

Agenda

Lake Huron Primary Water Supply System Joint Board of Management

2nd Meeting of the Lake Huron Primary Water Supply System Joint Board of Management
March 6, 2025, 2:00 PM
Committee Room #5

Pages

1. Call to Order

2. Indigenous Territorial Acknowledgement

The Lake Huron Water Supply System and its benefiting municipalities are situated on the traditional lands of the Anishinaabek(Uh-nish-in-ah-bek), Haudenosaunee(Ho-den-no-show-nee), Lūnaapéewak(Len-ah-pay-wuk) and Attawandaron (Add-a-won-da-run) peoples. We honour and respect the history, languages and culture of the diverse Indigenous people who call this territory home. This region is currently home to many First Nations, Inuit and Métis people today and we are grateful to have the opportunity to live and work in this territory.

3. Disclosures of Pecuniary Interest

4. Recognitions and Comments from the Chair

5. Adoption of Minutes of the Previous Meeting(s)

5.1 Minutes of the 1st Meeting held on December 5, 2024

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6. Communications and Petitions

7. Motions of Which Notice is Given

8. Reports and Added Reports

8.1 Recommended Items for Consent

a. Quarterly Compliance Report (4th Quarter 2024: October - December)

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b. Environment Management System and Quality Management System

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	October 2, 2025	
15.	Adjournment	

Lake Huron Primary Water Supply System Report

1st Meeting of the Lake Huron Primary Water Supply System Joint Board of
Management
December 5, 2024

Attendance: Meeting held on Thursday, December 5, 2024, commencing at
1:01 PM.

PRESENT: S. Hillier (Chair); C. Burghardt-Jesson, A. DeViet,
C. Grantham, J. Keogh, S. Lehman, P. Van Meerbergen, P.
Walden and J. Wilcox and J. Bunn (Committee Clerk)

ALSO PRESENT: B. Haklander, A. Henry and K. Scherr

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

1.2 Election of Chair and Vice Chair for the term ending November 30, 2026

VAN MEERBERGEN AND LEHMAN

That S. Hillier **BE ELECTED** Chair, for the term ending November 30,
2026. **CARRIED**

Motion Passed

LEHMAN AND BURGHARDT-JESSON

That C. Grantham **BE ELECTED** Vice Chair, for the term ending
November 30, 2026. **CARRIED**

Motion Passed

2. Adoption of Minutes

2.1 Minutes of the 4th Meeting held on Thursday, October 3, 2024

WALDEN AND GRANTHAM

That the minutes of the 4th meeting of the Lake Huron Primary Water Supply System Joint Board of Management, from the meeting held on October 3, 2024, **BE NOTED AND FILED. CARRIED**

Motion Passed

3. Consent Items

3.1 Quarterly Compliance Report (3rd Quarter 2024: July - September)

VAN MEERBERGEN AND KEOGH

That, on the recommendation of the Chief Administrative Officer, the report dated December 5, 2024, with respect to the general, regulatory and contractual obligations of the Lake Huron Primary Water Supply System, for July to September 2024, **BE RECEIVED. CARRIED**

Motion Passed

3.2 Environmental Management System and Quality Management System

VAN MEERBERGEN AND KEOGH

That, on the recommendation of the Chief Administrative Officer, the report dated December 5, 2024, with respect to the Environmental Management System and the Quality Management System, **BE RECEIVED. CARRIED**

Motion Passed

3.3 Quarterly Operating Financial Status - 3rd Quarter 2024

VAN MEERBERGEN AND KEOGH

That, on the recommendation of the Chief Administrative Officer, the report dated December 5, 2024, with respect to the Quarterly Operating Financial Status of the Lake Huron Primary Water Supply System for the 3rd Quarter of 2024, **BE RECEIVED. CARRIED**

Motion Passed

3.4 Process Optimization Program Update

VAN MEERBERGEN AND KEOGH

That, on the recommendation of the Chief Administrative Officer, the report dated December 5, 2024, with respect to an update on the Process Optimization Program at the Lake Huron Water Treatment Plant, **BE RECEIVED. CARRIED**

Motion Passed

3.5 Delegated Authority Approvals and Expenditures
VAN MEERBERGEN AND KEOGH

That, on the recommendation of the Chief Administrative Officer, the report dated December 5, 2024, with respect to Delegated Authority Approvals and Expenditures, **BE RECEIVED. CARRIED**

Motion Passed

4. Items for Discussion

4.1 Appointment of the CAO By-law
VAN MEERBERGEN AND WALDEN

That, on the recommendation of the Chief Administrative Officer, the Appointment of the Chief Administration Officer By-law 14-2024, as appended to the report dated December 5, 2024, **BE APPROVED. CARRIED**

Motion Passed

Additional Votes:

DEVIET AND BURGHARDT-JESSON

Motion to approve the Second Reading of By-law No. 14-2024.

Motion Passed

LEHMAN AND GRANTHAM

Motion to approve the Third Reading and Enactment of By-law No. 14-2024.

Motion Passed

5. Deferred Matters/Additional Business

None.

6. Next Meeting Date

March 6, 2025

7. Confidential

GRANTHAM AND KEOGH

That the Lake Huron Primary Water Supply System Joint Board of Management convene In Closed Session for the purpose of considering the following:

7.1 (ADDED) Litigation/Potential Litigation/Matters Before Administrative Tribunals

A matter pertaining to litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board.

7.2 (ADDED) Position, Plan, Procedure, Criteria or Instruction for Negotiation Purposes

A matter pertaining to a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board.

Motion Passed

The Lake Huron Primary Water Supply System Joint Board of Management convened In Closed Session from 1:09 PM to 1:24 PM.

8. Adjournment

WALDEN AND VAN MEERBERGEN

That the meeting BE ADJOURNED.

Motion Passed

The meeting adjourned at 1:25 PM.

Board of Management Report

Subject: Quarterly Compliance Report (4th Quarter 2024: October - December)

Overview:

- There were no adverse water quality incidents (AWQI) reported during this quarter.
- There are no new or proposed regulatory changes which might have a significant impact on the system.

Recommendation

That the Board of Management for the Lake Huron Primary Water Supply System **RECEIVE** this report for information.

Background

Pursuant to Board of Management resolution, this Compliance Report is prepared on a quarterly basis to report on general, regulatory, and contractual compliance issues relating to the regional water system. For clarity, the content of this report is presented in two basic areas, namely regulatory and contractual, and does not intend to portray an order of importance or sensitivity nor is it a complete list of all applicable regulatory and contractual obligations.

Discussion

Regulatory Issues

Recent Regulatory Changes: At the time of drafting this report, there were no new regulatory changes for this reporting period which may significantly impact the Lake Huron Primary Water Supply System (LHPWSS).

New Environmental Registry of Ontario (ERO) Postings: At the time of drafting this report, there were no new postings on the ERO that may have a significant impact on the LHPWSS.

Quarterly Water Quality Reports: The [Water Quality Quarterly Report](#) for the period of October 1 – December 31, 2024, was completed by the operating authority, and is posted on the Water Systems' website for public information.

Note: In order to better comply with the *Accessibility for Ontarians with Disabilities Act, 2005*, the detailed tables of water quality test results which were previously appended to this Report have been removed. The full list of test results of drinking water quality parameters is posted on the water system's website and available in print at the Board's Administration Office in London upon request. In addition, detailed water quality information is also published within the water system's Annual Report required by O.Reg. 170/03 under the *Safe Drinking Water Act*.

Adverse Water Quality Incidents (AWQIs): There were no AWQI reported by the operating authority or the external laboratory during this quarter.

Compliance Inspections: The annual inspection by the Ministry of the Environment, Conservation and Parks (MECP) took place on November 21, 2024. The final inspection report was received on January 21, 2025, and is the subject of a separate report to the Board.

Contractual Issues

ARTICLE 3, "Operation and Maintenance of the Facilities – General": Board staff informally meets with OCWA on a monthly basis to discuss operations and maintenance related issues, and formally on a quarterly basis to review contractual performance. The 2024 fourth quarter Contract Report was received from OCWA on January 30, 2025, and was scheduled to be discussed at the quarterly administration meeting between Board staff and OCWA on February 19, 2025. Copies of the monthly Operations and Maintenance Reports, and quarterly Contract Reports are available at the Board's Administration Office in London upon request.

Conclusion

Board staff will continue to review new and proposed legislation for potential impacts to the LHPWSS. Board staff will continue to meet with the operating authority on a regular basis to discuss regulatory and contractual compliance issues, and ensure any non-compliances are addressed in a timely manner.

Prepared by: Erin McLeod, CET
Quality Assurance & Compliance Manager

Submitted by: Andrew J. Henry, P.Eng.
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Environmental Management System and Quality Management System

Overview:

- This report provides a summary of Environmental Management System (EMS) and Quality Management System (QMS) activities that took place during the fourth quarter of 2024 (Q4).
- A Management Review meeting was held on December 12, 2024. The meeting minutes are attached to this report as [Appendix A](#).
- An internal Environmental Compliance Audit (Fire Protection and Prevention Act and Workplace Hazardous Materials Information System) was conducted on November 11-21, 2024. The Internal Audit Summary Report is included as [Appendix B](#).
- An external EMS Surveillance Audit was conducted by Intertek - SAI Global Limited on October 02 and 03, 2024. The EMS Surveillance Audit Report is included as [Appendix C](#) for the information of the Board of Management.

Recommendation

That the Board of Management for the Lake Huron Primary Water Supply System **RECEIVE** this report for information.

Background

Environmental Management System (EMS)

The Lake Huron Primary Water Supply System (LHPWSS) has an Environmental Management System (EMS) which has been registered to the ISO 14001 standard since 2003. The LHPWSS underwent a three-year registration audit in October 2023 and was recommended for registration to the ISO 14001:2015 standard for a three-year period.

The continued utilization and registration of the EMS to the ISO 14001 standard is a requirement of the Service Agreement with Ontario Clean Water Agency (OCWA), the contracted Operating Authority for the LHPWSS.

Quality Management System (QMS)

The existing EMS has been integrated with a QMS that meets the requirements of the province's Drinking Water Quality Management Standard, 2017 (DWQMS). The combined EMS/QMS is maintained by the contracted Operating Authority.

