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Ontario

September 27, 2024

Jaime Allen
Clerk-Treasurer
P.O. Box 10
Latchford, ON P0J 1N0

Re: **2024-25 Inspection Report for the Latchford Drinking Water System, DWS # 210000960**

Attached is the Drinking Water System Inspection Report resulting from an announced, detailed, inspection of the above-mentioned facility by Scott Hanselman of the North Bay office of the Ministry of the Environment, Conservation, and Parks. The inspection commenced with a site visit on August 7, 2024.

Attached in Appendix A is the DWS Component Information from the Ministry's Drinking Water System Profile for the Latchford DWS.

Attached in Appendix B is a document titled "Key Reference and Guidance Material for Municipal Residential Drinking Water Systems".

Attached in Appendix C is the Inspection Rating Report (IRR).

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

The Ministry is offering to meet with the municipality to discuss the regulatory non-compliance identified in the inspection and the resulting Inspection Rating Report (once available). Please contact Timmins/ North Bay Water Compliance Supervisor Sherry Ilersich at 705-845-1544 or sherry.ilersich@ontario.ca to arrange this meeting.

Copies have been sent to the Timiskaming Health Unit and the Ministry of Natural Resources and Forestry in accordance with the Ministry's Municipal Drinking Water Inspection Protocol.

If you have any questions concerning the inspection report or you wish to discuss the findings of this report, please do not hesitate to contact me at (705) 845-1924.

Yours truly,

Scott Hanselman
Water Inspector/Provincial Officer
Ministry of the Environment, Conservation and Parks
Drinking Water and Environmental Compliance Division
North Bay Area Office

Cc: Rico Guindon, Overall Responsible Operator, Town of Latchford
Laurel Gadoury, Deputy Treasurer-Clerk, Town of Latchford
Ryan Peters, Program Manager, Timiskaming Health Unit
Mitch Baldwin, District Manager, MNRF, North Bay Office
Sherry Ilersich, Supervisor, MECP, Timmins/North Bay Office

Ontario

LATCHFORD DRINKING WATER SYSTEM
Physical Address: 1 MCLEOD ST, , LATCHFORD, ON P0J 1N0

INSPECTION REPORT

System Number:	210000960
Entity:	CORPORATION OF THE TOWN OF LATCHFORD
Inspection Start Date:	August 07, 2024
Site Inspection Date:	August 07, 2024
Inspection End Date:	September 13, 2024
Inspected By:	Scott Hanselman
Badge #:	

(signature)

INTRODUCTION

Purpose

This announced, detailed inspection was conducted to confirm compliance with Ministry of the Environment, Conservation and Parks' (MECP) legislation and conformance with ministry drinking water policies and guidelines.

Scope

The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management and the operation of the system.

The inspection of the drinking water system included both the physical inspection of the component parts of the system listed below under "Systems Components" and the review of data and documents associated with the operation of the drinking water system during the review period.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

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

Facility Contacts and Dates

The drinking water system is owned and operated by the Corporation of the Town of Latchford.

The system serves an estimated population of 300 and is categorized as a Large Municipal Residential Drinking Water System (DWS). Information reviewed for this inspection covered the time period of December 5, 2023 to August 7, 2024.

Systems/Components

All locations associated with primary disinfection were visited as part of this inspection. The following sites were visited as part of the inspection of the drinking water system:
- Latchford Water Treatment Plant (WTP)

Permissions/Approvals

This drinking water system was subject to specific conditions contained within the following permissions and/or approvals (please note this list is not exhaustive) at the time of the inspection in addition to the requirements of the SDWA and its regulations:
- Drinking Water Works Permit (DWWP): Permit Number 277-201, Issue Number 4, issued on March 3, 2021.
- Municipal Drinking Water Licence (MDWL): Licence Number: 277-101, Issue Number 4, issued on March 3, 2021.
- Permit to Take Water (PTTW) Number: 1047-BHEGZD, issued on November 14, 2019.

NON-COMPLIANCE

This should not be construed as a confirmation of full compliance with all potential applicable legal requirements. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

RECOMMENDATIONS

The following item(s) have been identified as non-conformance, based on a "No" response captured for a best management practice (BMP) question(s). For additional information on each question see the Inspection Details section of the report.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Item	Question	Recommendation(s)
R-1	**Question ID:** DWMR1052001 Was there a bylaw or policy in place limiting access to hydrants?	There was no bylaw or policy in place limiting access to hydrants. *RECOMMENDED ACTION(S) The Town of Latchford should develop a formal written policy or bylaw surrounding access to municipal fire hydrants.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	DWMR1012001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the owner have a harmful algal bloom monitoring plan in place that met the requirements of the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had a harmful algal bloom monitoring plan in place which met the requirements.

