

Meeting Minutes / Report

(Attachment 4)

Last Revised: 2020-02-11
Prepared By: Brad Dupuis

Meeting Minutes

Meeting Type: Management Review Meeting – DWQMS

Date: February 11, 2020

Called by: Town of Tecumseh

Attendees:
Margaret Misek-Evans - Chief Administration Officer (CAO)
Phil Bartnik - Director, Public Works & Environmental Services
Brad Dupuis - Manager, Water & Wastewater O.R.O.
Shawn LaPorte - DWQMS Representative/Water Operator

Location: Lacasse Board Room – 1189 Lacasse Blvd.

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	The sign-in sheet is appended to these minutes as Attachment No. 1.	IS	No Action Required
1	Previous Management Review Meeting Action Items	In the previous Management Review Meeting there were 04 Action Items (AI-04).	IS	No Action Required
		AI-01 As for the 2019 verification desktop audit, Brad and Denis attempted contact with Elizabeth Haney from NSF to set a date. Multiple emails and voicemails have been left with no response. Brad was to reach out to his peers and committees for further contacts with NSF Brad contacted Elizabeth Haney from NSF and completed the verification Inspection on October 25, 2019. Results have been completed and discussed in further detail in item 4 of this report.	IS	No Action Required

Meeting Minutes / Report

(Attachment 4)

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		<p>AI-02</p> <p>Brad and Denis to email version 15 to suppliers once completed.</p> <p>Town of Tecumseh water standards Version 15 is in the final stages.</p> <p>Discussed in further detail in item 9 of this report.</p>	IS	No Action Required
		<p>AI-03</p> <p>Denis Berthiaume, Manager of Water & Wasterwater O.R.O, is set to retire December 31, 2019. The job is currently posted and closes September 27, 2019.</p> <p>Brad is to contact the MECP (Ministry of Environment, Conservation and Parks Ontario) and fill out the revised <i>Drinking Water System Profile Information</i> form when action takes place.</p> <p>Brad contacted the MECP and updated the <i>Drinking Water System Profile Information</i> for the Town of Tecumseh</p>	IS	No Action Required

Meeting Minutes / Report

(Attachment 4)

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		AI-04 Denis and Shaun Fuerth (IT Department) to complete SCADA system upgrades. IT department partnered with the water & wastewater division will continue to work with ONYX Engineering to complete SCADA system upgrades. Discussed in further detail in item 12 of this report.	IS	No Action Required
		The Management Review Commitment (MCR) and Endorsement Statement is appended to the meeting minutes for September 09, 2019 as Attachment No. 2.		
2	Incidents of Adverse Drinking Water Tests	There have been (0) Adverse Drinking Water Results since the last managers meeting (September 09, 2019).	IS	No Action Required
3	Results of Internal Audits	The previous (2019) internal audit was reviewed and dispensed in the previous <i>managers review meeting- DWQMS</i> The upcoming Internal Audit shall be completed in the calendar year of 2020	AI	Brad and Shawn to complete the internal audit towards the end of the summer / early fall

Meeting Minutes / Report

(Attachment 4)

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4	Results of External Audits	<p>The results of the NSF Audit (October 25, 2019) were (0) Non-Conformances (NC) and (1) Opportunities for Improvements</p> <p>(OFI-1) A formal process to review Best Practices could prove Beneficial</p> <p>The MECP has yet to posts water distribution Best Practices therefore continuing to attend conferences, training sessions, committee meetings allowing us to network with peers is all considered best practice.</p> <p>NSF Audit was reviewed by all operators, attendance records available</p> <p>NSF Report is appended to these minutes as Attachment No. 3.</p>	IS	No Action Required
		<p>Every three years, an <i>On-Site</i> DWQMS Verification Audit must be completed by an accredited third party. Verification Inspection was completed November 21, 2018 by NSF. The results were discussed in the previous managers meeting (Feb 19, 2019).</p> <p>Annually a desktop DWQMS Verification Audit is to be completed by an accredited third party.</p> <p>The upcoming External Audit shall be completed in the calendar year of 2020</p>	AI	Brad and Shawn to contact accredited third party to complete the external audit mid-fall