The *Safe Drinking Water Act, 2002* (SDWA) and the water system's Municipal Drinking Water License (MDWL) require that an accredited Operating Authority be in operational charge of the drinking water system. To become accredited, the Operating Authority must implement and maintain a QMS, which includes an Operational Plan meeting the requirements of the DWQMS and must undergo yearly external audits.

OCWA successfully received full scope DWQMS re-accreditation in October 2022 and is currently accredited for the three-year period ending in 2025.

Discussion

Management Review

The documented EMS/QMS and its performance requires Management Review by Top Management a minimum of once every calendar year to ensure that the Board's management team and the Operating Authority stay informed of environmental and quality related issues. Items discussed at the Management Review meetings include, but are not limited to, water quality test results, environmental and quality performance, legislative changes, identified non-conformances, corrective and preventive actions, staff suggestions, changing circumstances and business strategies, and resource requirements. Corrective and preventive actions include not only those to address non-conformance issues and opportunities for improvement identified as part of internal and external audits, but also non-compliance issues identified by the Ministry of the Environment, Conservation and Parks (MECP), suggestions from staff, and opportunities for improvement identified during the Management Review process.

To carry out more effective Management Review meetings, the Board of Management's administration has opted to conduct shorter meetings at more frequent intervals. Although each required Management Review input may not be covered at every meeting, over the course of the year all required inputs are reviewed at least once. Management Review meetings are held in a combined format for both the LHPWSS and the Elgin Area Primary Water Supply System (EAPWSS).

A Management Review meeting was held on December 12, 2024. The meeting minutes are included as [Appendix A](#) for the information of the Board of Management.

Internal Audits

Pursuant to the international ISO 14001 standard and the provincial DWQMS, periodic “internal” audits are performed by the Board of Management’s administration to ensure continued compliance with legislated, contractual, and other requirements, as well as conformance with the ISO 14001 standard and DWQMS. Internal audits also ensure that the ongoing operation of the drinking water system conforms to the EMS and QMS as implemented. As required by the standards, internal audits are performed a minimum of once every calendar year.

An internal Environmental Compliance Audit was conducted for the Fire Protection and Prevention Act (FPPA), 1997 and Workplace Hazardous Materials Information System (WHMIS) O.Reg.860 under Occupational Health and Safety Act from November 11 to 21, 2024. There were three (3) non-compliances and two (2) opportunities for improvement identified. The Internal Audit Summary Report is included as [Appendix B](#) for the information of the Board of Management.

External Audits

Annual surveillance audits (third-party external audits) are conducted for both the EMS and QMS, with a recertification audit taking place every third year. The external registrar for both the EMS and QMS is currently Intertek - SAI Global. External audits review all aspects of the EMS or QMS, including the scope and results of internal audits, subsequent management reviews, and corrective action processes.

An external EMS Surveillance Audit was conducted by Intertek - SAI Global Limited on October 02 and 03, 2024. There were no non-conformances and four (4) opportunities for improvement identified. The EMS Surveillance Audit Report is included as [Appendix C](#) for the information of the Board of Management.

Corrective and Preventive Actions

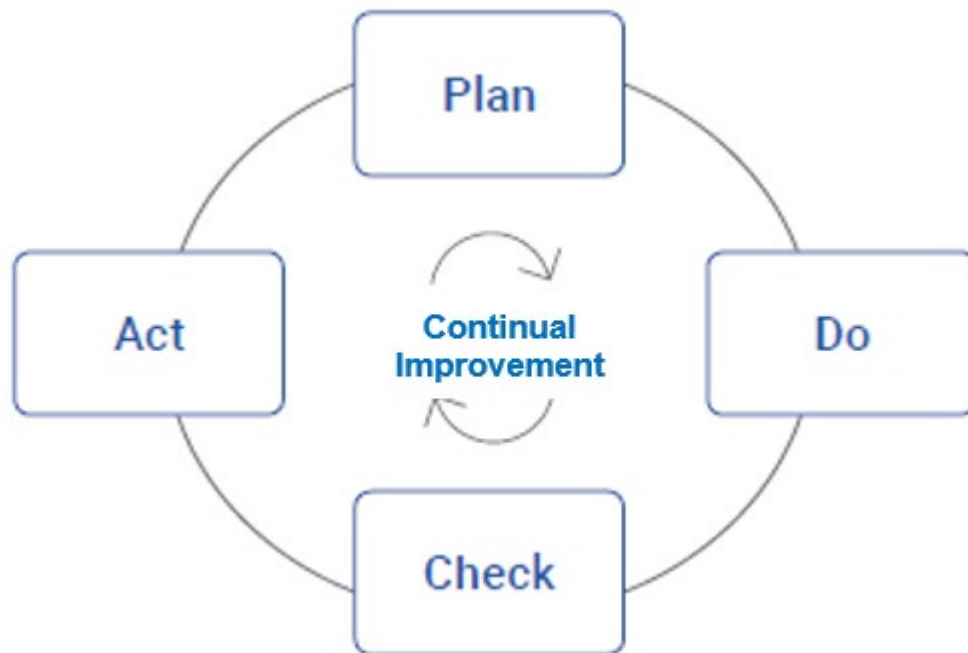
For the EMS/QMS to be effective on an on-going basis, an organization must have a systematic method for identifying actual and potential non-conformities, making corrections, and undertaking corrective and preventive actions, preferably identifying, and preventing problems before they occur. The Internal Audit process and Management Review are the two main drivers for proactively identifying potential problems, opportunities for improvement and for the implementation of corrective actions for the LHPWSS. Preventive actions may originate from identified opportunities for improvement as part of an audit, but also staff suggestions and discussions with management.

It is important to note that action items should not be construed as compliance failures, but rather an action to be undertaken which will improve the LHPWSS’s overall performance.

Action items are the result of the “Plan-Do-Check-Act” continual improvement process. The identification of action items is a critical component of continual improvement and an essential element of management systems. The identification of action items should be seen as a positive element, as this drives continual improvement.

A key concept of the Plan-Do-Check-Act continual improvement process (Figure 1) is that it does not require nor expect 100% conformance but promotes an environment of continual improvement by identifying shortfalls, implementing corrective and preventive measures, and setting objectives and targets for improvement.

Figure 1: Plan-Do-Check-Act Continual Improvement Process



The following summarizes the fourteen (14) new approved action items that have been added to the EMS/QMS action item tracking system during Q4:

- Four (4) new action items were added as a result of the Management of Change process related to the McGillivray Pumping Station HVAC and Electrical Upgrade - Project #LH1243 (October 01, 2024)
- Five (5) new action items were added resulting from the external EMS Surveillance Audit (October 02 and 03, 2024).
- Five (5) new action items were added resulting from the internal Environmental Compliance Audit (Fire Protection and Prevention Act and Workplace Hazardous Materials Information System) conducted from November 11-21, 2024.

As of February 06, 2025, there are currently thirty (30) open action items in the LHPWSS tracking system. All action items are prioritized and addressed using a risk-based approach, and deadlines established given reasonable timeframes and resources that are available. Board of Management staff are pleased with the performance of the corrective and preventive action process and have no concerns with the number of open action items.

Conclusion

The Internal Audits and frequent Management Review meetings continue to effectively identify and manage system deficiencies. The EMS/QMS for the LHPWSS continues to be suitable, adequate, and effective. Activities by OCWA continue to address the need for change, and the management systems are being revised and refined as required.

Prepared by: Jennifer Levitt
Compliance Coordinator

Erin McLeod, CET
Quality Assurance & Compliance Manager

Submitted by: Andrew J. Henry, P.Eng.
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Attachments: [Appendix A](#) – Management Review Meeting Minutes (December 12, 2024)

[Appendix B](#) – Compliance Audit Summary Report - Fire Protection and Prevention Act and Workplace Hazardous Materials Information System (November 11-21, 2024)

[Appendix C](#) – EMS Surveillance Audit Report - Intertek - SAI Global Limited (October 02 and 03, 2024)

Appendix A: Management Review Meeting Minutes (December 12, 2024)

Lake Huron & Elgin Area Primary Water Supply Systems EMS/QMS Management Review

Date: December 12, 2024

Time: 1:00pm

Location: Virtual – Microsoft Teams

Attendees: Andrew Henry (RWS), Erin McLeod (RWS), Jennifer Levitt (RWS), Jackie Muller (OCWA), Greg Henderson (OCWA), Denny Rodrigues (OCWA), Randy Lieber (OCWA), Cindy Sigurdson (OCWA), Mark MacKenzie (OCWA)

Regrets: Courtney Miller (OCWA)

N.B.: Management Review meetings are held in a combined format for both the Lake Huron Primary Water Supply System (LHPWSS) and the Elgin Area Primary Water Supply System (EAPWSS).

-----Meeting Notes-----

1. Review and Approval of Previous Meeting Minutes (September 16, 2024)

The minutes from the previous meeting (September 16, 2024) are posted to SharePoint. Minutes circulated to comment. No concerns noted and documents are approved.

2. Results of Board Meetings (December 5, 2024)

Huron Board Meeting (Dec. 5, 2024)

- Quarterly Compliance Report: The report was received for information.
- EMS/QMS Report: The report was received for information.

Elgin Board Meeting (Dec. 5, 2024)

- Quarterly Compliance Report: The report was received for information.
- EMS/QMS Report: The report was received for information.

3. Appointment of EMS/QMS Representative

Safety Process & Compliance (SPC) Manager, C.Sigurdson will act as the EMS/QMS Representative. Process & Compliance Technician, (M.Mackenzie) is the alternate EMS/QMS Representative.

4. DWQMS External Audit – LHPWSS (Sep. 23, 2024)

No non-compliance (NC) and one (1) opportunity for improvement (OFI) was identified as part of the audit.

5. DWQMS External Audit – EAPWSS (Sep. 24, 2024)

No NC's and two (2) OFI's were identified as part of the audit.

6. EMS External Audit – LHPWSS (Oct. 2-3, 2024)

No NC's and five (5) OFI's were identified as part of the audit.

