Water & Drinking-Water Supply	<p>The Town of Tecumseh receives an annual report from the Windsor Utilities Commission in regard to the water that is supplied to the town.</p> <p>The Town of Tecumseh receives an annual report from the Town of Lakeshore in regard to the water that is supplied to the town.</p> <p>The Town of Tecumseh is connected to the Town of LaSalle through Meter Chamber 12 (MC-12). The valve remains off until an agreement has been made between Windsor and LaSalle. As part of the construction of the Herb Gray Parkway, the supply watermain to the Howard</p>	IS	No Action Required

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		<p>Avenue metering facility (MCT-12) was re-routed through the Town of LaSalle. Subsequent to the re-routing of the supply watermain, the connection has been closed and the supply of potable water to the Town of Tecumseh through MCT-12 is currently not utilized.</p> <p>Every annual report is kept on the town's shared drive.</p> <p>The Town of Tecumseh Annual Summary Report (PWES-2020-12).</p> <p><a href="#">Report delivered to council on February 25, 2020</a></p>		
		<p><a href="#">All reports mentioned above are available on the shared drive for the Town of Tecumseh.</a></p>	IS	No Action Required
16	Resources needed for DWQMS Maintenance	Nothing is needed at this time.	IS	No Action Required
17	Town of Tecumseh website	Brad reviewed the town website, insuring the water information is current.	IS	No Action Required
18	Retention Table	Brad Dupuis and Nicole Bradley have reviewed the retention table along with the documents pertaining to it.	IS	No Action Required
19	Comments / Suggestions made by Personnel	No suggestions or feedback was given.	IS	No Action Required



## NSF International Strategic Registrations Audit Report

### **The Corporation Of The Town Of Tecumseh**

917 Lesperance Rd.

Tecumseh, Ontario N8N 1W9 CAN

**C0122080**

#### **Audit Type**

Verification Audit

#### **Auditor**

Robert Howarth

#### **Standard**

Ontario's Drinking Water Quality Management Standard Version 2  
(Exp Date: 22-OCT-2020)

#### **Audit Date(s):**

11/06/2020 - 11/07/2020

#### **Recommendation**

Ontario's Drinking Water Quality Management Standard Version 2 : Continue Certification, NO  
CARs



## Executive Summary

Ontario's Drinking Water Quality Management Standard Version 2

This Organization has effectively implemented a very detailed and thorough DWQMS. The effectiveness is evidenced through no incidents of reporting issues required throughout the testing process, no incidents of regulatory noncompliance, no incidents of adverse drinking-water tests and no deviations from critical control point limits combined with the continued investment in infrastructure and personnel.

This was a remote Audit due to Covid-19, It was noted in the Internal Audit Report that staff was very knowledgeable with respect to the requirements of the DWQMS Standard.

## Opportunities

Ontario's Drinking Water Quality Management Standard Version 2

Whereas Best Practices are addressed in the Operational Plan, adding this as an Agenda item for Management Review could ensure that it remains a focus for the Organization.

## Corrective Action Requests

There is NO Corrective Action Request in this audit.

## Site Information

The audit was based on a sampling of the company's management system.

### Industry Codes

NACE:E 41

### Scope of Registration

Ontario's Drinking Water Quality Management Standard Version 2 : Tecumseh Distribution System, 040-OA1, Entire Full Scope Accreditation



## Opportunities for Improvements

### Ontario's Drinking Water Quality Management Standard Version 2

Opportunity	Observations / Auditor Notes
Opportunities for Improvements (DWQMS)-01	<b>Location of OFI</b> Tecumseh, Ont.; <b>Discussed With</b> Brad Dupuis; <b>Description</b> Whereas Best Practices are addressed in the Operational Plan, adding this as an Agenda item for Management Review could ensure that it remains a focus for the Organization.;

## General Information

Operating Authority: Legal Name & Address	The Corporation Of The Town Of Tecumseh 917 Lesperance Rd. Tecumseh, Ont. N8N 1W9
Language Preference: Correspondence	English
Language Preference: Audit	English
Owner: Legal Name and Address	The Corporation Of The Town Of Tecumseh 917 Lesperance Rd. Tecumseh, Ont. N8N 1W9
Owner Language Preference: Correspondence	English
Owner Language Preference: Audit	English
Applicant Representative Information; Include Name, Title, Phone, Fax, Email & Website	Brad Dupuis Manager, Water and Waste Water Services Phone: 519-735-4225 X141 Fax: 519-735-1895 E mail: bdupuis@tecumseh.ca Website: http://www.tecumseh.ca/
Accreditation Option	Full Scope - Entire DWQMS
Date of Previous Systems Audit:	October 25, 2019
Date of Previous On-Site Verification Audit:	September 25-26/, 2017

## Processes

### Ontario's Drinking Water Quality Management Standard Version 2

Process Name	Observations / Auditor Notes
DWQMS Element 10 – Competencies	<b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b> This process is effectively controlled Operational Plan - Element-10; Version 10; Operational Plan defines Title/Function and Required Competencies and Desired Competencies for Municipal Ownwes/Operating Authorities Director of Public Works & Environmental Services Manager of Water and Wastewater Services/ORO