Question ID	DWMR1010001	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Were trends in source water quality monitored?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Trends in source water quality were monitored.

Question ID	DWMR1014001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Was flow monitoring performed as required by the Municipal Drinking Water Licence or Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Flow monitoring was performed as required.

Section 2 of Schedule C of MDWL 277-101 requires the continuous measurement and recording of:
-2.1.1 The flow rate (L/s) and daily volume (m3/day) of treated water that flows from the treatment subsystem to the distribution system.

- 2.1.2 The flow rate (L/s) and daily volume (m3/day) of water that flows into the treatment subsystem.

Question ID	DWMR1015001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were flow measuring devices calibrated or verified in accordance with the requirements of the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Flow measuring devices were calibrated or verified as required.

Raw and treated flow meters are calibrated annually in accordance with section 3.2 of Schedule C of MDWL No. 277-101.

Question ID	DWMR1016001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Was the owner in compliance with the conditions associated with maximum flow rate or the rated/operational capacity in the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner was in compliance with the conditions associated with maximum flow rate and/or the rated/operational capacity conditions.

Condition 1.1 of Schedule C of the Licence specifies that the maximum daily volume of treated water that flows from the Latchford Water Treatment Plant to the distribution system shall not exceed the rated capacity of 500 m3/day.

The maximum daily treated flow during the inspection period occurred during hydrant flushing on May 29, 2024 with a daily total of 211 m3.

Question ID	DWMR1013001	Question Type	Legislative

Legislative Requirement(s):
OWRA | 34 | (3);

Question:
Was the owner in compliance with all conditions of the Permit To Take Water?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner was in compliance with all conditions of the Permit To Take Water.

Condition 3.2 of the PTTW requires that the Corporation of the Town of Latchford shall only

take water from Bay Lake at a maximum rate of 379 L/min and 545.76 m3/day. During the inspection period;
- Raw water flow rate is valve-controlled at approximately 240 L/min.
- The maximum daily raw flow during the inspection period was 259 m3/d on March 30, 2024.

Condition 4 of the Permit To Take Water No. 1047-BHEGZD (PTTW) requires that the Corporation of The Town of
Latchford shall record the date, volume of water taken, and the rate at which water is taken daily. This requirement is met.

Condition 4 also requires the Permit Holder, unless otherwise required by the Director, to submit, on or before March 31st in every year, the daily water taking data collected and recorded for the previous year to the ministry's Water Taking Reporting System. The Overall Responsible Operator confirmed this requirement has been met.

Question ID	DWMR1018001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the owner ensure that equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner ensured that equipment was installed as required.

Question ID	DWMR1021001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were Form 2 documents prepared as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Form 2 documents were prepared as required.

A Form 2 was completed for the repair of Filter #1 and the 'like-for-like' replacement of the Filter #1 filter media (garnet/silica sand/anthracite).

Question ID	DWMR1028001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were up-to-date plans for the drinking water system made available in such a manner that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system, in accordance with the Drinking Water Works Permit and Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Plans for the drinking water system were kept up-to-date and made available as required.

Question ID	DWMR1025001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were all parts of the drinking water system that came in contact with drinking water disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All parts of the drinking water system were disinfected as required.

Work to repair Filter #1 and replace filter media commenced in February 2024. Prior to returning Filter #1 to service the filter was disinfected in accordance with AWWA Standard C653-97. The filter was returned to service on June 28, 2024 following consultation with the Ministry.

Question ID	DWMR1023001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Did records indicate that the treatment equipment was operated in a manner that achieved the design capabilities prescribed by O. Reg. 170/03, Drinking Water Works Permit and/or Municipal Drinking Water Licence at all times that water was being supplied to consumers?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities prescribed.