Comment - Top Management approved a revision to evaluation of compliance frequency on the legal register (e.g. 3-5 years based on risk).

7. EMS External Audit – EAPWSS (Oct. 3-4, 2024)

No NC's and four (4) OFI's were identified as part of the audit.

RWS comment – External Auditor noted good processes and partnership approach between RWS and OCWA. Contractor management was a noted issue but also commented on how contractor management is a large undertaking, and many other systems face similar challenges.

8. Env. Compliance Audit – EAPWSS (Nov. 2024) – Municipal Drinking Water Licence (MDWL), Drinking Water Works Permit (DWWP), Occupancy/License Agreements, Water Supply Agreements

No NC's and two (2) OFI's were identified as part of the audit.

9. Env. Compliance Audit – LHPWSS (Nov. 2024) - Fire Protection & Prevention Act, Workplace Hazardous Materials Information System (WHMIS)

Three (3) NC's and two (2) OFI's were identified as part of the audit.

OCWA comment – Currently working through resolutions for non-compliances. Safety Data Sheets (SDS) software implementation is underway, staff have been provided with refresher training on SDS, WHMIS and labelling. The new SDS software will also be able to create WHMIS labels.

Items 4-9 action items to address NCs and OFIs were assigned, approved and added to the tracking spreadsheet.

See agenda package for audit details.

10. Management of Change

Project #LH1243 - McGillivray Pumping Station HVAC and Electrical Upgrade
Four (4) actions created - see agenda package for further details.

11. Contingency Plan Test – LHPWSS

Two (2) action items created - see agenda package for further details.

12. Compliance Obligations Update

Municipal Drinking Water Licence (MDWL) – LHPWSS

The Ministry of the Environment, Conservation and Parks (MECP) will be issuing an updated MDWL with revised filter performance criteria wording. The MECP Inspector is also requesting wording be added to the MDWL related to distribution monitoring. An updated draft is pending.

OCWA comment – MECP Inspector wanted clarification on distribution system monitoring in the license, this was not a non-compliance issue. Every five years we will need to ensure wording is included. Draft in progress.

RWS comment – Re: distribution sampling, language in Ministry documents and regulations refer to ‘population served’ not municipalities.

Health Canada Notices:

Objective for Canadian drinking water quality- per- and polyfluoroalkyl substances

Source: Health Canada

Date Posted/Notice Received: August 9, 2024

Comments Due: N/A

Summary:

Health Canada has finalized a group “objective” for per- and polyfluoroalkyl substances (PFAS) in drinking water. The PFAS objective is set at 30 ng/L based on the sum of the concentration of 25 specific PFAS. The objective is a temporary measure until a guideline can be developed. The objective sets a goal for a maximum level of a contaminant in drinking water, taking into account available treatment technology and analytical methods. Health Canada recommends that PFAS levels in drinking water be maintained as low as reasonably achievable.

Potential Impacts: Unknown at this time. LHPWSS & EAPWSS are currently participating in a PFAS research project with the University of Waterloo which is studying the detection, characterization and treatment of PFAS in drinking water.

The LHPWSS and EAPWSS have been participating in a PFAS initiative research projects in partnership with the University of Waterloo.

Comments - General discussion on PFAS regarding guidelines and sampling.

OCWA comments – Attended training course in 2023. Powdered activated carbon (PAC) does help remove some PFAS. Will be interesting to see PFAS results once PAC is turned off. Both systems will be participating in another round of sampling with the University of Waterloo. Report is available.

Consultation on guidelines for Canadian drinking water quality: Radiological Parameters

Source: Health Canada

Date Posted/Notice Received: October 11, 2024

Comments Due: January 10, 2025

Summary:

Maximum acceptable concentrations (MAC) in drinking water have been established for three natural radionuclides (Lead-210, Radium-226, and total uranium in chemical form) and four artificial radionuclides (Tritium, Strontium-90, Iodine-131, and Cesium-137).

Potential Impacts:

None anticipated. The MACs established for the four artificial radionuclides are the same as the current Ontario standards in [O.Reg. 169/03](#). The MACs established for the three natural radionuclides vary compared to the current Ontario standards.

As per [O.Reg. 170/03](#) the LHPWSS and EAPWSS are only required to test for uranium. The MAC for total uranium established by Health Canada is the same as the current Ontario standard of 0.02 mg/L.

- EAPWSS data (2020-2024) - Total uranium max. 0.000073 mg/L; average 0.000044 mg/L
- LHPWSS data (2020-2024) – Total uranium max. 0.000068 mg/L; average 0.000052 mg/L

Ontario Notices:

Enabling greater beneficial reuse of excess soil

Source: Ministry of the Environment, Conservation and Parks (MECP)

Date Posted/Notice Received: October 18, 2024

Comments Due: November 21, 2024

Summary:

Amendments are proposed to [O. Reg. 406/19](#) (On-site and Excess Soil Management) and the Rules for Soil Management and Excess Soil Quality Standards, to make it easier and more affordable for businesses in the construction industry and municipalities to reuse more excess soil locally.

Proposed amendments include:

- Changing the in-effect date of the restriction on landfilling certain types of excess soil by moving it out by two years (to Jan. 1, 2027);
- Proposed amendments for exemptions from a waste ECA for lower-risk operations;
- Proposed flexibility for reuse of aggregate and stormwater management pond sediment;
- Proposed amendments to allow in-situ sampling for stormwater management ponds.

Potential Impacts: None anticipated.

General Information:

USEPA Lead and Copper Rule Improvements

Source: United States Environmental Protection Agency (USEPA)

Date Posted/Notice Received: October 8, 2024

Comments Due: N/A

Summary:

In relation to the removal of lead pipes in drinking water distribution systems, a final rule requiring replacement of lead pipes in the US within 10 years has been announced.

Potential Impacts: There are no changes to Ontario regulations at this time. This is being noted because there may be a similar approach taken in Ontario in future.

OCWA comment - Made in Ontario - AWWA Standards for C652, C653, C654 disinfection procedures are being developed by MECP.

13. Western Lake Erie Harmful Algal Bloom (HAB) Seasonal Assessment

The National Oceanic and Atmospheric Administration (NOAA) published their Seasonal Assessment Bulletin on November 13, 2024. The full bulletin is available online at: [Lake Erie Harmful Algal Bloom Final Seasonal Assessment](#)



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In summary, the 2024 western Lake Erie cyanobacterial bloom had a severity index (SI) of 6.6, which is moderately severe. This year, the Microcystis bloom started in late June along the Michigan coast and was fully developed by early July. This was the earliest bloom start since the monitoring began in 2002. The bloom slowly intensified, increasing in size and becoming more severe, through July, before the bloom peaked in mid-August. The bloom decreased in intensity until mid-September. There were no microcystin detects in the EAPWSS raw water in 2024.

*****End of Meeting*****

Next Meeting – March 27, 2025 – 9:00 am

Appendix B: Compliance Audit Summary Report - Fire Protection and Prevention Act and Workplace Hazardous Materials Information System (November 11-21, 2024)

Audit Purpose:

The purpose of the audit was to verify compliance with relevant environmental legislation and other compliance obligations at the Lake Huron Primary Water Supply System (LHPWSS). Internal audits ensure the progress and activity of the Environmental Management System (EMS) is tracked.

Auditor Qualifications:

Jennifer Levitt has completed an ISO 14001:2015 Internal Auditor training course and an Environmental Compliance 101 course and is deemed competent to complete environmental compliance auditing.

Methodology:

The internal audit was conducted as outlined in Procedure LH-ADMIN-1600 (Compliance) as detailed in the EMS Manual. The audit checklist was generated using Nimonik Environmental Criteria software which is attached as Appendix B of this report. An audit plan was issued November 08, 2024.

The audit was limited to the operation of the water supply system by the contracted Operating Authority, Ontario Clean Water Agency (OCWA), since the last Internal Audit conducted December 14, 2020.

Operational documents and records maintained by RWS and the Operating Authority for the period December 14, 2020 through November 21, 2024 were reviewed in conjunction with this compliance evaluation.

Note:

The audit was conducted through a review of a sampling of documents, limited interviews and observations by the auditor to demonstrate compliance obligations are being met as outlined in the EMS. The review and audit should not be construed as a complete and comprehensive review of all aspects and all documents.

Checklist Criteria - Compliance Obligations

The following items had criteria (Provincial) in the Nimonik Ontario General Industry Environmental Audit Template:

- Fire Protection and Prevention Act (FPPA), 1997 SO1997, c4
- Workplace Hazardous Materials Information System (WHMIS) O.Reg.860 under Occupational Health and Safety Act RSO1990, cO.1

Areas Visited

- Lake Huron WTP

Interviews Conducted

- E.McLeod, Quality Assurance & Compliance Manager, RWS
- D.Rodrigues, Senior Operations Manager, OCWA
- R.Lieber, Senior Operations Manager, OCWA

FINDINGS

The following is a summary of the findings including non-compliance issues and opportunities for improvement for the LHPWSS.

Definitions:

- A non-compliance (NC) is a non-fulfilment of a regulatory requirement.
- An opportunity for improvement (OFI) describes a regulatory requirement that can be more effectively addressed.

Regulatory NCs – WHMIS

NC #1 - Supplier Labels – Ontario Health and Safety Act (OHSA)/REG. 860 S.8

In some instances, WHMIS supplier labels appeared to be out of date (e.g., chlorine room, sodium bisulphite bulk storage).

NC #2 - Supplier Labels - OHSA/REG.860 S.8(3,4,10)

Created supplier labels containing 'sodium hypochlorite spray' in the maintenance shop were not clearly understandable (e.g., supplier label for a product in a bottle also labelled for a different product, noted personal protective equipment (PPE) differences).

NC #3 - Supplier Safety Data Sheets (SDS) - OHS/REG. 860 S.17(1,3)

SDS were not available for some products in the Maintenance Shop (e.g., 'Speedball 2000 Heavy Duty Spray Cleaner Concentrate' and 'Airoilene Oil').

OFIs – WHMIS:

OFI #1 - Education - OHS/REG. 860 S.7(1)(e)

There is an opportunity to review the status (e.g., draft / approved) of the Process Procedure documents. For example: LH-PROC-1400 Sodium Metabisulphite.