Process Name	Observations / Auditor Notes
	<p>Water/Wastewater Supervisor  New Operators (OIT)  Operator-3  Operator-2  Operator-1  Additionally defines Methods to assess, develop and maintain competencies</p>
DWQMS Element 11 – Personnel Coverage	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-11; Version 10 ; Procedure adequately defines the necessary personnel requirements to ensure the operation of the Distribution System.  This is supported by a Distribution Operator on call at all times outside of regular business hours  List of available Operators available and posted  Contacted through Answering Service  Available 24 Hours a day - 7 Days a week  Also includes coverage for Pandemic, strikes or lockouts.</p>
DWQMS Element 12 - Communications	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element -12; Version 10 ; Process defines Communication requirements including Communication with:  Owner:  Annual Report forwarded to the Mayor and Council defining the suitability and effectiveness of the DWQMS and as defined in Section 11(1) of Ont Reg. 170/03   Personnel  Through Town Network Drive and daily Tailgate meetings.  Minutes not retained.   Suppliers  Purchase Orders   Consumers/Public  Through Operations Centre and The Corporation of the Town of Tecumseh Web Site</p>
DWQMS Element 13 – Essential Supplies and Services	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-13 Version 10  Operational Plan - Appendix 5 Version 10; All supplies and services must meet AWWA and NSF/ANSI standards  List of Primary and secondary suppliers broken down into  Treated Drinking Water Supplies  Laboratories  Instrumentation Calibration/Maintenance  Contractors  and 10 Other  All purchases must be in accordance with the Town of Tecumseh By-Law 2017-63, a bylaw to govern procurement and procedures.</p>
DWQMS Element 14 – Review and Provision of Infrastructure	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-14; Version 10  Operational Plan - Appendix 6 Version 10; A report detailing the maintenance programs, any requirements for infrastructure, rehabilitation and renewal is prepared annually by the Director, Public Works &amp; Environmental Services and Director, Financial Services/Treasurer.  Includes requirement to consider Risk Assessment Outcomes.</p>



Process Name	Observations / Auditor Notes
	<p>The capital requirements are then submitted to Top Management and Municipal Owner/Operating Authority for budgetary approval.</p> <p>Appendix 6 - 2019-2023 Public Works and Environmental Services Capital Works Plan dated December 10, 2019</p>
DWQMS Element 15 – Infrastructure, Maintenance, Rehabilitation and Renewal	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled</p> <p>Operational Plan - Element -15; Version 10; Process broken down into 2 Subsections</p> <p>Planned Maintenance - Controlled through Daily Work Orders</p> <p>Work Orders retained electronically in Database sorted by Date and Address</p> <p>Unplanned Maintenance- resulting from emergency repairs or breakdown</p> <p>Watermain Break Report</p> <p>Infrastructure Rehabilitation - Monitored for effectiveness</p> <p>Infrastructure Renewal - Monitored for effectiveness</p> <p>Capital Upgrades - Planned and Approved by Owner</p>
DWQMS Element 16 – Sampling, Testing and Monitoring	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled</p> <p>Operational Plan - Element-16; Version 10; SOP-1 Water Sampling for Chlorine, BacT and HPC</p> <p>SOP-5 Community Lead Testing Program; All sampling and testing is defined in Sampling, Testing &amp; Monitoring procedure SOP-1 and meets all requirements as defined by the Ministry of Environment.</p> <p>Chlorine Testings:</p> <p>22 Samples per week based on rotating basis from 54 sites.</p> <p>Cycle repeated every four weeks with identified areas done every week</p> <p>Chlorine Testing done by technician on site - Limits defined</p> <p>No Results outside defined limits</p> <p>Microbiological Testing - (Total Coliform, E.coli and HPD)</p> <p>10 Samples per week based on rotating basis done by Caduceon Environmental Laboratory - Accredited</p> <p>Lead Sampling:</p> <p>Frequency as defined by Regulatory Requirement</p> <p>Currently only 4 Distribution samples twice per year.</p> <p>Testing done by Caduceon Environmental Laboratory.</p> <p>Results of sampling, testing, and monitoring activities are documented in a Summary Report and included in the Ontario Regulation 170/03 Drinking Water Systems Annual Report.</p> <p>The Summary Report is submitted to Council.</p> <p>If sampling, testing, and monitoring activities indicate that results exceed acceptable limits, Town of Tecumseh will follow established reactive plans to address the situation as defined in Emergency Response Plan.</p> <p>The Town of Tecumseh will ensure that its actions comply with requirements and guidelines put forth by the Ministry of the Environment (MOE).</p>
DWQMS Element 17 – Measurement and Recording Equipment Calibration and Maintenance	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled</p> <p>Operational Plan - Element-17; Version 10; Pocket ; Colorimeter utilized and calibrated.</p> <p>6 in Use (One in each Truck)</p> <p>Calibrated November 13/19 - Requirement Annual</p> <p>Calibration Report submitted by Flowmetrics.</p> <p>Report dated Nov 13, 2019</p> <p>Includes Laboratory Accreditation,</p>



Process Name	Observations / Auditor Notes
DWQMS Element 18 - Emergency Management	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled  Operational Plan - Element-18 Version 10; Emergency Response Plan Dated February 2020, Version 12  Very detailed plan covering 20 different emergency situations and guidelines for response.  Evidence of training on Version 12 - Sign off by Operators  Annual Training exercise.  Watermain Break - October 2, 2020  Biological Contamination - October 2, 2020  Signed off by all employees and all employees evaluated for performance after training.</p>
DWQMS Element 19 - Internal Audits	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled  Operational Plan - Element-19 Version 10; Third Party Internal Audit undertaken October 8-9, 2020 by Acclams Environmental  Very thorough Audit  Checklist utilized  Audit Report - Dated October 19, 2020  No Minor nonconformances identified  2 Opportunities for improvement identified.</p>
DWQMS Element 20 - Management Review	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled  Operational Plan - Element- 20 Version 10; Management Review held February 11, 2020 and October 27, 2020  Minutes available  Senior Management involved  Chief Administrative Office  Director of Public Works and Environmental Services  Manager Water and Wastewater  DWQMS Representative</p> <p>Topics addressed</p> <ul style="list-style-type: none"> <li>a) incidents of regulatory non-compliance,</li> <li>b) incidents of adverse drinking-water tests,</li> <li>c) deviations from critical control point limits and response actions,</li> <li>d) the efficacy of the risk assessment process,</li> <li>e) internal and third-party audit results,</li> <li>f) results of emergency response testing,</li> <li>g) operational performance,</li> <li>h) raw water supply and drinking water quality trends,</li> <li>i) follow-up on action items from previous management reviews,</li> <li>j) the status of management action items identified between reviews,</li> <li>k) changes that could affect the Quality Management System,</li> <li>l) consumer feedback,</li> <li>m) the resources needed to maintain the Quality Management System,</li> <li>n) the results of the infrastructure review,</li> <li>o) Operational Plan currency, content and updates, and</li> <li>p) staff suggestions.</li> </ul> <p>Very detailed meeting and supporting minutes</p>
DWQMS Element 21 - Continual Improvement	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled  Operational Plan - Element- 21 Version 9 ; ; No Corrective Actions identified in past 12 months  No incidents of regulatory noncompliance,</p>