Meeting Minutes / Report

(Attachment 4)

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5	Results of MECP Inspection	<p>MECP Inspection Report was completed January 16, 2020 and received a Final Inspection Rating of 100%.</p> <p>MECP Inspection Report is appended to these minutes as Attachment No. 4.</p> <p>Report Number PWES-2020-13 to be presented to council February 25, 2020.</p>	AI	Brad to present MECP Inspection results to council Feb 25, 2020
6	Incidents of Non-Compliance with Applicable Regulations	There are currently no Non-Compliance issues	IS	No Action Required
7	Consumer Feedback	<p>(10) Consumer complaints regarding water quality were made to the Town of Tecumseh since the last Manager's Review Meeting (2019-10-09).</p> <p>(1) Sep 20, 2019 (610 Michael)-</p> <ul style="list-style-type: none"> Particles on dishes – consumer stated particles sticking to dishes. Operator responded to the consumer complaint regarding the particles. Operator found particles were soap residue from dish washer. Operator took a chlorine residual of 1.08ppm. (Acceptable MECP range 0.05-4.0ppm) <p>(2) Oct 29, 2019 (1016 William)-</p> <ul style="list-style-type: none"> Low Pressure – consumer stated they had low pressure. Operator found normal operating pressure of 60 psi at laundry tub. Low pressure found at kitchen tap only. Advised consumer to clean screen on faucet. Obtained a chlorine residual of 0.56ppm. (Acceptable MECP range 0.05-4.0ppm) 	IS	No Action Required

Meeting Minutes / Report

(Attachment 4)

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		<p>(3) Oct 31, 2019 (163 Manning)-</p> <ul style="list-style-type: none"> • Colour – consumer stated discolored water coming from kitchen taps. Operator was completing the valve turning program on Manning at time of call. Operator attended consumers' residence and flushed hydrant in front of 163 Manning until visually clear. Obtained a chlorine residual of 0.76ppm from hydrant. Obtained a chlorine residual of 0.48ppm in residence house. (Acceptable MECP range 0.05-4.0ppm) <p>(4) Nov 01, 2019 (12336 Candlewood)-</p> <ul style="list-style-type: none"> • Odor smell – customer stated water had strong smell of chlorine. Operator took a chlorine residual of 1.28ppm. (Acceptable MECP range 0.05-4.0ppm) <p>(5) Nov 02, 2019 (13554 Riverside Dr.)-</p> <ul style="list-style-type: none"> • Colour- Customer stated discoloured water coming from taps. Operator found cloudy water when first dispensed into clear glass and then clearing overtime. Common occurrence in temperature change. Operator took a chlorine residual of 1.28ppm. (Acceptable MECP range 0.05-4.0ppm) <p>(6) Nov 05, 2019 (402 Amberlly)-</p> <ul style="list-style-type: none"> • Odor smell – customer stated odor and putty type taste along with low pressure. Operator did not find an odor nor putty type taste to consumers' water. Operator found normal pressure at laundry tub. Operator took a chlorine residual of 1.06ppm. (Acceptable MECP range 0.05-4.0ppm) 		
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Meeting Minutes / Report

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(7) Nov 05, 2019 (401 Amberlly)-

- **Odor smell** – customer stated odor and putty type taste. Operator did not find an odor nor putty type taste to consumers' water. Operator took a chlorine residual of 1.16ppm. (Acceptable MECP range 0.05-4.0ppm)

(8) Nov 06, 2019 (1900 Candlewood.)-

- **Colour**- Customer stated his pool filter was stained pink due to the municipal water supply. Pool water is not potable water therefor operator took a glass sample at kitchen tap finding no discoloration or odor as described. Operator took a chlorine residual of 1.20ppm. (Acceptable MECP range 0.05-4.0ppm)

(9) Nov 16, 2019 (12922 Lemire)-

- **Taste**- Customer stated strong chlorine taste in water. Operator took a chlorine residual of 0.92ppm. (Acceptable MECP range 0.05-4.0ppm)