Section 1-4 of Schedule 1 of O. Reg. 170/03 requires the owner of a surface water supply to provide treatment equipment that is designed to be capable of achieving, at all times, primary disinfection in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario, including at least;
- 2-log removal/inactivation of Cryptosporidium oocysts
- 3-log removal/inactivation of Giardia cysts*

- 4-log removal/inactivation of viruses**
* At least 0.5-log removal/inactivation of Giardia cysts must be provided by disinfection (e.g. CT)
** At least 2-log removal/inactivation of viruses must be provided by disinfection

For the Latchford WTP, the required log removal for cryptosporidium, giardia and viruses are achieved through:
i) Conventional filtration, and
ii) CT disinfection with free chlorine.

FILTRATION
MDWL #277-101 credits the filtration process with;
- 2 log inactivation credit for Cryptosporidium oocyst,
- 2.5 log inactivation credits for Giardia Cysts, and
- 2 log inactivation credit for viruses.

Log inactivation credits can only be claimed when the following criteria is met:
1. A chemical coagulant is used at all times when the treatment plant is in operation;
2. Chemical dosages are monitored and adjusted in response to variations in raw water quality;
3. Effective backwash procedures, including the filter-to-waste, to ensure that the effluent turbidity requirements are met at all times;
4. Filtrate turbidity is continuously monitored from each filter, and
5. Performance Criterion for filtered water turbidity of less than or equal to 0.3 NTU in 95% of the measurements each month shall be met for each filter.

A review of operational records for the plant, and discussions with the Operator with Overall Responsible Operator, indicates the filtration process met the criteria listed above during the inspection period.

CT DISINFECTION
Chlorination and contact time (CT) is required to provide the remaining;
- 0.5 log removal credit for Giardia Cysts, and
- 2 log removal credit for viruses.

The 'CT Calculation SOP' for the Latchford Water Treatment Plant' indicates that a minimum free chlorine residual of 0.7 mg/L is required in the treated water leaving the plant to achieve primary disinfection under the following 'worst-case' conditions.
- maximum treated flow rate of 15 L/s (fire pump not running)
- minimum clearwell level of 2.5 m
- maximum pH of 8
- minimum temperature of 0.5 degrees C

If the fire pump is activated, an operator is alerted by an alarm and the standard operating

procedure is to monitor CT disinfection using the 'CT Calculation SOP – Fire Pump Running'. This SOP indicates a minimum free chlorine residual of 1.4 mg/L is required in the treated water leaving the plant to achieve primary disinfection under the following 'worst-case' conditions;
- maximum treated flow rate of 38 L/s (fire pump running)
- minimum clearwell level of 2.8 m*
- maximum pH of 8
- minimum temperature of 0.5 degrees C
* a CT calculation trigger of 2.8m was accepted by MECP Approvals Branch during the MDWL renewal in March 2021.

Records reviewed during the inspection indicate primary disinfection was achieved at all times. Records reviewed include;
- continuous monitoring trends for filter effluent turbidity, flow, free chlorine residual (for CT) and CT achieved.
- DWS data summary reports,
- operators logs, and
- analytical reports.

Question ID	DWMR1027001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the owner have evidence indicating that chemicals and materials that came in contact with water within the drinking water system met all applicable AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had evidence indicating that chemicals and materials that came in contact with water within the drinking water system met the applicable standards.

Question ID	DWMR1024001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Did records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required.

Question ID	DWMR1033001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (3); SDWA | O. Reg. 170/03 | 7-2 | (4);

Question:
Was secondary disinfectant residual tested as required for the large municipal residential distribution system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Secondary disinfectant residual was tested as required.

Question ID	DWMR1049001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Did records confirm that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system.

A review of the Latchford distribution residual sheets indicates disinfection residuals are being checked at the return line, town office, town shop, and the dam depot.

Operators indicated that the return line is the last connection/sample point in the distribution system.

Question ID	DWMR1036001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-7 | (1);

Question:
Where continuous monitoring equipment was not used for chlorine residual analysis, were samples tested using an acceptable portable device?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Samples for chlorine residual analysis were tested using an acceptable portable device.

Question ID	DWMR1030001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (1); SDWA | O. Reg. 170/03 | 7-2 | (2);

Question:
Was primary disinfection chlorine monitoring being conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit or at/near a location where the intended CT had just been achieved?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Primary disinfection chlorine monitoring was conducted as required.

Question ID	DWMR1031001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Were operators aware of the operational criteria necessary to achieve primary disinfection within the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators were aware of the operational criteria necessary to achieve primary disinfection within the drinking water system.

Question ID	DWMR1032001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-3 | (2);

Question:
If the drinking water system obtained water from a surface water source and provided filtration, was continuous monitoring of each filter effluent line performed for turbidity?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Continuous monitoring of each filter effluent line was performed for turbidity.