Process Name	Observations / Auditor Notes
	<p>No incidents of adverse drinking-water tests,  No deviations from critical control point limits and response actions  No significant customer complaints  Procedure updated to include the consideration of Best Practices.</p>
DWQMS Element 3 - Commitment and Endorsement Statement	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-3; Version 10; Commitment and Endorsement Statement available  Approved by CAO and Director of Public Works &amp; Environmental Service dated February 27, 2018(Top Management)</p> <p>Council Identified as Owners  Sent to council and approved February 25 ,2020  The Drinking Water Quality Management System Operational Plan Version 10 be endorsed and committed to.  Approved at meeting by Council.  Evidenced in Meeting Minutes</p>
DWQMS Element 5 - Document and Records Control	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-5; Version 10 ; Procedures adequately defined controls required  for control of Documents and Records  No uncontrolled documents evidenced during Audit  Records suitably provided to complete the Audit.</p>
DWQMS Element 6 – Drinking-Water System	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-6; Version 10 and Appendix 2; The Drinking Water System Descriptions as defined in the Operational Plan adequately and effectively address the requirements as required by the DWQMS Standard including Description, Ownership, Flow Charts Maps, and Specific Descriptions.</p> <p>Note: The City of Windsor has the responsibility for treating the water and providing safe drinking water to the town.  The Town of Tecumseh only distributes the water.</p>
DWQMS Element 7 Risk Assessment and DWQMS Element 8 Risk Assessment Outcomes	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b>  This process is effectively controlled  Operational Plan - Element-7; Version 10  Operational Plan - Element-8; Version 10  Operational Plan - Appendix 3; Version 10- Defines criteria and methodology for ascertaining risk.  Appendix 4 - Risk Assessment Outcomes.; The Information in the Risk Assessment is reviewed Annually for validity and currency  Last comprehensive review January 20, 2019 by 4 Operators, DWQMS Representative and Manager  Water.  Operational Plan states The entire Risk Assessment process will be conducted at least once every three years to ensure that the information used remains current and the assumptions remain valid.  Operational Plan states the Risk Assessment Team shall meet once a calendar year to review the validity of the assumptions and the currency of the information used in the risk assessment. - January 20, 2019.</p> <p>Appendix 3 identifies the criteria for assessing Risk broken into Likelihood, Severity and Detectability with ranks of 1-5</p>



Process Name	Observations / Auditor Notes
	<p>Risk assessment is based on adding the scores for Likelihood, Severity and Detectability to determine a Critical Control Point</p> <p>According to Procedure Appendix 3 a Ranking of greater than 8 is considered critical.</p> <p>6 Hazards identified</p> <p>Risk Assessment and Critical Control Point work Sheets available and up to date for all identified risks</p> <p>Where CCP of greater than 8 identified Emergency Response Plan procedures</p> <p>Very detailed and thorough</p> <p>All items as identified in SWQMS Standard Version 2 included,</p>
DWQMS Element 9 – Organizational Roles, Responsibilities & Authorities	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>This process is effectively controlled</p> <p>Operational Plan - Element-9; Version 10; Responsibilities and Authorities defined for System Owner</p> <p>Top Management</p> <p>Chief Administrative Officer</p> <p>Director of Public Works and Environmental Services</p> <p>Manager of Water/Wastewater</p> <p>DWQMS Management Representative</p> <p>Certified Water Operators (Leaders)</p> <p>Certified Water Operators</p> <p>Clerical Staff</p>
DWQMS-1 Quality Management System, DWQMS-2 Quality Management System Policy & DWQMS-4 QMS Representative	<p><b>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths &amp; weaknesses of process:</b></p> <p>These processes are effectively controlled</p> <p>Operational Plan - Element-1; Version 10</p> <p>Operational Plan - Element-2; Version 10</p> <p>Operational Plan - Element-4; Version 10; Operational Plan available covering all elements as defined in Standard; Policy meets all defined requirements</p> <p>Quality Management System Representative -</p> <p>The QMS Representative, currently the DWQMS Representative (Brad Dupuis) and has been appointed as the QMS Representative for The Town of Tecumseh by Top Management.</p> <p>The Representative is authorized and responsible for administering all processes associated with the operation and performance of the QMS.</p>



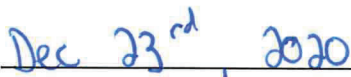
Summary of Findings	
Requirement	Finding
1. Quality Management System	C
2. Quality Management System Policy	C
3. Commitment and Endorsement	C
4. Quality Management System Representative	C
5. Document and Record Control	C
6. Drinking-Water System	C
7. Risk Assessment	C
8. Risk Assessment Outcomes	C
9. Organizational Structure, Roles, Responsibilities, and Authorities	C
10. Competencies	C
11. Personnel Coverage	C
12. Communications	C
13. Essential Supplies and Services	C
14. Review and Provision of Infrastructure	C
15. Infrastructure Maintenance, Rehabilitation & Renewal	C
16. Sampling, Testing & Monitoring	C
17. Measurement & Recording Equipment, Calibration & Maintenance	C
18. Emergency Management	C
19. Internal Audits	C
20. Management Review	C
21. Continual Improvement	C
<b>Mj</b>	Major Non-Conformity. The auditor has determined one of the following: (a) a required element of the DWQMS has not been incorporated into a QMS; (b) a systemic problem with a QMS is evidenced by two or more minor conformities; or (c) a minor non-conformity identified in a corrective action request has not been remedied.
<b>Mn</b>	Minor Non-Conformity. In the opinion of the auditor, part of a required element of the DWQMS has not been incorporated satisfactorily into a QMS.
<b>OFI</b>	Opportunity for Improvement. Conforms to requirement, but there is opportunity for improvement.
<b>C</b>	Conforms to requirement.
	Not Applicable to this audit
<b>*</b>	Additional Comment added by auditor in the body of the report.