(10) Dec 20, 2019 (12540 Clarice)-

- **Low Pressure**- Customer stated they had low pressure. Operator found water softener to be the cause. Operator was able to complete a visual inspection from hose bib, ensuring strong pressure. Operator took a chlorine residual of 1.32ppm. (Acceptable MECP range 0.05-4.0ppm)

Meeting Minutes / Report

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		<p>DWQMS Rep. has reviewed the Survey Monkey results from past managers meeting (September 25, 2019) to today (February 11, 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>	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
		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>Shawn LaPorte is now the current DWQMS Rep. Brad Dupuis is the alternate.</p> <p>Changes to the Operational Plan Version 10 have been updated to reflect such change</p>	IS	No Action Required

Meeting Minutes / Report

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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>Documentation stored in shared hard drives.</p>	AI	Complete Annual hydrant flushing program in the Spring
		<p>The <i>hydrant winterizing program</i> was completed December 09, 2019</p> <p>Three different checks were completed</p> <p>Documentation stored in shared hard drives.</p>	IS	No Action Required
		<p>The <i>valve turning program</i> is underway. 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>The <i>meter change program</i> has been complete. All water meters are now read by the Itron drive-by system</p>	IS	No Action Required
		<p>Current FC300 Itron reading system is being replaced by MC3Lite. Brad has been working with IT department, Wolseley, Itron and Essex Power for the implementation and training of new software.</p> <p>It is in final stages of completion</p>	IS	No Action Required

Meeting Minutes / Report

(Attachment 4)

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		<p>We have a total of 33 sample stations.</p> <p>2019- (10) Stainless Steel sample station units have been replaced as per life cycle</p> <p>2020- Another (10) units have been ordered</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 awarder tender. Along with GWA for the service body.</p> <p>GWA is currently outfitting the vehicle. Approximation for delivery in March.</p>	IS	No Action Required
		<p>Due to life cycle, service truck W4- 12 is scheduled to be replaced.</p> <p>A report will be brought to council by the Manager of Roads & Fleet for the 2020 supply of various vehicles.</p>	IS	No Action Required
		<p><i>Winter Lead Testing</i> was completed January 23, 2020.</p> <p>All (4) samples taken in the distribution system found to be well below the threshold.</p>	IS	No Action Required

Meeting Minutes / Report

(Attachment 4)

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9	Changes to Services, Activities, Regulations, etc. that could affect DWQMS	There have been changes in the services and/or activities performed by the Town of Tecumseh since the last management review meeting.	IS	No Action Required
		<p>The Ontario Drinking Water Standard for Haloacetic Acids (HAAs) came into effect January 1, 2020</p> <p>The standard will be 0.08 mg/L (80 µg/L) and is expressed as a running annual average (RAA).</p>	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> <p>Report Number FS-2019-14 reflects Administration Fees and Charges.</p>	IS	No Action Required
		Town of Tecumseh water standards Version 15 is in the final stages. The 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.	AI	Brad and Shawn 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 & Environmental Services Five Year Capital Works Plan</i> was endorsed by council (December 10, 2019).	IS	No Action Required

Meeting Minutes / Report

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		<p>Denis Berthiaume, Manager of Water & Wasterwater O.R.O, retired December 31, 2019. Brad Dupuis is his replacement</p> <p>Brad contacted the MECP (Ministry of Environment, Conservation and Parks Ontario) and fill out the revised <i>Drinking Water System Profile Information</i></p>	IS	No Action Required
		<p>Asset Management Plan 2.0 has been created for all linear assets. As a result of that review, a schedule for the replacement of water mains have been created and contained within that document.</p>	IS	No Action Required
		<p>CIMA+ presented the updated version to the Water & Wastewater Master Plan December 10, 2019.</p> <p>Report Number PWES-2019-54 was endorsed by council December 10, 2019</p>	IS	No Action Required
		<p>All reports mentioned above are available on the shared drive for the Town of Tecumseh.</p> <p>30 Day review period ended February 8, 2020.</p> <p>No Part II orders issued.</p>	IS	No Action Required

Meeting Minutes / Report

(Attachment 4)