Handling and Transport has been in draft for 7 years; LH-PROC-1100 Sodium Hypochlorite Transport, has been in draft for 7 years; LH-PROC-1101 Sodium Hypochlorite Consumption, has been in draft for 5 years.

OFIs – FPPA

OFI#2 - Inspector - FPPA S.O. 1997, C.4 S.19 (7)

The Fire Plan was missing HSOP-2-06 'General Fire Response', referenced as Appendix E.



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Meeting Date: March 6, 2025
File No.:

Appendix C: EMS Surveillance Audit - Intertek - SAI Global Limited (October 02 and 03, 2024)

[See Attachment]

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

Surveillance 1

Report issued at 15:03 GMT on 08-Oct-2024

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

Client ID#:	CMPY-163895
Client/Address:	LAKE HURON PRIMARY WATER SUPPLY SYSTEM 71155 Bluewater Highway, Grand Bend, Ontario N0M 1T0 , Canada Regional/Divisional Office 13966 Medway Road, RR # 1, Arva, Ontario, N0M 1C0, Canada Regional/Divisional Office 39590 Huron St. Municipality of South Huron, Grand Bend, Ontario, 0L 2L0, Canada Regional/Divisional Office 9064 McGillivray Drive, Brinsley, Ontario, N0M 1A0, Canada
Audit Criteria:	ISO 14001:2015
Audit Activity:	Surveillance 1
Date(s) of Audit:	Grand Bend, Canada: 02-Oct-2024 to 03-Oct-2024
Auditor(s) (level):	Sandra Tavares (Lead Auditor, Grand Bend, Canada)
Scope of Audit and Scope of Certification:	Site: LAKE HURON PRIMARY WATER SUPPLY SYSTEM, Grand Bend, Ontario, Canada ISO 14001:2015: Overall scope/Main and additional sites scopes: Operation and maintenance of the facilities associated with the taking of raw water, subsequent treatment of this water and ultimately in the transmission and storage of potable drinking water.

OVERALL RESULT:

No Action Required

The management system was found to be fully effective. (no nonconformities issued)

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

EXECUTIVE SUMMARY

The EMS appears to be well managed given the conclusions and summary throughout this audit report (refer to SWOT Analysis below).

Continuous improvement projects continue to be recognized, again this year as part of the Ontario Water Works Association (OWWA) Water and Energy Efficiency Award application in relation to energy savings for backwash turbidimeter replacement (i.e., 422ML and \$87K / year).

SWOT ANALYSIS

Strengths	Level of Engagement, buy in and continual improvement is a model for other organizations.
Weaknesses	Refer to Opportunities for Improvement, specifically related to 7.3 Awareness and 8.1 Operational planning and control related to Contractor Management.
Opportunities	Refer to all Opportunities for Improvement.
Threats	Refer to 'Weaknesses' above.

INTERTEK MATURITY MODEL

The score descriptions are generic to all management systems and cannot be customized by the auditor, thus allowing for the consistency of interpretation and standardization of audit results worldwide. The scores provided to your organisation are for benchmarking purposes only and are based on the audit team’s evaluation.

Management

Outstanding

Strong evidence of management commitment, customer and/or interested party satisfaction, knowledge/awareness of policy and objectives being demonstrated consistently by all members of the organization. Responsibility and authority is evident and supported fully via data, trends and related KPI’s. Management reviews are completed as scheduled and attended regularly by all required personnel. Records are complete and demonstrate positive trends in improvement and lessons learned. Senior management is fully engaged in supporting all aspects of the System.

Auditor Comments:

LH-ADMIN-900 (V5.0, 9/13/2023) documents a process for Management Review that evaluates the continuing suitability, adequacy, and effectiveness of the QMS, tracked on the Management Review Tracking Form, LF-ADMIN-900, to ensure all are reviewed at least annually.

Top Management is to conduct a Management Review at least annually with LHPWSS conducting these more frequently, generally quarterly (e.g., 14-Sep- and 14-Dec-2023 and 5-Mar-, 6-Jun- and 16-Sep-2024) with increased frequency as a result of changes in legislation, changing circumstances, or at the request of Top Management. Corrective actions identified during Management Review were confirmed tracked in accordance with LH-ADMIN-400, on the LHPSS Corrective Action Spreadsheet.

Management Review Tracking LF-ADMIN-900 (V.3.0) 7-Jun-2023 through 16-Sep-2024 meeting referenced all inputs and outputs required by ISO 14001 including the Environmental Policy located https://huronelginwater.ca/wp-content/uploads/2023/06/2023-06-01-LHPWSS-Environmental-and-Quality-Policy-signed_acc.pdf.

Organizational structure including respective roles, responsibilities, and authorities are described within LH-ADMIN-100 (V.9.0, 30-Aug-2023). The RWS Director (e.g., reports and makes recommendations to Board, provides resources) and OA Regional Manager were interviewed with responsibilities confirmed. The Compliance Manager is responsible for arranging and chairing the Management Review described in Element 20. Two Senior Operations Managers are in place - one for Operations (previous Compliance Manager) and the other focusing on Maintenance.

Internal Audits

Mature

Internal audits are being performed at planned intervals and are based on status and importance of the Management System. Data is being collected analyzed and reviewed by senior management on a regular basis. There exists a link between the internal audit results and the overall health of the Management System. Audit teams are trained, impartial and objective in their approach. Audit reports are clear, concise and supported with applicable correction

LAKE HURON PRIMARY WATER SUPPLY SYSTEM **AUDIT REPORT**

actions. Management is involved in the corrective action process ensuring timely implementation and overall effectiveness of resolution.

Auditor Comments:

LH-ADMIN-1200 (V5.0, 9/13/2023) documents an internal audit process which includes responsibilities, use of plans and checklists, auditor selection, etc. Internal audits are to be performed at least once every calendar year, lastly 13-15 May-2024 internally with 3 nonconformities relating to project checklists and associated Conservation Authority project notification (31-Dec-2024 deadline) and emergency preparedness and response relating to Transportation of Dangerous Goods (TDG) certification and 15 opportunities for improvement, documented in CAF Tracking. The audit schedule is to be maintained by the RWS Director or their designate, in consultation with the SPC Manager. Audit plans and reports are to be filed by the Compliance Manager as per LH-ADMIN-200. Non-conformances and opportunities for improvement are to be handled as per and tracked in the LHPWSS Corrective Action Spreadsheet. The audits consider previous internal and external audit results with nonconformities and OFIs identified and initiated following the Corrective & Preventive Action Procedure LH-ADMIN-400 (V5.0, 13-Nov-2019).

Corrective Action

Mature

The corrective action process has demonstrated to be effective in practice. Data from sources such as customer and/or interested party complaints, internal audits, warranty analysis, defects, internal metrics and supplier performance show stability over time as the system matures. The process includes a thorough review of the effectiveness of the actions taken. There is evidence of problem solving tools being used to support the process.

Auditor Comments:

Audits consider previous internal and external audit results with nonconformities and OFIs identified and initiated following the Corrective & Preventive Action Procedure LH-ADMIN-400 (V.5.0, 13-Nov-2019) which references the use of the CAF Tracking Spreadsheet discussed with the RWS Manager and Compliance Coordinator. 2023 ReAccreditation Audit OFIs are tracked with most remaining open but not overdue. Action item status is as follows:

	# Action Items	# Complete	# Incomplete	# Overdue	% Completion
2020	38	38	0	0	100
2021	71	69	2	2	97 (related to coagulation update which is complete)
2022	100	100	0	0	100
2023	82	76	6	2	93

Continuous Improvement

Mature

Data streams are being used as sources to drive continual improvement over time. These may include management system policy, objectives, and audit results, analysis of data, CAPA and management reviews. There is some evidence of advanced techniques being used during the improvement cycle. Economic benefits have been realized.

Auditor Comments:

LH-ADMIN-1500 (6.0Version number 6.0, 9/13/2023) describes the Objectives, Targets & Programs process which includes the use of Environmental Management Program Form (LF-ADMIN-1500, V3.0) and includes reference to significant aspects, compliance obligations and risks and opportunities. 2 EMS Objectives were reset for Jan 1/2023 through 31-Dec-2027 (coincides with OCWA's contract start and end dates) and include:

LAKE HURON PRIMARY WATER SUPPLY SYSTEM **AUDIT REPORT**

- Reducing the demand on electrical generation through conservation and displacement previously at <700kwh/ML and now 670kwh/ML which may decrease further as a result of new pumping strategy and annual operation (673.8 in 2018, 662.7 in 2019, 668 in 2020, 677 2021, 669.1 in 2022, 624.5 in 2023, and 601.7 YTD2024 to end of August lowest ever since 2008 with a sharp decrease as a result of using new pumps strictly with an operation strategy provided by AECOM).
- Reducing the use of chemicals in production of potable water <48kg/ML and now <44 (52.9 in 2017, 47.4 in 2018, 2019 45.3, 2020 44.4, 2021 41.6, 2022 42.5, 2023 at 45, 2024 YTD 44.9) with LH1260 Huron Flash Mix / Coagulation Upgrade remaining as further contributing to these numbers addressing inefficient mixing to decrease chemical costs / usage.

Operational Control

Mature

Operational Controls are planned and developed. Planning of operational controls is consistent with all other Management processes. Objectives, process requirements, needs for appropriate additional documents and resources, verification and monitoring activities and records requirements have been determined, as appropriate. Processes and activities run consistently. Data is collected, and reviewed to verify the effectiveness of operational controls with evidence of significant improvement trends. Some evidence linking to some key business factors.

Auditor Comments:

Management of Change and tracking contributes to a mature planning of operational controls.

The processes to manage change include LH-ADMIN-2300 New Projects (V5.0, 2/2/2021) and LH-ADMIN-700 Changes in the Lake Huron System (V5.0, 18-Jan-2019) with Management of Change Checklists (LF-ADMIN-700) completed for capital projects within the last year (e.g., RWS RFT-2022-216 McGillivray PS Facility Upgrades LH1243 LF-ADMIN-700 completed 1-Oct-2024 with actions added to CAF Tracking 2024-).