STAGE 1 - REQUEST FOR CORRECTIVE ACTION			
<b>Date</b>	December 1, 2020	<b>Initiator</b>	Robert Howarth
<b>CA #</b>	EA20 OFI-01		
<b>Element/ Topic</b>	Element 21 – Continual Improvement		
<b>Manager Responsible</b>	Manager of Water & Wastewater, ORO		
<b>ACTION TYPE</b>	Opportunity for Improvement – (OFI)		
<b>Statement of Recommendation :</b> <i>Whereas Best Practices are addressed in the Operational Plan, adding this as an Agenda item for Management Review could ensure that it remains a focus for the Organization.</i>			
STAGE 2 – CORRECTIVE / PREVENTIVE ACTIONS ASSIGNED			
<b>Action Description</b>	<b>Responsibility</b>	<b>Date</b>	
"Best Practices" will be added to the Management Review Agenda as its own topic for discussion.	DWQMS Rep / Operator	December 31, 2020	
<b>APPROVAL DATE</b>	December 15, 2020		
STAGE 3 – CONTROLS FOR CORRECTIVE / PREVENTIVE ACTION			
<b>Describe Controls to Prevent Repeat Occurrences</b>	<b>Approved By</b>	<b>Date</b>	
N/A	N/A	N/A	
STAGE 4 - VERIFICATION OF CORRECTIVE / PREVENTIVE ACTION (if required)			
<b>Verification</b>	<b>Assigned To</b>	<b>Verified</b>	
Verification will be made at the first Management Review meeting of 2021.	DWQMS Rep / Operator	Y / N	
<b>CAR Closed By</b>	Nicole Bradley	<b>CAR Close Date</b>	Jan. 4, 2021 NB

Proof of Acceptance

  
Manager, Water & Wastewater/ORO

  
Date



Ministry of the Environment,  
Conservation and Parks

Ministère de l'Environnement, de la  
Protection de la nature et des Parks

Southwestern Region

Direction régionale du Sud-Ouest

620 – 4510 Rhodes Drive  
Windsor ON N8W 5K5

Tel.: 519 948-1464

Fax.: 519 948-2396

TTY: 416 456-1234

620 – 4510, chemin Rhodes  
Windsor ON N8W 5K5

Tél. : 519 948-1464

Télec. : 519 948-2396

ATS : 416 456-1234

File# SI-ES-TE-540

January 14, 2021

Town of Tecumseh  
917 Lesperance Road  
Tecumseh, ON  
N8N 1W9

Attention: Margaret Misk-Evans, CAO  
[mevans@tecumseh.ca](mailto:mevans@tecumseh.ca)

Dear Ms. Misk-Evans;

Re: Tecumseh Water Distribution System  
Inspection Report

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Please find enclosed the Drinking Water System Inspection Report for the Tecumseh Distribution System (DWS#260004969). This year's unannounced inspection was conducted remotely and the telephone interview/questionnaire was held on December 7, 2020. There was no physical inspection conducted at your drinking water system this year.

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 on the Drinking Water Ontario website at [www.ontario.ca/drinkingwater](http://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) 490-0761.

Likewise, if you have any questions or concerns regarding this report, please call me at (226) 280-1556.

Yours truly,



Neil Gilbert, P.Eng.  
Provincial Officer – Water Inspector  
Southwestern Region  
Ministry of the Environment, Conservation and Parks  
Sarnia District – Windsor Area Office

Encl.

cc: Dr. Wajid Ahmed, Medical Officer of Health, Windsor-Essex County HU, [wahmed@wechu.org](mailto:wahmed@wechu.org)  
Theresa Marentette, CEO and Chief Nursing Officer, Windsor-Essex County HU, [tmarentette@wechu.org](mailto:tmarentette@wechu.org)  
Kristy McBeth, Director of Health Protection, Windsor-Essex County HU, [kmcbeth@wechu.org](mailto:kmcbeth@wechu.org)  
Phil Wong, Manager, Environmental Health, Windsor-Essex County HU, [pwong@wechu.org](mailto:pwong@wechu.org)  
Victoria Peczulis, Manager, Environmental Health, Windsor-Essex County HU, [vpeczulis@wechu.org](mailto:vpeczulis@wechu.org)  
Phil Bartnik, Director of Public Works & Env. Services, Town of Tecumseh, [pbartnik@tecumseh.ca](mailto:pbartnik@tecumseh.ca)  
Brad Dupuis, Water & Wastewater Manager, Town of Tecumseh, [bdupuis@tecumseh.ca](mailto:bdupuis@tecumseh.ca)  
Marc Bechard, Water Compliance Supervisor, MECP Sarnia District, [marc.bechard@ontario.ca](mailto:marc.bechard@ontario.ca)



**Ministry of the Environment, Conservation and Parks**

**TECUMSEH DISTRIBUTION SYSTEM**  
**Inspection Report**

<b>Site Number:</b>	260004969
<b>Inspection Number:</b>	1-NX84L
<b>Date of Inspection:</b>	Dec 07, 2020
<b>Inspected By:</b>	Neil Gilbert