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10	Infrastructure Review Results	Currently (2) major infrastructure jobs are underway.	IS	No Action Required
		<p>(1) Contractor, Shea Rock, is low tender and scheduled to be awarded Highway No.3 / Walker Road watermain replacement February 25, 2020 at council.</p> <p>Project consists of replacing the existing 200mm Ductile watermain with a 300mm PVC.</p> <p>As well as increasing water quality by removal of existing dead-end watermain 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>	IS	No Action Required
		<p>(2) County of Essex is installing a roundabout at the intersection of Walker Rd and South Talbot Rd.</p> <p>Watermain needs to be lowered in two locations to ensure proper cover for the relocation of box culverts.</p> <p>Current valve placement will align in the centre of new constructed roadway creating dangerous conditions for operators to maintain and operate.</p> <p>Water Division staff will relocate valves protecting the towns assets, allowing contractor to complete project without disruption to consumers as well as keeping costs to a minimal.</p>	IS	No Action Required

Meeting Minutes / Report

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		<p>Note:</p> <p><i>Landmark Structures</i> completed the cleaning and inspection report for water tower June 05, 2018.</p> <p>It was found that within the next 2-4 years the interior lining of the tank should be removed via abrasive blast cleaning, then re-lined with an AWWA D102 ICS-3 or ICS-4 system.</p> <p>April 23, 2019 Report Number PWES-2019-25 (Internal Lining replacement of the Town of Tecumseh elevated water tank) was accepted.</p> <p><i>Landmark Structures</i> began October 14, 2019 and completed January 10, 2020.</p> <p>Bonduelle and Windsor treatment plants have been contacted, informing them of such activities.</p>	IS	No Action Required
		<p>There have been a total of 20 broken watermain repairs in 2019</p> <p>(9) in former Tecumseh Hamlet area (5) in former St. Clair Beach area (6) in former Sandwich South area</p>	IS	No Action Required

Meeting Minutes / Report

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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> <p>The results of risk assessment have been added to the operational plan (version 10).</p> <p>Version 10 of the Operational Plan will be brought to council February 25, 2020 for endorsement</p>	AI	<p>Brad present Version 10 to council for endorsement Feb 25, 2020</p> <p>Brad and Shawn to review operational plan and risk assessment with operators once endorsed.</p>
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 & Wastewater division to implement the upgrades.</p>	AI	<p>Brad and Shaun Fuerth (IT department) working together towards completion</p>

Meeting Minutes / Report

(Attachment 4)

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13	Effectiveness of Risk Assessment Process	<p>Every three years a full comprehensive review shall be completed.</p> <p>A full comprehensive review of the risk assessments were completed on January 24, 2019 by Denis, Brad and senior operators.</p> <p>Risk Assessment shall be completed with all operators during the review for the Operational Plan Version 10</p>	IS	Brad and Shawn to complete risk assessment review with operators during the review of the Operational Plan Version 10
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>Attendance records shall be available once completed.</p>	AI	Brad and Shawn to complete and review Emergency Response Plan Version 12 with operators along with two mock exercises
		<p>The Town of Tecumseh has been responding to higher water levels in the Great Lakes system since earlier this year.</p> <p>Projects completed to date include: providing free sandbags and sand to residents along the shorelines of Lake St. Clair and Pike Creek; conducting topographical surveys of the shoreline to determine critical areas for protection; shoring up pump stations and clearing drainage channels; and, developing a Flood Emergency Response Plan through the Fire Department.</p> <p>The Fire Department submitted the Flood Emergency Response Plan to Council which was approved on July 9, 2019. (Report Number FIRE-2019-05).</p>	IS	No Action Required

Meeting Minutes / Report

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		Phil, Brad, Shawn and Margaret are part of the Tecumseh Flood Working Group.		
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 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) has been completed and will be presented to council February 25, 2020.</p>	AI	Brad to present annual summary report to council February 25, 2020
16	Resources needs 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 Shawn LaPorte have reviewed the retention table along with the documents pertaining to it.	IS	No Action Required

Meeting Minutes / Report

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19	Comments / Suggestions made by Personnel	No suggestions or feedback was given.	IS	No Action Required
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SIGN-IN SHEET