LF-ADMIN-2301 (the 2023 ISO 14001 Recertification Audit OFI to update LF-ADMIN-2301 with regard to LH-ADMIN-2300 as the latter is now part of the tender document and streamline with completion of LF-ADMIN-1700 and acknowledgement via RWS contract signing was updated to reflect new orientation [e.g. OnLocation contractor sign-in) which once complete omit/retire LF-ADMIN-1700 with LH-ADMIN-2300 requiring updates to reflect new procedure due 31-Dec-24 as per CAF Tracking which is also tied to #897 to review LH-ADMIN-1700 Subcontractor process to ensure sign-offs are completed in a timely manner [OCWA Contractor Safety video in progress with 2025 implementation) LH-1243 Electrical and HVAC updates was reviewed for updates with new glycol cooling system and scrap waste as a focus (refer to OFI). OCWA LH1216 closed loop chlorine control system completed 5-Oct-2023 had no Management of Change as minor project as per LF-ADMIN-2301 with overview provided by Control Room Operator and coagulation system now up and running (LH1260).

2023 ReCertification OFI to review Maximo maintenance Work Order closure to ensure completion (e.g., KB1 WO35714 scrubber media sample closure 11-Oct-2023 despite no receipt of report confirmed completed 11-Apr-2024 with a 6 month frequency was closed automatically 3 months later with 5/20/2024 report as waiting until report impacts WO closure report and next date so informally monitored through Maintenance SOM when invoices are approved) and continuity (e.g., WTP annual scrubber maintenance completed 23-Apr-24 with 2-May-24 verification as per CAF tracking). Maintenance records were also reviewed for:

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- CI gas detector by Hetek every 6 months, lastly 7/10/2024 and 1/16/2024 and internal monthly last 5/16/2024 and 6/25/2024 for Komoka Mt Brydges
- Exeter internal semi (8-Feb- and 20-Aug-2024) and annual by Sommers and LH quarterly by Toromont 4 CAT (e.g., 6/26/2024 and 3/26/2024) generators

Resources

Mature

Resources required for the effective maintenance and improvement of the management system have been defined and deployed. Improvements have been noted in areas such as customer and/or interested party satisfaction, continual improvement, process variation. Levels of competency have been defined and documented within the existing management system.

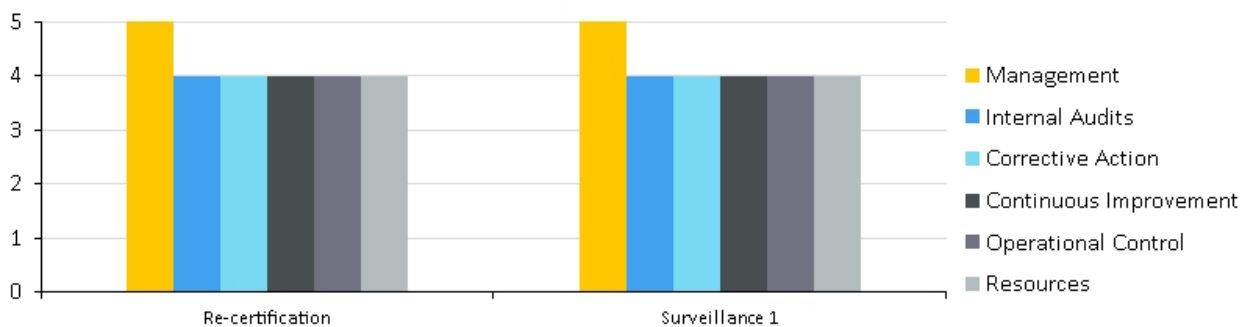
Auditor Comments:

LH-ADMIN-1400 (v.12.0, 22-Aug-2023) documents the competencies required for personnel performing duties which references the LH Internal Training Matrix (quarterly work order for review and updates usually completed by the Team Lead interviewed) to track EMS & OCWA mandatory training requirements, Environmental Compliance 101 every 3 years, etc.

Orientation is to be delivered to new employees, with refresher training to be provided approximately every 2 years thereafter (confirmed). Specific to the DWQMS, the QMS orientation is to include roles, responsibilities, and benefits in achieving conformance; and Emergency Management & associated procedures (refer to OFI). Activities to develop and/or maintain are documented, including practical training, professional development training, etc.

Refer to OFI in relation to documentation of contractor competency.

Intertek Maturity Model



Rating: 5=Benchmark | 4=Mature | 3=Meets Intent | 2=Beginning | 1=Not Evident

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

FINDING SUMMARY

	Minor	Major
Issued during current activity	0	0
Opportunities for improvement have been identified		
Yes		

STATUS OF PREVIOUS AUDIT FINDINGS

Follow-up on findings issued at previous audit:

Prior assessment resulted in no non conformities.

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

EVIDENCE SUMMARY

The state of the management system is summarized below:

Process for Monitoring and Maintaining Compliance with Legal and Other Requirements

As per Management Review, new needs and expectations of interested parties were reviewed, including compliance obligations and Environmental Compliance Internal Audit Report.

Compliance Obligations are described within LH-ADMIN-600 (4-Sep-2024 updated to reflect newsletter source as Nimonik rather than CERCN) whereas LH-ADMIN-1600 (both V8.0, 5/12/2023 to reflect desktop audits not requiring opening and closing meetings) identifies the compliance audit process, including the use of the Legal Register (V27, 10/3/2024) that includes the date the obligation was last audited. Legal Register "not applicable" tab still in place with no changes focusing on areas that are either not applicable or project construction related and rely on Project Managers to address.

An Environmental Compliance audit is also performed annually, whose schedule was observed for 2024 (e.g., 15-Jan-2024 reviewed) quarterly and 2025, including overdue items (no findings were identified), completed by the RWS Compliance Coordinator using the Nimonik list covering Federal and Provincial requirements with municipal and other requirements covered via LF-ADMIN-600 (V4.0). Refer to OFI.

Assessment of Implementation related to Significant Environmental Aspects

Significant environmental aspects appear to be appropriately managed.

Aspects & Impact Assessment (V17.0, 7/9/2024 encompasses CAF action item 680 & LH16 with annual review 4/23/2024) is described within LH-ADMIN-1100 (V3.0, 6/5/2020) and points to life cycle. The 2023 ISO 14001 ReCertification OFI to review the Aspects & Impact Assessment extreme weather impacts to other pump stations aside from McGillivray ("N" also identified for Arva) was updated to include all pump stations as of 5-Dec-23 as per the Huron CAF Tracking and verified 9-Jan-24 by the Regional Water Supply (RWS).

The following was reviewed:

- Chemical Usage is identified as part of maintenance in disinfection, super- and de-chlorination in relation to cleaning and filter media top-up as well as water treatment with the use of Alum, Polymer, PAC, Chlorine Gas, Sodium Hypochlorite and Residuals Treatment using Polymer, Sodium Bisulphite, with various operational procedures in place.
- Energy encompasses electricity via operating process equipment (pumps), lighting and heating as well as natural gas consumption associated with boilers and dehumidifiers with a downward trend from 2019-2023 as per https://www.huronelginwater.ca/app/uploads/2024/06/CDM-Plan-LHPWSS_2024-FINAL-with-Appendices.pdf. LH-ADMIN-2100 (Electricity Use) is in place for management. Fuel consumption is associated with backup generators and vehicles. Oil consumption is related to process equipment (i.e., pumps) and transformers which have an associated maintenance program as the operational control. Electricity Consumption aspect operating process equipment (pumps) due to HLP replacement.
- Fleet replacement has now incorporated a hybrid vehicle and new LEED Silver building will need to have EV stations.
- High water level and storm events as a 2023 environmental aspect (Lake Huron and related April and October erosion inspections every 6 months PM5632 still scheduled).

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- Waste - Non-Hazardous, pertaining to Solids (non-recyclables such as Filter media, fiber & foam filters, Recyclables (paper, plastic, cans, scrap metals) as well as LH-PROC-200 Waste Manifest Completion (V5.0 as a result of RPR).)
- Water Consumption taking and Optimization relates to service/process water within WTP or Pumping Station and Water conservation and efficiency by customers/consumers. Backwash savings ties into less water taking and optimization which relates to objective.

Conclusions regarding the audit of Mandatory Requirements

Refer to 'Process for Monitoring and Maintaining Compliance with Legal and Other Requirements'.

Identified opportunities for improvement

7.3 Awareness - There is an opportunity to:

i) within the Training Matrix:

- a) identify completion timeframe for New Employee Facility Environmental and Fire Safety Plans training.
 - b) reflect quarterly emergency training and exercise.
 - c) identify mandatory training (e.g., 'Electrical Hands On Training Checklist') and associated frequency (e.g., Acute Spill Response every 3 years).
- ii) identify significant aspects within the EMS / QMS Orientation Training.

8.1 Operational planning and control (Contractor Management) - In preparation for the MRI OnLocation software, there is an opportunity to add certification expiries (e.g., insurance, licensing [Transportation of Dangerous Goods], EMS / QMS Review completion) and, in relation to LH-ADMIN-1700 contractor rules, chemical approval and spill reporting.

9.1 [General] Monitoring, measurement, analysis and evaluation - There is an opportunity to track scrap metal waste associated with McGillivray project.

9.1.2 Evaluation of compliance - There is an opportunity to:

- i) review Evaluation of Compliance frequency (e.g., 3-5 years based on risk).
- ii) ensure record traceability (e.g., name and date on LF-ADMIN-600 Environmental Compliance Checklist completion).

10.2 Nonconformity and corrective action - There is an opportunity for improvement to ensure new process verification of effectiveness (e.g., LH11 pertaining to online LF-ADMIN-2301 completion).

Conclusions regarding risk assessment/risk treatment processes

Risk assessment and management appears to be effective.

Refer to 'Conclusions regarding context of the organization', 'Process for Monitoring and Maintaining Compliance with Legal and Other Requirements', and 'Assessment of Implementation related to Significant Aspects' for risk information.

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

Conclusions regarding context of the organization

Context of the organization appears to be well managed.