Question ID	DWMR1035001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4;

Question:
Were operators examining continuous monitoring test results and did they examine the results within 72 hours of the test?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators were examining continuous monitoring test results as required.

Question ID	DWMR1038001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4;

Question:
Was continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency and recording data with the prescribed format?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency and recording data with the prescribed format.

Question ID	DWMR1037001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

Question:
Were all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, equipped with alarms or shut-off mechanisms that satisfied the standards described in Schedule 6?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All required continuous monitoring equipment utilized for sampling and testing were equipped with alarms or shut-off mechanisms that satisfied the standards

Subsection 6-5(1)(5) of Schedule 6 of O. Reg. 170/03 requires that, when continuous monitoring equipment malfunctions, loses power, or a test result for a parameter is above the maximum alarm standard or below the minimum alarm standard, there must be an immediate alarm or immediate shutdown of equipment (no delays permitted).

Schedule 6-5 (1.1)(1) of O. Reg. 170/03 requires that the continuous monitoring equipment causes an alarm to sound when a test result for a parameter is above the maximum alarm standard or below the minimum alarm standard specified in the regulation.

TURBIDITY
The maximum alarm standard for turbidity is 1.0 Nephelometric Turbidity Units (NTU).

On the day of the inspection, filter effluent turbidity callout alarms were set at 0.95 NTU with no delay. Additional controls include;
- a lockout alarm set at 0.9 NTU, and
- automatic filtering-to-waste occurs at turbidities above 0.295 NTU. If turbidities don't return to below 0.295 NTU the filter shuts down.

FREE CHLORINE RESIDUAL (PRIMARY DISINFECTION)
The minimum alarm standard for free chlorine residual required to achieve primary disinfection is 0.1 mg/L less than the concentration of free chlorine residual that is required to achieve primary disinfection.

Under worst-case conditions of flow (15 L/s), temperature (0.5 deg. C), pH (8), and clearwell level (2.5 m), a free chlorine residual of 0.7 mg/L is sufficient to achieve CT disinfection. The minimum alarm standard under worst-case conditions is therefore 0.6 mg/L.

As indicated in the previous inspection report the low free chlorine residual alarm for primary disinfection was lowered from 0.8 mg/L to 0.7 mg/L to reduce disinfection by-products. This alarm condition is immediately communicated to an on-call, certified operator.

If the fire pump activates, the above worst-case conditions change. Specifically, the worst-case flow would increase to 38 L/s, resulting in a higher minimum required free chlorine residual for CT. Furthermore, the the CT assessment trigger for low clear well level is increased from 2.5 m to 2.8 m for extra security, resulting in a minimum required free chlorine residual of 1.4 mg/L under worst-case fire pump flows.

It is important to note that an alarm sounds to notify an operator when the fire pump is activated, at which time it is standard operating procedure for operators to begin assessing CT using the "LATCHFORD WTP – CT CALCULATION SOP FIRE PUMP RUNNING" procedure.

Question ID	DWMR1040001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10;

Question:
Were all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All continuous analysers were calibrated, maintained, and operated as required.

1) Continuous Monitoring of Free Chlorine Residual for Primary Disinfection:
A HACH CL-17 is used for continuous monitoring of free chlorine residual for primary disinfection. The manufacturer's instructions do not specify a regular calibration schedule, therefore the owner must calibrate the analyzers as often as necessary to ensure that test results are within a margin of error of 0.05 mg/L in accordance with section 6-5(1) (10)(i) of

Schedule 6 of O. Reg. 170/03.

A review of the Monthly CL-17 Chlorine Analyzer Maintenance Record sheets indicates that the chlorine analyzer was verified monthly and cleaned/maintained every two weeks.

Instrumentation Calibration/Maintenance Records for the inspection period indicate the HACH CL-17 was calibrated semi-annually on October 4, 2023 (previous inspection period) and April 5, 2024.

2) Continuous Monitoring of Turbidity on Each Filter Effluent Line:
Two HACH 1720E (continuous turbidity analyzers) are used for continuous monitoring of turbidity on each filter effluent line. The manufacturer states instrument must be recalibrated before use to meet published accuracy specifications. Therefore, the owner must calibrate the analyzers as often as necessary to ensure that test results are within a margin of error of 0.1 NTU in accordance with section 6-5(1)(10)(iii) of Schedule 6 of O. Reg. 170/03.