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Appendix A: Stakeholder Appendix

Appendix B: Inspection Rating Record

**OWNER INFORMATION:**

<b>Company Name:</b>	TECUMSEH, THE CORPORATION OF THE TOWN OF		
<b>Street Number:</b>	917	<b>Unit Identifier:</b>	
<b>Street Name:</b>	LESPERANCE Rd		
<b>City:</b>	TECUMSEH		
<b>Province:</b>	ON	<b>Postal Code:</b>	N8N 1W9

**CONTACT INFORMATION**

<b>Type:</b>	Main Contact	<b>Name:</b>	Brad Dupuis
<b>Phone:</b>	(519) 735-2184 x145	<b>Fax:</b>	(519) 735-1895
<b>Email:</b>	bdupuis@tecumseh.ca		
<b>Title:</b>	Water & Wastewater Manager		

**INSPECTION DETAILS:**

<b>Site Name:</b>	TECUMSEH DISTRIBUTION SYSTEM
<b>Site Address:</b>	TECUMSEH
<b>County/District:</b>	TECUMSEH
<b>MECP District/Area Office:</b>	Windsor Area Office
<b>Health Unit:</b>	WINDSOR-ESSEX COUNTY HEALTH UNIT
<b>Conservation Authority:</b>	Essex Region Conservation Authority
<b>MNR Office:</b>	Chatham Regional Office
<b>Category:</b>	Large Municipal Residential
<b>Site Number:</b>	260004969
<b>Inspection Type:</b>	Special Unannounced
<b>Inspection Number:</b>	1-NX84L
<b>Date of Inspection:</b>	Dec 07, 2020
<b>Date of Previous Inspection:</b>	Jan 16, 2020

**COMPONENTS DESCRIPTION****Site (Name):** Distribution System**Type:** **Sub Type:****Comments:**

The Tecumseh Distribution System is a standalone distribution system which supplies water to the area of the Town of Tecumseh in two discrete service zones. The zone north of Highway 401 is bounded by the Tecumseh municipal boundaries, south to Baseline Road. The zone south of Highway 401 is bounded by the Tecumseh municipal boundaries generally south of Essex County Road 46. Source water is from the City of Windsor water supply via the Windsor municipal distribution system. One currently unused connection from Windsor is through a short section of transmission main within the Lasalle municipal distribution system. The City of Windsor water supply draws its source water from the Detroit River in the vicinity of Belle Isle. According to the drinking water system profile, a population of approximately 24,000 residents is served by the Tecumseh Distribution System. It therefore falls into the "large municipal residential" category under O. Regulation 170/03.

Water mains take treated water from the City of Windsor to the service area through 10 of 12 currently used boundary metered connections points with Tecumseh. The water tower in the Town of Tecumseh maintains distribution system

pressure and is controlled by the Town. The water tower is monitored by the Windsor Utilities Commission (WUC) and the Town through SCADA. Secondary disinfection is provided by the A.H. Weeks water treatment plant in Windsor.

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

- Town of Tecumseh, City of Windsor and Windsor Utilities Commission (WUC) entered into a 50-year service agreement in November 2004 (By-law 2004-71). The service agreement was implemented on March 31, 2006.
- Prior to August 1, 2008, WUC provided water to 2400 residents in the former Township of Sandwich South, south of Highway 401 ("South Water Area"). The Town of Tecumseh assumed the responsibility for the operations and maintenance of the water distribution system from WUC in this South Water Area effective August 1, 2008.

## 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" and was conducted remotely. This type of system receives treated water from a separately owned "donor" system. This report contains 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 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.

The Tecumseh Distribution System (DWS#260004969) is owned by the Corporation of the Town of Tecumseh. It is a standalone distribution system that receives treated surface water from the City of Windsor water supply via the Windsor municipal distribution system. The City of Windsor water supply draws its source water from the Detroit River in the vicinity of Belle Isle.

According to Tecumseh's drinking water system profile, a population of approximately 24,000 residents are served by the Tecumseh Distribution System. It therefore falls into the "large municipal residential" category under O.Reg. 170/03.

The water tower in the Town of Tecumseh maintains distribution system pressure and secondary disinfection is provided by the A.H. Weeks water treatment plant in Windsor.

This inspection was conducted remotely and the inspection review period was January 1, 2020 to November 30, 2020.

### Treatment Processes

- The owner/operating authority was in compliance with the requirement to prepare Form 2 documents as required by their Drinking Water Works Permit during the inspection period.
- Where an activity has occurred that could introduce contamination, all parts of the drinking water system were disinfected in accordance with Schedule B, Condition 2.3 of the Drinking Water Works Permit.

The system's representative was made aware that the updated Ontario Watermain Disinfection Procedure was issued on August 1, 2020. The representative was advised that the municipality is required to modify its watermain repair/commissioning procedures and forms to meet the updated procedure's documentation requirements by the date required in its DWWP.

- The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

### Treatment Process Monitoring

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

As per O.Reg. 170/03 s 7-2 (3), the owner/operating authority of a system that provides secondary disinfection shall

### Treatment Process Monitoring

ensure that at least seven distribution samples are taken each week and are tested immediately for, (a) free chlorine residual, if the system provides chlorination and does not provide chloramination; or (b) combined chlorine residual, if the system provides chloramination.

The following rules apply to the distribution samples referred above unless at least one sample is taken on each day of the week: At least four of the samples must be taken on one day of the week, at least 48 hours after the last sample was taken in the previous week. Then, at least three of the samples must be taken on a second day of the week, at least 48 hours after the last sample was taken on the first day of the sampling week. When more than one sample is taken on the same day of the week then each sample must be taken from a different location.

During the inspection review period (January 1, 2020 to November 30, 2020) at least seven distribution samples were collected each week using the 4/3 rule and tested for free chlorine residuals.