PURPOSE: TOWN OF TECUMSEH DWQMS MANAGEMENT REVIEW MEETING

DATE: February 11, 2020

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	<i>Brad Dupuis</i>
SHAWN LAPORTE	DWQMS REPRESENTATIVE / WATER OPERATOR	<i>Shawn Laporte</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 meet the input requirements of the Town of Tecumseh DWQMS management review program.
- 3) That the committee is aware of the actions assigned to appropriate resources as a result 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 action items
 - b. Within the timelines committed to in the meeting
- 2) Approval to empower the DWQMS representative 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: September 9th 2019

Name/ Delegate Name	Title	Signature	Date
Margaret Misek-Evans	Chief Administrative Officer (CAO)	Marg Misek-Evans	Feb 11/20
Phil Bartnik	Director of Public Works & Environmental Services	Phil Bartnik	Feb 11/20
Brad Dupuis	Manager, Water and Wastewater	Brad Dupuis	Feb 11/20
Shawn Laporte	DWQMS Representative	Shawn Laporte	Feb 11/20



NSF International Strategic Registrations Audit Report

The Corporation Of The Town Of Tecumseh

917 Lesperance Rd.

Tecumseh, Ontario N8N 1W9 CAN

C0122080

Audit Type

DWQMS System Audit

Auditor

Robert Howarth

Standard

Ontario's Drinking Water Quality Management Standard Version 2

Audit Date(s):

10/25/2019 - 10/25/2019

Recommendation

Ontario's Drinking Water Quality Management Standard Version 2 : DWQMS System Audit
Complete No Change to Certificate



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 non-compliance, no incidents of adverse drinking-water tests and no deviations from critical control point limits combined with the continued investment in infrastructure and personnel.

Opportunities

Ontario's Drinking Water Quality Management Standard Version 2

A formal process to review Best Practices could prove Beneficial.

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

Processes

Ontario's Drinking Water Quality Management Standard Version 2

Process Name	Observations / Auditor Notes
7: DWQMS Element 21 Continual Improvement	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element- 21 Version 9 ; No Corrective Actions identified in past 12months No incidents of regulatory noncompliance, 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 10 – Competencies	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-10; Version 9 ; 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 Water/Wastewater Supervisor New Operators (OIT) Operator-3 Operator-2 Operator-1</p> <p>Additionally defines Methods to assess, develop and maintain competencies</p>
DWQMS Element 11 – Personnel Coverage	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>his process is effectively controlled Operational Plan - Element-11; Version 9; Procedure adequately defines the necessary personnel requirements to ensure the operation of the Distribution System.</p> <p>This is supported by a Distribution Operator on call at all times outside of regular business hours</p> <p>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>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element -12; Version 9; 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</p> <p>Personnel Through Town Network Drive and daily Tailgate meetings.</p>



Process Name	Observations / Auditor Notes
	<p>Minutes not retained.</p> <p>Suppliers Purchase Orders</p> <p>Consumers/Public Through Operations Centre.</p>
DWQMS Element 13 – Essential Supplies and Services	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-13 Version 9 Operational Plan - Appendix 5 Version 9 ; All supplies and services shall 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</p> <p>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>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-14; Version 9 Operational Plan - Appendix 6 Version 9 ; A report detailing the maintenance programs, any requirements for infrastructure, rehabilitation and renewal is prepared annually by the Director, Public Works & Environmental Services and Director, Financial Services/Treasurer.</p> <p>Includes requirement to consider Risk Assessment Outcomes.</p> <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 11. 2018</p>
DWQMS Element 15 – Infrastructure, Maintenance, Rehabilitation and Renewal	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element -15; Version 9.0; Process broken down into 2 Subsections Planned Maintenance - Controlled through Daily Work Orders Work Orders retained electronically in Database sorted by Date and Address</p> <p>Unplanned Maintenance- resulting from emergency repairs or breakdown Watermain Break Report Infrastructure Rehabilitation - Monitored for effectiveness Infrastructure Renewal - Monitored for effectiveness Capital Upgrades - Planned and Approved by Owner</p>
DWQMS Element 16 – Sampling, Testing and Monitoring	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-16; Version 8 SOP-1 Water Sampling for Chlorine, BacT and HPC SOP-5 Community Lead Testing Program; All sampling and testing is defined in Sampling, Testing & Monitoring procedure SOP-1 and meets all requirements as defined by the</p>