Instrumentation Calibration/Maintenance Records indicate that filter effluent turbidity meters No. 1 and No. 2 were calibrated on October 25, 2023 (previous inspection period), January 12, 2024, April 3, 2024, and July 9, 2024.

Question ID	DWMR1108001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

Question:
Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, Municipal Drinking Water Licence, Drinking Water Works Permit, or order triggered an alarm or an automatic shut-off, did a qualified person respond as required and take appropriate actions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
A qualified person responded as required and took appropriate actions.

Question ID	DWMR1099001	**Question Type**	Information

Legislative Requirement(s):
Not Applicable

Question:
Do records show that water provided by the drinking water system met the Ontario Drinking Water Quality Standards?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records showed that not all water sample results met the Ontario Drinking Water Quality

Standards.

The maximum acceptable concentration of HAA is 80 ug/L (expressed as a running annual average of quarterly results). The running annual average (RAA) of HAA results exceeded the maximum acceptable concentration in the fourth quarter 2023 (85.9 ug/L) and in the third quarter of 2024 (83.4 ug/L).

Question ID	DWMR1079001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-4 | (1); SDWA | O. Reg. 170/03 | 10-4 | (2); SDWA | O. Reg. 170/03 | 10-4 | (3);

Question:
Were raw water microbiological sampling requirements prescribed by Schedule 10-4 of O. Reg. 170/03 for large municipal residential systems met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Raw water microbiological sampling requirements were met.

Section 10-4 of Schedule 10 of O.Reg. 170/03 requires the owner and operating authority for the system to ensure at least one raw water sample is collected weekly and tested for E. coli and total coliforms.

A review of records for the inspection period indicates one raw water sample was collected weekly and tested for E.coli and total coliforms.

Question ID	DWMR1083001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-3;

Question:
Were treated microbiological sampling requirements prescribed by Schedule 10-3 of O. Reg. 170/03 for large municipal residential systems met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Treated microbiological sampling requirements were met.

Section 10-3 of Schedule 10 to O. Reg. 170/03 requires the owner and operating authority for the system to ensure at least one sample of treated water is collected weekly and tested for E. coli, total coliforms and HPC.

A review of the microbiological sample data indicated that the owner and operating authority have complied with the treated water sampling requirements of Schedule 10 of O. Reg. 170/03.

Question ID	DWMR1081001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-2 | (1); SDWA | O. Reg. 170/03 | 10-2 | (2); SDWA | O. Reg. 170/03 | 10-2 | (3);

Question:
Were distribution microbiological sampling requirements prescribed by Schedule 10-2 of O. Reg. 170/03 for large municipal residential systems met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Distribution microbiological sampling requirements were met.

Based on an estimated service population of 300 people, section 10-2 of Schedule 10 to O. Reg. 170/03 requires the owner and operating authority for the system to ensure at least eight (8) water samples are collected monthly from distribution system sites and tested for E. coli and total coliforms, with 25% of those samples tested for general bacteria population expressed as colony counts on a heterotrophic plate count
(HPC).

Two distribution system locations are typically sampled each week. All samples are submitted to an accredited laboratory for total coliform and E. coli. At lease one sample (50%) is also submitted for HPC analysis each week.

Question ID	DWMR1096001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-3 | (1);

Question:
Did records confirm that chlorine residual tests were conducted at the same time and location as microbiological samples?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that chlorine residual tests were conducted as required.

Question ID	DWMR1084001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-2;

Question:
Were inorganic parameter sampling requirements prescribed by Schedule 13-2 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Inorganic parameter sampling requirements were met.

Schedule 13-2 of O. Reg. 170/03 requires the owner and operating authority for the system to

ensure at least one sample of treated water is collected every 12 months and tested for every parameter set out in Schedule 23 (Inorganics).

Records reviewed indicate samples for Schedule 23 (Inorganic) parameters were collected on April 11, 2022, April 3, 2023, and April 8, 2024.

Question ID	DWMR1085001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-4 | (1); SDWA | O. Reg. 170/03 | 13-4 | (2); SDWA | O. Reg. 170/03 | 13-4 | (3);

Question:
Were organic parameter sampling requirements prescribed by Schedule 13-4 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Organic parameter sampling requirements were met.

Section 13-4 of Schedule 13 to O. Reg. 170/03 requires the owner and operating authority for the system to ensure at least one sample of treated water is collected every 12 months and tested for every parameter set out in Schedule 24 (Organics).