- **Samples for chlorine residual analysis were tested using an acceptable portable device.**

### Distribution System

- **The owner had up-to-date documents describing the distribution components as required.**
- **There is a backflow prevention program, policy and/or bylaw in place.**  
The Town of Tecumseh's By-law #2001-68 is a by-law which regulates backflow prevention. In addition, Tecumseh's Standard Operating Procedure #017 (SOP-017) is a procedure for the annual inspection and testing of backflow preventers.
- **The owner had a program or maintained a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system.**
- **The owner had implemented a program for the flushing of watermains as per industry standards.**
- **Records confirmed that disinfectant residuals were routinely checked at the extremities and "dead ends" of the distribution system.**
- **A program was in place for inspecting and exercising valves.**
- **There was a program in place for inspecting and operating hydrants.**
- **There was a by-law or policy in place limiting access to hydrants.**  
The Town of Tecumseh's Water-Use By-law #2003-99 (Parts 7.3 and 11) contain conditions with respect to the use and restriction of hydrants.
- **The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.**
- **The donor had provided an Annual Report to the receiver drinking water system.**

### Operations Manuals

- **Operators and maintenance personnel had ready access to operations and maintenance manuals.**

### Operations Manuals

- The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.
- 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.

Condition 16.2 under Schedule B of Tecumseh's Drinking Water Licence (#040-101, Issue #4 dated May 24, 2019) notes that the operations and maintenance manuals shall include (at a minimum) the following:

- 16.2.1 The requirements of this licence and associated procedures;
  - 16.2.2 The requirements of the drinking water works permit for the drinking water system;
  - 16.2.3 A description of the processes used to achieve secondary disinfection within the drinking water system;
  - 16.2.4 Procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;
  - 16.2.5 Procedures for the operation and maintenance of monitoring equipment;
  - 16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;
  - 16.2.7 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint.
- A review of Tecumseh's operating manual and standard operating procedures suggests that these conditions appear to be satisfied. All secondary disinfection is provided by the City of Windsor's A.H. Weeks Water Treatment Plant and Tecumseh does not maintain or operate a re-chlorination system.

### Logbooks

- 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.
- For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.
- Logs or other record keeping mechanisms were available for at least five (5) years.

### Contingency/Emergency Planning

- Standby power generators were tested under normal load conditions.

The standby natural gas powered generator at the Public Works building is tested once a month.

### Security

- All storage facilities were completely covered and secure.
- Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens.
- The owner had provided security measures to protect components of the drinking water system.

### Consumer Relations

- The owner and/or operating authority undertook efforts to promote water conservation and reduce water

### Consumer Relations

#### **losses in their system.**

The Owner/Operating Authority has taken various water conservation efforts including, public education/water conservation promotion, water line replacement, and fully metering customers.

The Town of Tecumseh's By-Law #2003-99 is a by-law which regulates the use of water within the Town.

### Certification and Training

- **The overall responsible operator had been designated for each subsystem.**
- **Operators-in-charge had been designated for all subsystems which comprised the drinking water system.**
- **All operators possessed the required certification.**
- **An adequately licenced operator was designated to act in place of the overall responsible operator when the overall responsible operator was unable to act**

### Water Quality Monitoring

- **All microbiological water quality monitoring requirements for distribution samples were being met.**

As per O.Reg. 170/03 s10-2, the owner/operating authority for the system shall ensure that if a system serves 100,000 people or less, at least eight distribution samples, plus one additional sample for every 1,000 people served, are taken every month, with at least one sample being taken each week. Each of the distribution samples collected must be tested for E. coli and total coliforms and at least 25 percent of these samples must be tested for general bacteria population expressed as colony counts on a heterotrophic plate count (HPC).

During the inspection review period (January 1, 2020 to November 30, 2020) all microbiological water monitoring requirements for distribution water samples were performed.

- **All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location.**

As per O.Reg 170/03 s13-6.1, the owner/operating authority shall ensure that a minimum of one sample is collected and tested for haloacetic acid (HAA) per calendar quarter.

On January 1, 2020, the O.Reg. 169/03 standard for HAA (80ug/L) came into effect and is expressed as a RAA, where RAA is defined as "the running annual average of quarterly results" for HAA for a drinking water system. During the inspection review period (January 1, 2020 to November 30, 2020), these HAA samples were collected on Jan. 6, 2020 (HAA result = 13.9ug/L), Apr. 6, 2020 (HAA result = 16.5ug/L), July 7, 2020 (HAA result = 26.1ug/L) and Oct. 5, 2020 (HAA result = 26.3ug/L). All of these HAA results were below 80ug/L and the average for the inspection review period was 20.7ug/L.

- **All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.**

As per O.Reg. 170/03 s13-6, the owner/operating authority of a system that provides chlorination or chloramination shall ensure that at least one distribution sample is taken in each calendar quarter, from a point in the distribution system that is likely to have an elevated potential for the formation of trihalomethanes (THMs), and have the sample tested for THMs.

During the inspection review period (January 1, 2020 to November 30, 2020), these THM quarterly samples were collected on Jan. 6, 2020 (at 3 locations with a THM average = 15ug/L), Apr. 6, 2020 (at 4 locations with a THM average = 16.8ug/L), July 7, 2020 (at 3 locations with a THM average = 34.7ug/L) and Oct. 5, 2020 (at 3 locations with a THM average = 40ug/L).

The Ontario Drinking Water Quality Standard (ODWQS) for THM is 100 ug/L (expressed as a running annual

### Water Quality Monitoring

average of quarterly results). All of the THM results were below 100ug/L and the average for the inspection review period was 26.6ug/L.

