



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: February 28, 2023

Report Number: PWES-2023-18

Subject: Drinking Water Quality Management System
Operational Plan

Recommendations

It is recommended:

That Report PWES-2023-18 Drinking Water Quality Management System Operational Plan **be received;**

And that Tecumseh Town Council **endorse and commit to** the Town of Tecumseh Distribution System, Drinking Water Quality Management System Operational Plan, Revision Date: February 28, 2023.

Background

Following the contamination of the water supply in Walkerton, Ontario in May 2000, a provincial inquiry was held that investigated the cause of the water contamination, which then triggered an examination of the state of drinking water protection in Ontario.

The Walkerton Inquiry Report outlined a number of recommendations for drinking water protection in Ontario that resulted in the [Safe Drinking Water Act](#) and [Clean Water Act](#) that regulate our water systems today.

The legacy of events in Walkerton has resulted in a significantly improved legal framework for drinking water protection that includes a multi-barrier approach.

The requirement for Owners and Operating Authorities of municipal residential drinking water systems to develop and implement Drinking Water Quality Management Systems (DWQMS) was legislated under the [Safe Drinking Water Act](#) (SDWA) and forms part of the Ministry of the Environment, Conservation and Parks (MECP) [Municipal Drinking Water Licensing Program](#). The idea of mandated implementation of a DWQMS originated as recommendations in Part Two of the [Walkerton Inquiry Report](#).

The DWQMS requires that an Operational Plan for the Drinking Water System is established and that this Operational Plan be endorsed and committed to by the Owners/Operating Authority – Tecumseh Town Council.

The Operational Plan must include 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.

As legislatively required by the province, the Town of Tecumseh is required to review, update, and maintain its DWQMS Operational Plan on an annual basis. This is an important element, which is key to the continuous improvement process.

Comments

Updates to the Operational Plan can be effected by staff suggestions, changes in administrative or work processes, internal audits, external audits, MECP inspections and regulatory updates.

Updates to the Operational Plan are submitted to and approved by the Management Review Committee, which 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 due in part to the following:

1. Legislative and Regulatory Changes

The Operational Plan was updated to include reference to O.Reg. 128/04: Certification of Drinking Water System Operators and Water Quality Analysts, and O.Reg. 129/04: Licensing of Sewage Works Operators, for personnel coverage during emergency situations where staff may not be available to work.

In April 2022, the MECP also updated the municipal risk assessments for drinking water systems to explicitly consider cybersecurity threats. This update effected a change to Element 7 of the Operational Plan.

2. Risk Assessment Review

A Risk Assessment Review was conducted in accordance with Element 7 of the Operational Plan which subsequently resulted in an update to the Hazard Analysis and Critical Control Point Worksheets to include Cyber Security as a potential hazard to the Town's drinking water system.

3. Audit and Inspection Reports

Audits and inspections are conducted on the Town's Drinking Water Distribution System to ensure the DWQMS conforms to the requirements of the Operational Plan and to determine compliance with requirements under the [Safe Drinking Water Act, 2002](#) and associated regulations. An audit of the Town's DWQMS identified an opportunity for improvement by including additional processes to manage the potential for personnel shortages during emergency situations. The Operational Plan was updated accordingly.

4. Management Review Committee recommendations.

The Management Review Committee reviews recommended changes to the Operational Plan and ensures and evaluates the continuing suitability, adequacy and effectiveness of the DWQMS. These recommended changes are implemented in the updated Operational Plan.

The Management Review Committee approved the suggested updates to the Operational Plan at their meeting held October 24, 2022. The minutes recorded at said Management Review Committee meeting are provided in Attachment 1.

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

Element No.	Title	Revision	Page No. in Operational Plan
General	Operational Plan	Spelling and grammar revisions.	Throughout
General	Operational Plan	Position title of "Water Operator" was amended to "Water Distribution Operator".	Throughout

Element No.	Title	Revision	Page No. in Operational Plan
General	Operational Plan	Included “or designate” following “Manager Water Services/ORO.”	Throughout
6	Drinking Water System	Amended Appendix 2.1: Data in the table updated to current values.	62
7 & 8	Risk Assessment	Amended Appendix 3.8: MECP’s “Potential Hazardous Events for Municipal Drinking Water Systems” updated to current version.	73
7 & 8	Risk Assessment	Amended Appendix 4.1: Addition of new Worksheet No. 19 – Cyber Security.	99
11	Personnel Coverage	Addition of statement referring to amended O.Reg. 128/04 and 129/04 “Emergency Situations.”	36

The above-noted changes were implemented in the updated Operational Plan, dated February 28, 2023, which is appended to this report as Attachment 2.

Tecumseh’s Water Services staff strives to continually improve the effectiveness of its DWQMS to provide reliable and safe drinking water for consumers.

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	Management Review Committee Meeting Minutes dated October 24, 2022
2	Town of Tecumseh Distribution System Drinking Water Quality Management System Operational Plan, Revision Date: February 28, 2023