Process Name	Observations / Auditor Notes
	<p>Ministry of Environment.</p> <p>Chlorine Testings: 22 Samples per week based on rotating basis from 54 sites. Cycle repeated every four weeks with identified areas done every week Chlorine Testing done by technician on site - Limits defined No Results outside defined limits</p> <p>Microbiological Testing - (Total Coliform, E.coli and HPD) 10 Samples per week based on rotating basis done by Caduceon Environmental Laboratory - Accredited</p> <p>Lead Sampling: Frequency as defined by Regulatory Requirement Currently only 4 Distribution samples twice per year. 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. 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>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-17; Version 9 Pocket ; Colorimeter utilized and calibrated 6 in Use (One in each Truck) Calibrated November 1/18 - Requirement Annual Calibration Report submitted by Flowmetrics. Report dated Nov 13, 2018 Includes Laboratory Accreditation,</p>
DWQMS Element 18 - Emergency Management	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-18 Version 9 ; Emergency Response Plan Dated February 2019, Version 11 Very detailed plan covering 20 different emergency situations and guidelines for response. Evidence of training on Version 11 - Sign off by Operators</p> <p>Annual Training exercise. Adverse Drinking Water Conditions - February 26, 2019 Severe Storm Creating Water Shortage - February 26, 2019 Signed off by all employees and all employees evaluated for performance after training.</p>
DWQMS Element 19 - Internal Audits	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-19 Version 9 ; Third Party Internal Audit undertaken September 19, 2018 by Ontario Clean Water Agency Very thorough Audit Checklist utilized</p> <p>Audit Report - Dated September 18, 2019 No Minor nonconformances identified 1 Opportunities for improvement identified.</p>



Process Name	Observations / Auditor Notes
DWQMS Element 20 - Management Review	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element- 20 Version 9 ; Management Review held September 25, 2019 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"> a) incidents of regulatory non-compliance, b) incidents of adverse drinking-water tests, c) deviations from critical control point limits and response actions, d) the efficacy of the risk assessment process, e) internal and third-party audit results, f) results of emergency response testing, g) operational performance, h) raw water supply and drinking water quality trends, i) follow-up on action items from previous management reviews, j) the status of management action items identified between reviews, k) changes that could affect the Quality Management System, l) consumer feedback, m) the resources needed to maintain the Quality Management System, n) the results of the infrastructure review, o) Operational Plan currency, content and updates, and p) staff suggestions.
DWQMS Element 3 - Commitment and Endorsement Statement	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-3; Version 9 ; Commitment and Endorsement Statement available</p> <p>Approved by CAO and Director of Public Works & Environmental Service dated February 27, 2018(Top Management)</p> <p>Council Identified as Owners</p> <p>Sent to council and approved February 26 ,2019 The Drinking Water Quality Management System Operational Plan Version 9 be endorsed and committed to. All required approves at meeting</p>
DWQMS Element 5 - Document and Records Control	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-5; Version 9; 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>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-6; Version 9 and Appendix 2; The Drinking Water System Descriptions as listed above adequately and effectively address the requirements as defined in 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</p>