- **The owner ensured that water samples were taken at the prescribed location.**
- **All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.**

This drinking water system is exempt from plumbing lead sampling as per the exemption in O.Reg. 170/03 Schedule 15.1. Under this exemption and as per subsection 15.1-5 (10), the owner/operating authority are required to test for pH and alkalinity during each of the two periods described in subsection 15.1-5 (5) (i.e. Dec. 15 to Apr. 15 and June 15 to Oct. 15) in every 12-month period and to test for lead during each of the two periods described in subsection 15.1-5 (5) in every third 12-month period. In accordance with the "Reduced Sampling Table" (found in O.Reg. 170/03 Schedule 15.1) and based on the population served by the Tecumseh Distribution System, at least four sampling points must be tested in the distribution system per period (i.e. Dec. 15 to Apr. 15 and June 15 to Oct. 15).

During the inspection review period (Jan. 1, 2020 to Nov. 30, 2020), water samples were collected from four locations within the distribution system on Jan. 23, 2020 and Oct. 5, 2020 and tested for lead, alkalinity and pH.

- **Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.**
- **The owner indicated that the required records are kept and will be kept for the required time period.**

### 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).**

### Reporting & Corrective Actions

- **Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements.**

**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:

Neil Gilbert

Signature: (Provincial Officer)

Reviewed &amp; Approved By:

Marc Bechard

Signature: (Supervisor)

Review &amp; 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.



Ministry of the Environment,  
Conservation & Parks  
Drinking Water System Inspection Report  
Appendix A

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## Stakeholder Appendix

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# 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](mailto:waterforms@ontario.ca).

For more information on Ontario's drinking water visit [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater)



PUBLICATION TITLE	PUBLICATION NUMBER
<b>FORMS:</b> 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

# Principaux guides et documents de référence sur les réseaux résidentiels municipaux d'eau potable

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment. Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le ministère au 1-866-793-2588, ou encore à [waterforms@ontario.ca](mailto:waterforms@ontario.ca) si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site [www.ontario.ca/eaupotable](http://www.ontario.ca/eaupotable)

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Renseignements sur le profil du réseau d'eau potable	012-2149F
Avis de demande de services de laboratoire	012-2148F
Avis de résultats d'analyse insatisfaisants et de règlement des problèmes	012-4444F
Prendre soin de votre eau potable - Un guide destiné aux membres des conseils municipaux	Site Web
Marche à suivre pour désinfecter l'eau potable en Ontario	Site Web
Stratégies pour minimiser les trihalométhanes et les acides haloacétiques de sous-produits de désinfection	Site Web
Filtration Processes Technical Bulletin (en anglais seulement)	Site Web
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	Site Web
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable	Site Web
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	Site Web
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802F
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	Site Web
Liste des personnes-ressources du réseau d'eau potable	Site Web
L'eau potable en Ontario - Norme de gestion de la qualité - Guide de poche	Site Web
Procédure de désinfection des conduites principales	Site Web
Laboratoires autorisés	Site Web



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**Inspection Rating Record**

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

**DWS Name:** TECUMSEH DISTRIBUTION SYSTEM  
**DWS Number:** 260004969  
**DWS Owner:** Tecumseh, The Corporation Of The Town Of  
**Municipal Location:** Tecumseh

**Regulation:** O.REG 170/03  
**Category:** Large Municipal Residential System  
**Type Of Inspection:** Standalone  
**Inspection Date:** December 7, 2020  
**Ministry Office:** Windsor Area Office

**Maximum Question Rating:** 240

Inspection Module	Non-Compliance Rating
Treatment Processes	0 / 33
Distribution System	0 / 4
Operations Manuals	0 / 42
Logbooks	0 / 22
Certification and Training	0 / 35
Water Quality Monitoring	0 / 71
Reporting & Corrective Actions	0 / 4
Treatment Process Monitoring	0 / 29
<b>TOTAL</b>	<b>0 / 240</b>

Inspection Risk Rating	0.00%
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<b>FINAL INSPECTION RATING:</b>	<b>100.00%</b>
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Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2020-2021)

**DWS Name:** TECUMSEH DISTRIBUTION SYSTEM  
**DWS Number:** 260004969  
**DWS Owner:** Tecumseh, The Corporation Of The Town Of  
**Municipal Location:** Tecumseh

**Regulation:** O.REG 170/03  
**Category:** Large Municipal Residential System  
**Type Of Inspection:** Standalone  
**Inspection Date:** December 7, 2020  
**Ministry Office:** Windsor Area Office

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**Maximum Question Rating:** 240

<b>Inspection Risk Rating</b>	<b>0.00%</b>
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<b>FINAL INSPECTION RATING:</b>	<b>100.00%</b>
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**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	260004969
<b>Drinking-Water System Name:</b>	Town of Tecumseh Distribution System
<b>Drinking-Water System Owner:</b>	The Corporation of The Town of Tecumseh
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	01- January -2020 to 31- December – 2020

**Complete if your Category is Large Municipal Residential or Small Municipal Residential**

Does your Drinking-Water System serve more than 10,000 people? Yes [ x ] No [ ]

Is your annual report available to the public at no charge on a web site on the Internet? Yes [ x ] No [ ]

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Town of Tecumseh Municipal Office  
917 Lesperance Road  
Tecumseh, Ontario  
N8N 1W9

**Complete for all other Categories.**

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes [ X ] No [ ]

Number of Interested Authorities you report to:

2

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes [ x ] No [ ]

**Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report**

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Lakeshore Dist. System	260004982

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [ x ] No [ ]



Indicate how you notified system users that your annual report is available, and is free of charge.