Records reviewed indicate samples for Schedule 24 (Organic) parameters were collected on April 11, 2022, April 3, 2023, and April 8, 2024.

Question ID	DWMR1086001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-6.1 | (1); SDWA | O. Reg. 170/03 | 13-6.1 | (2); SDWA | O. Reg. 170/03 | 13-6.1 | (3); SDWA | O. Reg. 170/03 | 13-6.1 | (4); SDWA | O. Reg. 170/03 | 13-6.1 | (5); SDWA | O. Reg. 170/03 | 13-6.1 | (6);

Question:
Were haloacetic acid sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Haloacetic acid sampling requirements were met.

Section 13-6.1 of Schedule 13 of O. Reg. 170/03 requires the owner and operating authority for the system to ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water system's distribution system, or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of haloacetic acids (HAAs).

HAA samples were collected from 10 Main Street (Town Office) on October 30, 2023 (183 ug/L), January 15, 2024 (44 ug/L), April 8, 2024 (45 ug/L), and July 15, 2024 (99 ug/L). This meets the sampling requirements of section 13-6.1 of Schedule 13 of O. Reg. 170/03.

The maximum acceptable concentration of HAA is 80 ug/L (expressed as a running annual average of quarterly results). The running annual average (RAA) of HAA results exceeded the maximum acceptable concentration in Q4 of 2023 and in Q3 of 2024. This is discussed later the report.

Question ID	DWMR1087001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-6 | (1); SDWA | O. Reg. 170/03 | 13-6 | (2); SDWA | O. Reg. 170/03 | 13-6 | (3); SDWA | O. Reg. 170/03 | 13-6 | (4); SDWA | O. Reg. 170/03 | 13-6 | (5); SDWA | O. Reg. 170/03 | 13-6 | (6);

Question:
Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Trihalomethane sampling requirements were met.

Section 13-6 of Schedule 13 of O. Reg. 170/03 requires the owner and the operating authority for the system to ensure that at least one water sample is collected every three months from points in the distribution system (including connecting plumbing) likely to have an elevated potential for formation of trihalomethanes (THM).

THM samples were collected at 64 Sullivan Street on October 30, 2023 (110 ug/L) January 15, 2024 (63.3 ug/L), April 8, 2024 (38.8 ug/L), and July 15, 2024 (88.7 ug/L). This meets the sampling requirements of section 13-6 of Schedule 13 of O. Reg. 170/03

The 2023 average THM concentration at the time of the inspection was 75.3 ug/L. The maximum acceptable concentration is 100 ug/L (expressed as a running annual average of quarterly results).

Question ID	DWMR1088001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-7;

Question:
Were nitrate/nitrite sampling requirements prescribed by Schedule 13-7 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Nitrate/nitrite sampling requirements were met.

Section 13-7 of Schedule 13 of O. Reg. 170/03 requires the owner and the operating authority for the system to ensure that at least one water sample is collected every three months from the point at which water enters the drinking water systems' distribution system.

Nitrate/nitrite samples were collected on October 30, 2023, January 15, 2024, April 8, 2024,

and July 15, 2024. This meets the sampling requirements of section 13-7 of Schedule 13 of O. Reg. 170/03.

Question ID	DWMR1089001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-8;

Question:
Were sodium sampling requirements prescribed by Schedule 13-8 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Sodium sampling requirements were met.

Schedule 13-8 of O. Reg. 170/03 requires the owner and operating authority for the system to ensure at least one treated water sample is collected every 60 months and tested for sodium.

Treated water samples for sodium analysis were last collected on April 6, 2020.

Question ID	DWMR1090001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-9;

Question:
Where fluoridation is not practiced, were fluoride sampling requirements prescribed by Schedule 13-9 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Fluoride sampling requirements were met.

Section 13-9 of Schedule 13 of O. Reg. 170/03 states, "If a drinking water system does not provide fluoridation, the owner of the system and the operating authority for the system shall ensure that a water sample is taken at least once every 60 months and tested for fluoride.

Treated water samples for fluoride analysis were last collected on April 6, 2020.

Question ID	DWMR1092001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-2;

Question:
Were water samples taken at the prescribed location?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Water samples were taken at the prescribed location.