External and Internal issues discussions during the 16-Sep-2024 Management Review included aging (i.e., life cycle) infrastructure (e.g., Grand Bend high lift pump project and coagulation system upgrade now complete with alum being the top chemical used, Exeter concrete deterioration discussed in 2023 now observed complete as part of facility tours and McGillivray electrical upgrade nearly complete; Arva repair on reservoir Victaulic coupling WO138192 now complete), water demand being discussed as part of the Master Plan with potential increased demand to the City of London, resource inputs (e.g., 5% chemical costs 2025 increase anticipated and sodium bisulphite reduction with 30% reduction in backwashes to the lake), Senior government incentives and funding (in relation to Oneida pipeline with a signed agreement in place extending pipeline by 20km and minimal demand about 2000 people which is at 60% design with 2025 construction), Public engagement (tours) and Supply chain interruptions/delays (quarterly chemical contracts are now annual again).

Additional information/unresolved issues

Not applicable (N/A)

Communication/Changes during the visit (if applicable)

N/A

References to appendices:

Audit plan

Have all shifts been audited:

Yes

The audit has been performed according to audit plan meeting audit objectives, scopes and duration (on-site and off-site) as given within the audit plan

Yes

Have there been any changes to Scope?

No

Have there been any changes to Headcount?

No

Have there been any Address Changes?

No

LAKE HURON PRIMARY WATER SUPPLY SYSTEM AUDIT REPORT

Have there been any Sites Added / Removed?

No

Have there been any Other Changes?

No

LEAD AUDITOR RECOMMENDATION

Lead Auditor's Recommendation for ISO 14001:2015

The management system is in conformity with the audit criteria and can be considered effective in assuring that objectives will be met. Continued certification is therefore recommended.

OTHER OR ADDITIONAL LEAD AUDITOR RECOMMENDATION

Not applicable.

CLIENT ACKNOWLEDGEMENT

Client Representative Name and Mailing Denny Rodrigues, OCWA Senior Operations Manager

Address:

Acknowledged By: Denny Rodrigues, OCWA Senior Operations Manager

This report is based on a sample of evidence collected during the audit; therefore the results and conclusions include an element of uncertainty. This report and all its content is subject to an independent review prior to a decision concerning the awarding or renewal of certification.

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Board of Management Report

Subject: Quarterly Operating Financial Status – 4th Quarter 2024

Overview:

- This report shows the current fiscal year’s 4th quarter in comparison to its Budgeted amount and the previous year’s same time period.

Recommendation

That the Board of Management for the Lake Huron Water Supply System receive this report regarding the Operating Financial Status Report for the period of October 1 to December 31, 2024, noting that this report is unaudited and subject to adjustments including the preparation of the financial statements and completion of the annual audit.

Previous and Related Reports

June 6, 2024	Quarterly Operating Financial Status – 1 st Quarter 2024
October 3, 2024	Quarterly Operating Financial Status – 2 nd Quarter 2024
December 5, 2024	Quarterly Operating Financial Status – 3 rd Quarter 2024

Background

At the request of the Board of Management, a Financial Status Report is provided on a quarterly basis for information. The financial status provides a high-level overview of incurred expenditures and revenues on a cash-flow basis and is compared to the approved operating budget of the water supply system. All expenditures and revenues provided in this Financial Status Report are unaudited and may include accrued and/or unaccrued expenses from a previous or future fiscal year.

A high-level summary of incurred expenses and revenues for the water supply system is attached to this report as Appendix A for the fourth quarter 2024 (October 1 to December 31) as well as a comparative accumulation of expensed for the year to date.

Note: The reported expenditures and revenues may be subject to adjustments, including but not limited to corrections and entries required for the preparation of financial statements and completion of the annual audit.

Discussion

For the information and reference of the Board, the following highlights of the attached summary provides a brief explanation of notable deviations from the approved budget and/or clarifications of the financial summary:

- Contracted Operating Services in the summary report reflects the total direct operating costs of the contracted operation of the water treatment and transmission system, as well as other related contracted services. The total accumulated operating costs over the year (unaudited) is higher than the same period in 2023 and is reflective of contractual increases in service agreements with the operating authority and other contracted services. A chemical fee adjustment accounts for a large portion of the increase.
- Contracted Administrative Services in the summary report reflects the fees paid to the City of London. The costs have increased but are being renegotiated.
- Electricity expenditures include the purchase of energy and related energy management service charges for the water system. The water system is currently tracking approximately \$203,000 higher than the previous year. Usage in kWh decreased over this period but the commodity costs and charges for the energy was higher. This can partially be attributed to the increased volume of water sold.
- Salaries, wages and benefits expenditures include all direct labour costs for administrative staff including benefits. Variations over the same period in 2023 are attributed to annual salary adjustments, and new staff hired.
- Administration and Other Expenses relates to various overhead operating expenses, including subscriptions and memberships, office supplies and property taxes. The expenses are higher than the same period in 2023 mainly due to an increase in property taxes and higher rent due to increased office space.
- Vehicles and Equipment expenditures include costs associated with vehicles, computers and office equipment for administrative staff. The increase from 2023 is due an increase in the computer contracted service costs. Instrumentation costs were moved from the capital budget to the operating budget.
- Purchased Services and Professional Fees largely relates to allowances for ad hoc professional consulting and legal services, security services, office lease, telephone charges, network and SCADA maintenance, printing services, and pipeline locate costs.
- Debt Principal and Interest payments occur twice per year; in the first and third quarter.

- Contributions to the Reserve Funds occur at the end of the fiscal year as part of the year-end audit preparation process, where the actual contributions are the total remaining revenue in excess of expenditures. Accordingly, the amount of the anticipated contribution is currently adjusted to reflect the additional revenue and expenses incurred and may be subject to further adjustment as a result of the completion of the year-end financial statements and audit.

The 2024 revenues for the water system were lower than budgeted largely due to significantly lower water volumes supplied to the benefiting municipalities over the course of the year. Notwithstanding, expenses and net projected contributions to the reserve funds were comparatively lower in 2024 to compensate.

Prepared by: Archana Gagnier
Budget and Finance Analyst

Submitted by: Andrew J. Henry, P.Eng.,
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Attachments: Operating Financial Status Summary – 4th Quarter 2024

Quarterly Financial Summary Report

Lake Huron Water Supply system

4th Quarter 2024 (October 1 to December 31)

(\$,000's)

	Approved 2024 Budget	Q4 - 2024	2024 Year to Date	Year To Date Variance	2023 Year To Date
Total Revenue	27,561	6,318	26,568	993	24,416
<u>Expenditures:</u>					
Contracted Operating Services	8,083	2,543	8,412	(329)	7,758
Contracted Administrative Services	338	84	334	4	302
Electricity	3,100	982	3,134	(34)	2,931
Salaries, Wages, Benefits	1,251	414	1,211	40	1,049
Administration and Other Expenditures	535	44	495	40	480
Vehicles and Equipment	291	32	258	33	160
Purchased Services & Professional Fees	1,384	230	1,349	35	1,522
Debt Principle Payments	957	6	957	0	1,113
Interest on Long-Term Debt	28	(6)	28	0	53
Contributions to Reserve Funds	11,593	11,593	10,390	1,203	9,048
Total Expenditures	27,561	15,922	26,568	993	24,416

Board of Management Report

Subject: Capital Status Report

Overview:

- This report shows the current fiscal year's status of all capital projects.
- Eight capital projects are recommended to be closed with a net surplus funding in the approximate amount of **\$3,943,035** recommended to be released to the Reserve Funds.

Recommendation

That, on the recommendation of the Chief Administrative Officer, the Board of Management for the Lake Huron Primary Water Supply System take the following actions regarding capital projects:

- a) The Board **CLOSE** projects **LH1207** Concrete Crack Injection, **LH1216** Closed Loop Chlorine Control, **LH1230** High Lift Pump Replacement, **LH1232** Arva Victaulic Repair **LH2044** Sub-Basement Drain Study and **LH1245** Flocculator Walking Beam Rehab with surplus funding in the approximate amount of **\$4,060,623** be released to the Reserve Funds.
- b) The Board **CLOSE** project **LH1284** Huron Flocc Gear Drive Repair and **LH2056** Clarifier Ramp Replacement with additional funding in the approximate amount of **\$117,588** be drawn from the Reserve Funds.
- c) The Board **RECEIVE** this report for information.

Previous and Related Reports

October 3, 2024, Capital Status Report

Background

The Capital Project Status Report, attached for the Board's information, provides a brief overview of the status of current capital projects for the Lake Huron Primary Water Supply System. This report is provided for the general information of the Board.

The status report is divided into four categories of projects, namely:

- 1. Ongoing Projects:** This section provides a summary list of all projects which are funded by the Board through the Capital Budget, and which are currently in-progress. Board funded projects are typically for the replacement or upgrade of existing assets, the construction of new assets, or engineering studies and assessments, as approved by the Board.

Under the terms of the Service Agreement with the contracted operating authority, the Board is also required to pay for some maintenance/repair activities. The benchmark used in the operating contract is that if the value of the material and any contracted labour is over \$30,000 (indexed annually to inflation from the start of the contract), the project is considered Capital Maintenance and the contracted operating authority would fund the first \$30,000 (indexed), with the balance funded by the Board. Accordingly, the Board maintains an annual “fund” within the Board’s capital budget to pay for these projects as they arise.

- 2. a) Completed Projects - Release Surplus to Reserve Funds:** This section provides a summary list of all projects which are presently completed and do not require additional funds from that budgeted. Should the Board approve the closure of the listed projects, it is the recommendation of staff to release the surplus funds, if any, to the appropriate Reserve Fund.

b) Completed Projects – Reduce Authorized Debt: In the case where the project is funded through the issuance of a debenture, should the Board approve the closure of the listed project it is the recommendation of staff to reduce the previously authorized but unissued debt for the project(s).

- 3. Completed Projects - Additional Funding Required:** This section provides a summary list of all projects which are presently completed but require additional funds from that originally approved by the Board. Should the Board approve the closure of the listed projects, it is the recommendation of staff to provide the required additional funding from the Board’s Reserve Fund.