Process Name	Observations / Auditor Notes
	drinking water to the town. The Town of Tecumseh only distributes the water.
DWQMS Element 7 Risk Assessment and DWQMS Element 8 Risk Assessment Outcomes	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-7; Version 9 Operational Plan - Element-8; Version 9 Operational Plan - Appendix 3; Version 9 - 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</p> <p>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.</p> <p>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 Risk assessment is based on adding the scores for Likelihood, Severity and Detectability to determine a Critical Control Point According to Procedure Appendix 3 a Ranking of greater than 8 is considered critical.</p> <p>6 Hazards identified Risk Assessment and Critical Control Point work Sheets available and up to date for all identified risks Where CCP of greater than 8 identified Emergency Response Plan procedures</p> <p>Very detailed and thorough All items as identified in SWQMS Standard Version 2 included,</p>
DWQMS Element 9 – Organizational Roles, Responsibilities & Authorities	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>This process is effectively controlled Operational Plan - Element-9; Version 9; Responsibilities and Authorities defined for System Owner Top Management Chief Administrative Officer Director of Public Works and Environmental Services Manager of Water/Wastewater DWQMS Management Representative Certified Water Operators (Leaders) Certified Water Operators Clerical Staff</p>
DWQMS-1 Quality Management System, DWQMS-2 Quality Management System Policy & DWQMS-4 QMS Representative	<p>Describe whether the process is effective or not (effectiveness should be supported with specific data/records/results). Include strengths & weaknesses of process:</p> <p>These processes are effectively controlled Operational Plan - Element-1; Version 9 Operational Plan - Element-2; Version 9 Operational Plan - Element-4; Version 9; Operational Plan available covering all elements as defined in Standard</p> <p>Policy meets all defined requirements</p> <p>Quality Management System Representative - The QMS Representative, currently the DWQMS Representative (Brad Dupuis) and has been appointed as the QMS Representative for The Town of Tecumseh by Top</p>



Process Name	Observations / Auditor Notes
	<p>Management.</p> <p>The Representative is authorized and responsible for administering all processes associated with the operation and performance of the QMS.;</p>

Audit Summary Matrix



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
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TTY: 416 456-1234

620 – 4510, chemin Rhodes
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ATS : 416 456-1234

File# SI-ES-TE-540

January 30, 2020

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

Attention: Margaret Misek-Evans, CAO
mevans@tecumseh.ca

Dear Ms. Misek-Evans;

Re: Tecumseh Water Distribution System
Inspection Report

Please find enclosed the Drinking Water System Inspection Report for the Tecumseh Distribution System (DWS#260004969). There was no physical inspection conducted at your drinking water system this year, however, the inspection was conducted remotely as part of the ministry's new "Remote Inspection Pilot" project. During this year's inspection, a telephone interview/questionnaire was conducted on January 16, 2020.

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

In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Summary Rating

Record (IRR), included as Appendix B of the inspection report, provides the Ministry, the system owner and the local Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance.

IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspectors' Annual Report. If you have any questions or concerns regarding the rating, please contact Marc Bechard, Water Compliance Supervisor, at (519) 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, Acting Medical Officer of Health, Windsor-Essex County HU, wahmed@wechu.org
Theresa Marentette, CEO and Chief Nursing Officer, Windsor-Essex County HU, tmarentette@wechu.org
Phil Wong, Manager, Environmental Health, Windsor-Essex County HU, pwong@wechu.org
Victoria Peczulis, Manager, Environmental Health, Windsor-Essex County HU, vpeczulis@wechu.org
Phil Bartnik, Director of Public Works & Env. Services, Town of Tecumseh, pbartnik@tecumseh.ca
Brad Dupuis, Water & Wastewater Manager, Town of Tecumseh, bdupuis@tecumseh.ca
Marc Bechard, Water Compliance Supervisor, MECP Sarnia District, marc.bechard@ontario.ca



Ministry of the Environment, Conservation and Parks

TECUMSEH DISTRIBUTION SYSTEM
Inspection Report

Site Number:	260004969
Inspection Number:	1-L5FD0
Date of Inspection:	Jan 16, 2020
Inspected By:	Neil Gilbert

Table of Contents

Owner Information	2
Inspection Details	2
Inspection Summary	4
Introduction	4
Treatment Processes	4
Treatment Process Monitoring	5
Operations Manuals	5
Logbooks	6
Security	6
Certification and Training	6
Water Quality Monitoring	6
Water Quality Assessment	7
Reporting & Corrective Actions	7
Non-Compliance with Regulatory Requirements and Actions Required	8
Summary of Recommendations and Best Practice Issues	9
Signatures	10

Appendix A: Stakeholder Appendix

Appendix B: Inspection Rating Record

OWNER INFORMATION:

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

CONTACT INFORMATION

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

INSPECTION DETAILS:

Site Name:	TECUMSEH DISTRIBUTION SYSTEM
Site Address:	TECUMSEH
County/District:	TECUMSEH
MECP District/Area Office:	Windsor Area Office
Health Unit:	WINDSOR-ESSEX COUNTY HEALTH UNIT
Conservation Authority:	Essex Region Conservation Authority
MNR Office:	Chatham Regional Office
Category:	Large Municipal Residential
Site Number:	260004969
Inspection Type:	Special Announced
Inspection Number:	1-L5FD0
Date of Inspection:	Jan 16, 2020
Date of Previous Inspection:	Feb 28, 2019

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

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

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

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 is 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 March 1, 2019 to December 31, 2019.