- ☒ Public access/notice via the web  
☐ Public access/notice via Government Office  
☐ Public access/notice via a newspaper  
☒ Public access/notice via Public Request  
☐ Public access/notice via a Public Library  
☐ Public access/notice via other method \_\_\_\_\_

**Describe your Drinking-Water System**

**Water Distribution System**

The Town of Tecumseh, City of Windsor and the Windsor Utilities Commission (WUC) entered into a 50-year Service Agreement in November 2004. The Service Agreement was implemented on March 31, 2006 when four boundary metering chambers were installed and maintained by the Town of Tecumseh. Tecumseh's drinking water system also includes a water tower located on Tecumseh Road, with no re-chlorination stations within the distribution system

Prior to August 1, 2008, WUC provided water to 2,400 residents in the former Township of Sandwich South, south of Highway 401 ("South Water Area"). The Town installed eight additional boundary meter chambers and assumed the responsibility for the operations and maintenance of the water distribution system from WUC in this South Water Area effective August 1, 2008.

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

**List all water treatment chemicals used over this reporting period**

N/A

**Were any significant expenses incurred to?**

- No ☒ Yes ☐ Install required equipment  
No ☒ Yes ☐ Repair required equipment  
No ☐ Yes ☒ Replace required equipment- Public Works Report No.2020-10



**Please provide a brief description and a breakdown of monetary expenses incurred**

This project involves the replacement of the existing 150mm and 200mm diameter ductile iron watermain at the Highway 3/County Road 11 intersection from Oldcastle Road westerly to approximately 450m west of County Road 11 (Walker Road) and along County Road 11 from McCord Lane southerly to just south of Highway 3 with new 200mm and 300mm diameter watermain. Total cost of projects was \$1,390,658, excluding HST.

**Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
None					

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.**

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	520	0 to 0	0 to 0	157	0 to 10

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity	N/A	
Chlorine Tecumseh Water Tower	8760	Max 1.64 mg/L Min 0.70 mg/L
Chlorine Distribution Free Chlorine Residuals	1568	Max 1.82 mg/L Min 0.32 mg/L
Fluoride (If the DWS provides fluoridation)	N/A	

*NOTE: For continuous monitors use 8760 as the number of samples.*

*NOTE: Record the unit of measure if it is **not** milligrams per litre.*



Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Winter Session – Collection Date: January 23, 2020</b>						
305 Burdick	1	85	0.00002	Mg/L	7.1	None
241 Edgewater	1	85	0.00002	Mg/L	7.2	
2060 St Anne	1	86	0.00002	Mg/L	7.1	
12117 Evergreen	1	85	0.00004	Mg/L	7.1	



Location Type Distribution	Number of Samples	Alkalinity Result (range 30-500)	Lead Result (range 0-0.01)	Unit of Measure	Field pH (range 0-14)	Number of Exceedances
<b>Summer Session – Collection Date: October 5, 2020</b>						
278 St Marks	1	78	0.00005	Mg/L	6.70	None
225 Fairway	1	79	0.00004	Mg/L	6.70	
12167 Cedarwood Dr.	1	78	0.00002	Mg/L	6.80	
12325 Meconi Dr.	1	77	0.00003	Mg/L	6.70	

## Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2,4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				

Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acids (HAAs) (NOTE: show latest annual average)	quarterly	20.7	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	quarterly	26.6	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

Summary table for Running Annual Averages of Organic Parameters sampled during this reporting period.

Parameter	Sample Date	Result	Running Annual Average	Unit of Measure	Number of Exceedances
HAA	Jan.6, 2020	13.9	20.7	µg/L	None
	Apr.6, 2020	16.5		µg/L	
	July 7, 2020	26.1		µg/L	
	Oct.5, 2020	26.3		µg/L	



# Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Parameter	Sample Date	Average Result	Running Annual Average	Unit of Measure	Number of Exceedances
THM	Jan.6, 2020	15.0	26.6	µg/L	None
	Apr.6, 2020	16.8		µg/L	
	July 7, 2020	34.7		µg/L	
	Oct.5, 2020	40.0		µg/L	

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample
N/A			



Summary Report  
For the  
Tecumseh Distribution System  
(260004969)  
For the year  
2020

Prepared for the Town of Tecumseh  
By Brad Dupuis, C.Tech.  
Manager Water & Wastewater Division O.R.O.

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## Section 1: Overview

This report has been prepared and submitted in accordance with Schedule 22 of O. Reg. 170/03 under the *Safe Drinking Water Act*. Schedule 22 requires:

The owner of a drinking-water system shall ensure that, not later than March 31 of each year after 2003, a report is prepared in accordance with subsections (1) and (2) for the preceding calendar year and is given to the members of the municipal council.

Schedule 22 also states that:

- 1) The 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; and
  - b) for each failure referred to in clause (a), describe the measures that were taken to correct the failure.
- 2) The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system. A summary of the quantities of the water supplied during the period covered by the report, including monthly flows.

In June 2003, the provincial *Safe Drinking Water Act* came into effect. The Drinking Water Systems Regulation (O.Reg. 170/03) defines how various drinking water systems are to be operated.

According to this Regulation, the Tecumseh Distribution System is classified as a Large Municipal Residential System (LMR).

## Section 2: Non-Compliance Issues

During the year of 2020 there was zero (0) reportable issue.

## Section 3: System Capability – 2020 Water Consumption

In accordance with the Agreement between the Town of Tecumseh and the City of Windsor for the provision of water services to the Town of Tecumseh, executed under By-Law No. 2004-71, the Maximum Daily Flow shall not exceed **87 Million Litres** (87 MLD) or 87,000 cubic meters.

The **Maximum Daily Flow** for 2020 was **17,371,000 Litres** (17,371 Cubic Meters) on July 06, 2020.

Monthly average and daily flows for 2020 are attached for reference.

A summary of the **monthly** total volume supplied by the City of Windsor to the Town of Tecumseh in the year 2020 is provided below:

Month	Total Volume (cubic meters)
January	205,499
February	185,850
March	203,244
April	202,201
May	261,947
June	379,234
July	424,549
August	400,946
September	364,352
October	291,363
November	255,254
December	237,754
<b>Total</b>	<b>3,174,439</b>