Discussion

For the information and reference of the Board, the following is the Capital Project Status Summary:

1. Ongoing Capital Projects

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
LH1016	Huron Safety Railing Replacement	\$600,000	\$598,028	Ongoing
LH1021	Huron Low Lift Pump 6 Refurbishment	\$415,000	\$263,492	Ongoing
LH1107	SCADA/PLC Software Review & Upgrade	\$500,000	\$447,548	Ongoing
LH1229	Security Upgrades	\$1,153,000	\$936,539	Ongoing
LH1242	Hydraulic/Transient Model Update and Monitoring	\$580,000	\$460,769	Ongoing
LH1243	McGillivray Electrical Upgrades	\$11,887,175	\$11,530,308	Warranty period
LH1251	PAC Feed/Transfer Pump System Replacement	\$1,300,000	\$88,516	Ongoing
LH1256	Crop Yield Monitoring – 2014 Pipeline Twinning	\$1,500,000	\$269,527	Ongoing
LH1260	Flash Mixer Upgrade	\$1,437,000	\$1,242,318	Warranty period
LH1261	PLC Replacements	\$40,000	\$41,120	Ongoing
LH1264	Vehicle Door Replacements	\$225,000	\$205,593	On hold
LH1267	Plant Interior Door Replacement	\$100,000	\$85,188	Warranty period
LH1272	Service Water Pipe Replacement (multi-year)	\$125,000	\$122,924	On hold
LH1273	(PS3) Exeter-Hensall Pump Control Upgrades	\$100,000	\$7,441	Warranty period
LH1274	SCADA Control Modifications	\$100,000	\$2,160	Ongoing

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
LH1277	IT Asset Replacement Program	\$566,000	\$365,433	Ongoing
LH1279	Cyber Intrusion Detection System	\$10,000	\$0	Ongoing
LH1285	Pressure Reducing Valve	\$425,000	\$124,262	On hold
LH1316-22	Annual Maintenance (2022)	\$125,000	\$207,947	Ongoing
LH1316-23	Annual Maintenance (2023)	\$125,000	\$18,410	Ongoing
LH1316-24	Annual Maintenance (2024)	\$125,000	\$118,749	Ongoing
LH1317	Distressed Pipe Replacement	\$2,500,000	\$1,562,986	Ongoing
LH1352	Arva Reservoir Structural Repairs	\$2,050,000	\$41,686	On hold
LH1353	WTP Modifications	\$2,350,000	\$492,323	Ongoing
LH1380	Clarifier Upgrades	\$465,000	\$363,493	Warranty period
LH1388	Coagulation Optimization Study	\$50,000	\$0	On hold
LH1408	Oneida Transmission Pipeline	\$25,200,000	\$737,307	Ongoing
LH1426	WTP Storage Schedule B	\$4,000,000	\$475,224	On hold
LH1900	Record Drawings & Documents	\$491,000	\$406,953	Ongoing
LH1901	Water Quality Facility Plan	\$290,000	\$146,662	Ongoing
LH2036	Roof Drain Replacement	\$100,000	\$105,104	Ongoing
LH2038	Chamber Flood Prevention/Rehab	\$250,000	\$239,057	On hold

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
LH2042	Pipeline-A Double Isolation Valve	\$1,247,000	\$28,989	Ongoing
LH2045	Monitoring Station Controls Upgrades	\$275,000	\$163,193	Warranty period
LH2046	Asset Condition Field Assessment	\$210,000	\$94,790	Ongoing
LH2048	De-Chlorination at Remote Stations	\$125,000	\$34,572	Ongoing
LH2049	Office Expansion	\$100,000	\$80,122	Warranty period
LH2050	Master Water Plan Update	\$235,000	\$72,834	Ongoing
LH2051	Service Water Study	\$120,000	\$0	Ongoing
LH2052	McGillivray Building Renovations	\$25,000	\$0	On hold
LH2053	Climate Change Resiliency Assessment	\$120,000	\$17,973	Ongoing
LH2054	Treatment Plant Surge System	\$175,000	\$0	Ongoing
LH2055	Beach Chamber Valve Replacement	\$400,000	\$0	Ongoing
LH2057	High Lift Discharge Flow Meter	\$400,000	\$534	Ongoing
LH2058	Low Lift Check & Butterfly	\$370,000	\$44,204	Ongoing
LH2059	Raw Water Valve & Actuator	\$350,000	\$0	Ongoing
TOTAL		\$63,336,175	\$22,244,278	

2.a) Completed Projects – Release Surplus to Reserve Funds \$4,060,623

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
LH1207	Concrete Crack Injection	\$270,000	\$261,757	Completed

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
LH1216	Closed Loop Chlorine Control	\$135,000	\$106,294	Completed
LH1230	High Lift Pump Replacement	\$13,557,000	\$9,579,851	Completed
LH1232	Arva Victaulic Repair	\$175,000	\$143,060	Completed
LH2044	Sub-Basement Drain Study	\$25,000	\$20,746	Completed
LH1245	Walking Beam Flocculator Rehab	\$400,000	\$389,669	Completed
TOTAL		\$14,562,000	\$10,501,377	

2.b) Completed Projects – Reduce Authorized Debt/Other Sources

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
TOTAL		\$ 0	\$ 0	

3. Completed Projects – Additional Funding Required (\$117,588)

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	STATUS
LH1284**	Huron Flocc Gear Drive	\$300,000	\$402,148	Completed
LH2056	Clarifier Ramp Replacement	\$280,000	\$295,440	Completed
TOTAL		\$580,000	\$697,588	

* Expended as of December 31, 2024

**Additional costs over the initial estimate were required due the extreme wear on the main ring gear on each gear drive. It was anticipated that these were to be refurbished but ultimately had to be replaced. These costs were compounded by the pandemic as well as the fact that the replacement parts could only be sourced from the United Kingdom.

Market Conditions

With the recent election cycle in the United States, and subsequent discussions related to potential tariffs, the markets are seeing significant upheaval and risk-based pricing has become more apparent in recent procurements. Equipment and materials procured from suppliers for the United States may be affected by countervailing tariffs imposed by Canada, as well as consequential input cost increases on raw materials exported from Canada to the USA which are used in the manufacture of equipment, materials and consumables.

These market conditions are causing significant pressures on procurement processes, particularly for longer-term construction projects are likely to impact total costs of the capital initiative. The budgets for these projects were established largely based on market conditions and projections prior to the more recent economic conditions. As such, it is important for the Board to be aware of the potential need for special meetings of the Board of Management to ensure the timely award of contracts and, potentially, increases to the approved capital budgets. While staff are taking all reasonable steps possible to contain costs and minimize the impacts of risk-based pricing, it is likely given the number of projects that the regional water system is undertaking that conditions will prevail whereby Board approval is explicitly required pursuant to the Procurement of Goods and Services and Disposal of Assets By-law.

Prepared by: Archana Gagnier
Budget and Finance Analyst

Submitted by: Billy Haklander, P. Eng., LL.M
Senior Manager, Capital Programs

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Ministry of the Environment, Conservation and Parks Inspection Report

Overview:

- The 2024-2025 annual Ministry of the Environment, Conservation and Parks (MECP) Inspection Report was received on January 21, 2025.
- The final inspection report did not identify any non-compliances or best management practices.
- The final inspection rating was 100%.

Recommendation

That the Board of Management for the Lake Huron Water Supply System **RECEIVE** this report for information.

Background

The Ministry of the Environment, Conservation and Parks (MECP) conducts an inspection of the Lake Huron Water Supply System (LHWSS) annually. The objective of the inspection is to determine the compliance of the drinking water system with specified requirements under the Safe Drinking Water Act and associated regulations, as well as licenses and permits issued by the MECP. An inspection report is issued by the MECP which outlines any non-compliances as well as recommended best management practices for the water system's consideration.

Violations identified within an inspection report, if any, have been evaluated by the MECP based on the potential and degree of risk to consumers. Any identified violations are monitored for compliance with the minimum standards for drinking water in Ontario as set forth under the Safe Drinking Water Act and associated regulations. Where risk is deemed to be high and/or compliance is an ongoing concern, violations are forwarded to the Ministry's Investigation and Enforcement Branch by the Ministry Inspector.

Discussion

Inspection Findings

The MECP conducted an announced "focused" physical inspection of the LHWSS on November 21, 2024. The final inspection report was issued by the MECP on January 21, 2025. The inspection covered the period from October 1, 2023, through October 31, 2024.

The final inspection report issued by the MECP contained an inspection rating of 100% for the inspection period. There were no non-compliances or best management practices (BMP) identified by the Ministry Inspector. No actions are required by either the operating authority or the owner.

Due to the length of the Ministry's final inspection report, this Board report contains a summary only for the general information of the Board. Copies of the complete inspection report, as issued by the MECP, are available to the Board, the benefiting municipalities, and the public at large from Board staff at the Regional Water Supply office in London upon request.

It is noted for the Board's information and reference that these annual inspection reports were previously posted to the water systems' website for ease of public access. Unfortunately, the inspection report issued by the MECP does not comply with the Accessibility for Ontarians with Disabilities Act. As a result, previous inspection reports have been removed from the water systems' website. This and future annual inspection reports issued by the Ministry will only be made available upon request until such time as the Ministry makes the document compliant with the Act.

Risk Rating

The MECP applies a risk rating methodology to establish an annual inspection rating. Any non-compliance identified in the inspection report is evaluated based on the potential to compromise the delivery of safe drinking water to the public. For example, a "failure to document" may have a relatively low risk to the consumer, whereas a "failure to disinfect" would have a relatively high risk. The primary goal of this type of assessment is to encourage ongoing improvement and to establish a way to measure improvement, which is weighted by the severity of the risk. A low inspection rating does not necessarily mean that drinking water is unsafe, but rather it is an indication of the degree to which there is room for improvement with respect to a drinking water system's operation and related administrative activities.

This methodology of risk assessment and rating has been used consistently by the MECP since the 2008-2009 inspection period and therefore can serve as a comparative measure both provincially and specifically to the LHWSS since that time. The methodology utilized for annual inspections is reviewed by the MECP every three years. If changes occur in the application of the methodology and risk ratings, ratings from one three-year period may be slightly inconsistent with another.