Treatment Processes

- **The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.**
Schedule A of the Drinking Water Works Permit (#040-201, Issue Number 4 dated May 24, 2019) contains the following physical components:
 - 4,540m³ water tower fed from the distribution system, and
 - watermains within the Town of Tecumseh Distribution System.
- **The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as**

Treatment Processes

required by their Drinking Water Works Permit during the inspection period.

During the inspection review period, "Form 1 - Record of Watermains Authorized as a Future Alteration" form was prepared for the following:

1) 300mm diameter watermain at North Talbot Road and County Road 11 (dated September 17, 2019).

- **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.**

During the inspection review period, "Form 2 - Record of Minor Modifications or Replacements to the Drinking Water System" forms was prepared for the following project:

1) 150mm watermain lowered on South Talbot Road during two bridge replacements (dated April 4, 2019).

- **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.**

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 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 (March 1, 2019 to December 31, 2019) at least seven distribution samples were collected each week using the 4/3 rule and tested for free chlorine residuals.

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

Operations Manuals

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

- Logbooks were properly maintained and contained the required information.
- 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.

Security

- The owner had provided security measures to protect components of the drinking water system.

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.

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 (March 1, 2019 to December 31, 2019) 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 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 haloacetic acids (HAAs), and have the sample tested for HAAs.

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 (March 1, 2019 to December 31, 2019), these HAA quarterly samples were collected on April 8, 2019 (HAA result=5.5ug/L), July 8, 2019 (HAA result=7.6ug/L) and October 7, 2019 (HAA result=19.3ug/L).

The RAA (running annual average of quarterly results) of the HAA samples collected during the inspection review period plus the first quarter of 2019 (HAA result was 5.3ug/L) is 9.4ug/L which would be below the new Ontario Drinking Water Quality Standard (ODWQS) of 80 ug/L (expressed as a running annual average of quarterly results).

Water Quality Monitoring

- **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 (March 1, 2019 to December 31, 2019), these THM quarterly samples were collected on April 8, 2019 (at 4 locations with a THM average =11.8ug/L), July 8, 2019 (at 3 locations with a THM average=19.7ug/L) and October 7, 2019 (at 3 locations with a THM average=40.7ug/L).

The RAA (running annual average of quarterly results) of the THM samples collected during the inspection review period plus the first quarter of 2019 (THM average result was 20.2ug/L) is 23.1ug/L which is below the Ontario Drinking Water Quality Standard (ODWQS) of 100 ug/L for THM's (expressed as a running annual average of quarterly results).

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

Water Quality Assessment

- **Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03).**

Reporting & Corrective Actions

- **All changes to the system registration information were provided within ten (10) days of the change.**

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 & Approved By:

Marc Bechard

Signature: (Supervisor)

Review & Approval Date:



2020.01.30 11:23:34 -05'00'

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

Stakeholder Appendix

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

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

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

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



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

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 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

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



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

Inspection Rating Record

Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2019-2020)

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: Adhoc
Inspection Date: January 16, 2020
Ministry Office: Windsor Area Office

Maximum Question Rating: 193

Inspection Module	Non-Compliance Rating
Treatment Processes	0 / 43
Operations Manuals	0 / 28
Logbooks	0 / 18
Certification and Training	0 / 28
Water Quality Monitoring	0 / 51
Reporting & Corrective Actions	0 / 4
Treatment Process Monitoring	0 / 21
TOTAL	0 / 193

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%

Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2019-2020)

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: Adhoc

Inspection Date: January 16, 2020

Ministry Office: Windsor Area Office

Maximum Question Rating: 193

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%