



The Corporation of the Town of Tecumseh

Public Works & Engineering Services

To: Mayor and Members of Council

From: Phil Bartnik, Director Public Works & Engineering Services

Date to Council: April 26, 2022

Report Number: PWES-2022-19

Subject: Town of Tecumseh Distribution System
Drinking Water Quality Management System
Operational Plan, Revision Date: April 26, 2022

Recommendations

It is recommended:

That Tecumseh Town Council **endorse and commit to** the Town of Tecumseh Distribution System, Drinking Water Quality Management System Operational Plan, Revision Date: April 26, 2022.

Background

In accordance with the [Safe Drinking Water Act, 2002](#) (SDWA), Owners and Operating Authorities of a drinking water system are mandated to implement a Drinking Water Quality Management System (DWQMS) that includes consideration of elements that are fundamental to ensuring the long-term sustainability of a Drinking Water System including: Management processes employed within the system; the maintenance of infrastructure used to supply drinking water; and, identification of potential risks and risk mitigation strategies for items such as system security, water treatment, and the impacts of climate change.

Town of Tecumseh Council are Owners of the Municipal Residential Drinking Water System and are responsible for ensuring that their water systems:

- Provide water that meets all prescribed drinking water quality standards;
- Operate in accordance with the Act and its regulations, and are kept in a fit state of repair;
- Are appropriately staffed and supervised by qualified persons;
- Comply with all sampling, testing and monitoring requirements; and
- Meet all reporting requirements.

Since 2008, the Town's DWQMS Operational Plan has been endorsed and committed to by Tecumseh Town Council.

As legislatively required by the province, Town of Tecumseh Water Services is required to review, update and maintain its DWQMS Operational Plan on an annual basis. Changes and updates can be triggered by staff suggestions, changes in administrative or work processes, internal audits, external audits, Ministry of the Environment, Conservation and Parks (MECP) inspections, and regulatory updates. Reviewing, updating and maintaining the DWQMS Operational Plan is an important part of the continuous improvement process.

In order for the Owner to continue to show support of its drinking water system and DWQMS, it is required that endorsement of and commitment to the updated Operational Plan are provided.

Comments

Management Review is a key element of the DWQMS. Management reviews are conducted to assess and ensure the continuing suitability, adequacy and effectiveness of the Town's DWQMS.

The Management Review Committee is comprised of the Town's Chief Administrative Officer (Marg Misek-Evans), Director Public Works & Engineering Services (Phil Bartnik), Manager Water Services (Brad Dupuis) and the DWQMS Representative/Water Operator (Nicole Bradley).

Updates to the Operational Plan were submitted to and approved by the Management Review Committee at their meetings held November 23, 2021 and March 1, 2022. An executive summary pertaining to the updated DWQMS Operational Plan is provided in Attachment 1.

Updates to the Operational Plan were due in part to the following:

1. Legislative and Regulatory Changes

During the course of the COVID-19 pandemic, adjustments were made to ensure continuity of water service - an essential service. During this time, staff modified work environments to comply with new legislative requirements enacted by the province and to keep in line with Ministry of Health protocol.

2. Risk Assessment Review

In accordance with Element 7 of the DWQMS, a comprehensive risk assessment is to be conducted every thirty-six months to validate identified potential hazardous events and associated hazards to the drinking water system. Following this review, the Operational Plan was amended to include updated risks associated with the occurrence of hazardous events, the control measures to address the events and the procedures to respond to these emergency situations, to name a few.

3. Management Review Committee recommendations.

The appended Management Review Committee minutes recorded at the March 1, 2022 meeting (Attachment 2) detail the entire list of recommended changes to the Operational Plan.

Key updates and revisions to the DWQMS Operational Plan, include but are not limited to the following:

Item	Detail	Change	Page No.
General	Throughout the entire Operational Plan document.	Updated the document to correlate with Organizational Review: reference new department name from Public Works & Environmental Services to Public Works & Engineering Services; reference new division name from Water Division to Water Services; and updated position titles to correspond with the new departmental and division names.	Throughout
Element 6	Drinking Water System	Appendix 2 is updated to include current infrastructure detail resulting from watermain installation and/or replacement, which has occurred	61-65

Item	Detail	Change	Page No.
		since the last Operational Plan update in 2021. These changes to the water infrastructure were approved in the annual PWES Capital Works Plan.	
Element 7	Risk Assessment	Appendix 3 is updated to include the current copy of the MECP reference sheet pertaining to “Potential Hazardous Events for Municipal Residential Drinking Water Systems to Consider in the DWQMS Risk Assessment.”	72-73
Element 8 Update No. 1	Risk Assessment Outcomes	The Critical Control Point (CCP) tables in Appendix 4 were reviewed and updated. The Hazard Description column was removed, as this was considered redundant information. Only two CCP tables are necessary: (1) Loss of Chlorine Residual – Secondary Disinfection and (2) Contamination within Distribution System through New Watermain Commissioning. The Backflow Prevention CCP table was removed. After careful evaluation, it was decided that Backflow Prevention was not a CCP. Water Services staff does not monitor backflow prevention devices on private property.	76-77
Element 8 Update No. 2	Risk Assessment Outcomes	The Risk Assessment Worksheet No. 18 - Staff Shortage is updated to include the potential of staff shortages due to the occurrence of a pandemic.	96

Item	Detail	Change	Page No.
Element 8 Update No. 3	Risk Assessment Outcomes	All Risk Assessment Worksheets are updated. Two sections were removed (“Control Procedure” and “Emergency Procedure or Contingency Plan”) and the relevant information from these two deleted sections was input in the “Available Monitoring & Control Measures” section. This was completed for clarity of information and to reduce redundancies.	79-96
Element 10	Competencies	The “Water Operator Skills and Knowledge” section was added. The minimum competency requirements for personnel performing duties directly affecting drinking water quality (i.e. Water Operators) and the means needed to meet those competencies are key to providing safe drinking water to consumers.	32-34
Element 20	Management Review	The list of categories for review by the Management Review Committee is updated and reorganized in the “Review Input” section, Section 20.3. This provides for a more efficient process to review the effectiveness of the DWQMS by the Management Review Committee.	48-49

Updates to the Operational Plan are necessary for continuous improvement of the Town’s Quality Management System. The updated Operational Plan is appended to this report as Attachment 3.

Consultations

Chief Administrative Officer

Ministry of the Environment, Conservation and Parks

Financial Implications

There are no financial implications arising from this report.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input checked="" type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input checked="" type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable

Website Social Media News Release Local Newspaper

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Cheryl Curran, BES
Project Technician

Reviewed by:

Brad Dupuis, C. Tech.
Manager Water Services

Reviewed by:

Phil Bartnik, P.Eng.
Director Public Works & Engineering Services

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	Executive Summary
2	Management Review Committee Meeting Minutes
3	Town of Tecumseh Distribution System Drinking Water Quality Management System, Revision Date: April 26, 2022