The following table outlines inspection ratings for the LHWSS over the last five years:

Inspection Year	Final Inspection Rating	# of Non-compliances	Type of Inspection	Operating Authority
2020-2021	100.00%	0	Detailed	OCWA
2021-2022	100.00%	0	Detailed	OCWA
2022-2023	91.12%	3	Focused	OCWA
2023-2024	99.35%	1	Detailed	OCWA
2024-2025	100.00%	0	Focused	OCWA

In April 2024, the LHWSS received notification from the MECP that due to a realignment of the Ministry’s water inspection boundaries the LHWSS would now be inspected by the Sarnia District office rather than the London District office. As a result of the boundary change the LHWSS was assigned a new Ministry Inspector in 2024.

Correspondence and Communications

Prior to issuing the final inspection report, the Ministry Inspector issued a draft copy to the operating authority, providing the opportunity to comment or request clarification on the findings. The operating authority provided Board staff with a copy of the draft report for review and comment. As there were no non-compliances identified in the draft report, Board staff submitted minor administrative comments only.

Conclusion

The MECP inspection report has indicated that the requirements of applicable legislation were met by the LHWSS for this inspection period. Board staff will continue to discuss any inspection findings with the MECP District Office to ensure that inspection findings are consistent, appropriate and relevant to the LHWSS.

Prepared by: Erin McLeod, CET
Quality Assurance & Compliance Manager

Submitted by: Andrew J. Henry, P.Eng.
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Registration of Board-Owned Property

Overview:

- Properties owned by the regional water system were not correctly registered with the Land Registry Office at the time of the Transfer Order issued by the Province of Ontario.
- The solicitor for the City of London has recommended that the incorrectly registered properties be registered to the City of London as bare trustee.

Recommendation

That, on the recommendation of the Chief Administrative Officer, the Board of Management for the Lake Huron Water Supply System consent and approve the corrections of the title ownership of lands owned by the regional water system, and authorize the registration of the properties in the name of “The Corporation of the City of London, as bare trustee and in its capacity as administering municipality for the Lake Huron Water Supply System”, or similar registration upon further consultation with the City of London’s solicitor and the Land Registry Office for Ontario.

Previous and Related Reports

None

Background

The Minister of the Environment issued Transfer Order “Lake Huron Area #W1/1998” on September 15, 2000, which, in part, established the Board of Management and transferred ownership of the Lake Huron Water Supply System to benefiting municipalities. Each municipality has an undivided interest in the regional water supply system and its assets as a tenant in common.

At the time of the transfer, solicitors for the City of London worked with solicitors of the Ministry of the Environment in preparing notifications and documentation necessary for the transfer of ownership, including the registrations of properties.

Discussion

There are five properties across Huron County and Middlesex County that are owned by the regional water system:

- The water treatment plant located at 71155 Bluewater Highway, South Huron
- The McGillivray Booster Pump Station located at 4064 McGillivray Drive, North Middlesex
- The Strathroy Monitoring Station #1 located at 33234 Niel Road, North Middlesex
- The Arva Terminal Reservoir and pump station #4 located at 13694 Medway Road, Middlesex Centre

All other infrastructure owned and operated by the regional water system are located within municipal rights-of-way or within easements that are registered on the respective privately owned lands.

In preparation for implementing process improvements related to tracking and addressing notifications received pursuant to the Construction Lien Act, 1990, and ensure ongoing compliance with recent amendments, Board staff discovered that most of the properties were not correctly registered at the time of the transfer in 2000, many of which continue to appear under the ownership of the Ontario Water Resources Commission, the provincial agency responsible for the original construction of the water supply system on behalf of the Province of Ontario.

The Strathroy Monitoring Station #1 located on Niel Road is currently registered to the Municipality of North Middlesex.

In consultation with the City Solicitors office of the City of London, it is proposed that the registered ownership and title of the properties be updated to properly reflect the change in ownership to the Lake Huron Water Supply System. Given the unaffirmed legal status of the Board, the City of London's solicitor is recommending continuing to register the properties of the regional water system under the City of London in its designated capacity as Administering Municipality (per the Transfer Order) and as bare trustee.

Property Tax

Since the time of the transfer, the regional water system has made "payments in lieu of taxes" (property taxes) to the respective municipalities based on the respective tax rolls and property valuation assessments by the Municipal Property Assessment Corporation. With the proposed correction in registration of land title, there are no anticipated impacts to property tax obligations of the regional water system.

Easements

Given the extent of the infrastructure located within easements, staff continue to verify and validate the registrations of easements on the respective privately owned properties. To date, all easements appear to be correctly transferred and registered; however, Board staff are continuing to assess the numerous registrations. There is one instance where the easement may be considered non-contiguous, and the Land Registry Office allowed the easement to laps. Board staff are continuing to investigate and will be consulting with the Board's solicitor to resolve the issue if the status of the easement registration is not confirmed.

Delegated Powers and Duties

Pursuant to the Procurement of Goods and Services and Disposal of Assets Policy, Schedule B clause 9, the procurement of Legal Services is excluded from the procurement-related policy as deemed appropriate by the Director of Regional Water, with the concurrence of the Chief Administrative Officer, up to \$250,000.

Should the regional water system need the services of a solicitor independent of the City of London on these matters, the Director will direct staff to utilize a solicitor which has knowledge and experience on Board-related matters.

Conclusion

In order to correct the ownership registrations with the Land Registry Office, Board staff recommend continuing to work with the solicitors of the City of London to complete the ownership registrations as originally intended at the time the issuance of the Transfer Order in 2000.

Submitted by: Andrew J. Henry, P.Eng.,
Director, Regional Water

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer

Board of Management Report

Subject: Lake Huron Primary Water Supply System Master Plan – Update (LH2050)

Overview:

- As a condition of the provincial transfer order issued under the *Municipal Water and Sewage Systems Transfer Act, 1997*, the LHPWSS is required to complete a Master Plan every five years to determine regional system needs over the short and long-term.
- The Master Plan follows the Master Planning process as outlined in the Municipal Engineers Association Municipal Class Environmental Assessment document (October 2000, as amended in 2007, 2011, 2015 and 2023).
- The Master Plan was awarded and initiated in spring 2024. A Master Plan is being undertaken for the Elgin Area Primary Water Supply System, in parallel with this assignment.

Recommendation

That the Board of Management for the Lake Huron Water Supply System **RECEIVE** this report for information.

Previous and Related Reports

June 4, 2020	Master Water Plan Update
October 5, 2023	2024 Operating and Capital Budgets
March 7, 2024	Lake Huron Primary Water Supply System Master Plan – Consultant Award (LH2050)

Background

The previous Master Plan for the Lake Huron Primary Water Supply System (LHPWSS) was completed and endorsed by the Board on June 4, 2020. An initial Master Plan was first completed for the LHPWSS in 2001, that was later updated in 2003, 2008 and 2014.

The proposed 2025 Master Plan is being undertaken in accordance with the process for Master Planning as outlined in the Municipal Engineers Association Municipal Class Environmental Assessment document (October 2000, as amended in 2007, 2011, 2015 and 2023).

As part of this assignment, regional water system needs will be assessed over a 20+ years planning period and considers growth and development potential within the region, and the consequential supply volumes required to support growth, in order to ensure level of service is maintained and/or enhanced to meet the needs of the municipalities. Since the last update of the LHPWSS Master Plan, the *More Homes Built Faster Act, 2022*, was released which has the potential to contribute to significant growth and development in the region. The review and evaluation of system needs will consider all regional water system infrastructure including but not limited to the treatment plant, transmission mains, intermediate facilities, and terminal storage.

The proposed Master Plan is intended to evaluate and identify recommended system improvements, including major system upgrades and expansion, to accommodate proposed growth. Some key considerations include:

- Population and corresponding water demand projections for the region supplied by the LHPWSS, including consultation with First Nations and member municipalities;
- Consideration of new communities joining the LHPWSS;
- Hydraulic modelling under current and future growth scenarios, including potential expansion in supply areas; and,
- Expansion concept for the treatment plant facility.

An outcome of the Master Plan is a roadmap outlining major system improvements over the next twenty years.

Discussion

The LHPWSS Master Plan assignment was awarded to AECOM Canada ULC (AECOM) at the Board Meeting held on March 7, 2024, and was initiated in late spring 2024.

A Notice of Commencement for the LHPWSS Master Plan was issued in February 2025, and this project website will be used to provide updates:

<https://www.huronelginwater.ca/lake-huron-primary-water-supply-system-master-plan/>

Prior to issuing the Notice of Commencement, various activities have been undertaken to date including but not limited to:

- review of background information and supporting studies and initiatives;
- development of a project contact list;

- preparation of a problem/opportunity statement compliant with the Municipal Class Environmental Assessment process;
- survey of member municipalities regarding population projections and water demand projections over the next twenty years;
- consultation with First Nations, as well as municipalities and counties not currently supplied by the LHPWSS;
- review and confirmation of water demand projections for adoption in the Master Plan including the review of alternative solutions; and,
- confirmation of evaluation criteria to be adopted for the review of various alternatives.

One virtual Public Information Centre is planned for June 2025. Further updates regarding the LHPWSS Master Plan will be provided at future board meetings.

AECOM is currently targeting completion of the LHPWSS Master Plan in the fall of 2025.

Project Financial Status

EXPENDITURE	FORECAST	INCURRED
Master Plan	\$202,909	\$ 72,834
Design	\$0	\$0
Construction Administration	\$0	\$0
Construction	\$0	\$0
Other Fees and Charges	\$0	\$0
Total	\$0	\$0
Approved Budget	\$235,000	
Budget Surplus / Deficit	\$32,091	

Conclusion

The LHPWSS Master Plan will inform planning of future improvements for the utility. Progress has been made on the Master Plan, and it is anticipated to be completed in the fall of 2025. Board staff will continue to provide the Board with updates regarding the Master Plan.

Prepared by: Marcy McKillop, P.Eng.
Environmental Services Engineer

Submitted by: Billy Haklander, P.Eng., LL.M,
Senior Manager, Capital Programs

Recommended by: Kelly Scherr, P.Eng., MBA, FEC
Chief Administrative Officer