Question ID	DWMR1095001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 15.1-10; SDWA | O. Reg. 170/03 | 15.1-4 | (1); SDWA | O. Reg. 170/03 | 15.1-5 | (1); SDWA | O. Reg. 170/03 | 15.1-5 | (10); SDWA | O. Reg. 170/03 | 15.1-5 | (11); SDWA | O. Reg. 170/03 | 15.1-5 | (2); SDWA | O. Reg. 170/03 | 15.1-5 | (3); SDWA | O. Reg. 170/03 | 15.1-5 | (4); SDWA | O. Reg. 170/03 | 15.1-5 | (5); SDWA | O. Reg. 170/03 | 15.1-5 | (6); SDWA | O. Reg. 170/03 | 15.1-5 | (7); SDWA | O. Reg. 170/03 | 15.1-5 | (8); SDWA | O. Reg. 170/03 | 15.1-5 | (9); SDWA | O. Reg. 170/03 | 15.1-7 | (1); SDWA | O. Reg. 170/03 | 15.1-7 | (2); SDWA | O. Reg. 170/03 | 15.1-7 | (3); SDWA | O. Reg. 170/03 | 15.1-7 | (4); SDWA | O. Reg. 170/03 | 15.1-9 | (1); SDWA | O. Reg. 170/03 | 15.1-9 | (2); SDWA | O. Reg. 170/03 | 15.1-9 | (3); SDWA | O. Reg. 170/03 | 15.1-9 | (4); SDWA | O. Reg. 170/03 | 15.1-9 | (5); SDWA | O. Reg. 170/03 | 15.1-9 | (6); SDWA | O. Reg. 170/03 | 15.1-9 | (7); SDWA | O. Reg. 170/03 | 15.1-9 | (8); SDWA | O. Reg. 170/03 | 15.1-9 | (9);

Question:
Were lead sampling requirements prescribed by Schedule 15.1 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Lead sampling requirements were met.

The owner was eligible to follow the "Exemption from Plumbing Sampling" requirements of Subsections 15.1-5 (9) and 15.1-5 (10) of Schedule 15.1 to O.Reg.170/03. As such, the owner is required to continue to sample the distribution system as follows;

- Sample for pH and alkalinity every "winter" and "summer" period each year; plus
- include sampling for lead once every three years, both "winter" and "summer" periods.

The owner opts to include lead sampling with each required pH/alkalinity sample. The owner performed lead, pH, and alkalinity sampling of the distribution system on;
- October 3, 2022 (summer)and April 3, 2023 (winter), and
- October 3, 2023 (summer), and April 8, 2024 (winter).

Question ID	DWMR1105001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 16-7 | (1); SDWA | O. Reg. 170/03 | 16-7 | (2); SDWA | O. Reg. 170/03 | 16-7 | (3); SDWA | O. Reg. 170/03 | 16-7 | (4); SDWA | O. Reg. 170/03 | 16-7 | (5);

Question:
Were written notice requirements for adverse water quality incidents met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Written notice requirements for adverse water quality incidents were met.

The maximum acceptable concentration of HAA is 80 ug/L (expressed as a running annual average of quarterly results). During this inspection period, the running annual average (RAA) of HAA results exceeded the maximum acceptable concentration in the third quarter of

2024 (RAA = 83.4 ug/L). The required written notification was submitted on July 25, 2024.

Question ID	DWMR1101001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 17-1; SDWA | O. Reg. 170/03 | 17-10 | (1); SDWA | O. Reg. 170/03 | 17-11; SDWA | O. Reg. 170/03 | 17-12; SDWA | O. Reg. 170/03 | 17-13; SDWA | O. Reg. 170/03 | 17-14; SDWA | O. Reg. 170/03 | 17-2; SDWA | O. Reg. 170/03 | 17-3; SDWA | O. Reg. 170/03 | 17-4; SDWA | O. Reg. 170/03 | 17-5; SDWA | O. Reg. 170/03 | 17-6; SDWA | O. Reg. 170/03 | 17-9;

Question:
For large municipal residential systems, were corrective actions, including any steps directed by the Medical Officer of Health, taken to address adverse conditions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Corrective actions were taken to address adverse conditions.

Operators undertook detailed monitoring of total and dissolved organic carbon (TOC/DOC) at various stages of the treatment plant. It has been identified that the only significant removal of raw water TOC/DOC is occurring in the clarifiers (60-70%) and that the filters were having little effect on TOC/DOC.

Operators continue to make process changes, such as;
- increasing alum dose
- lowering chlorine dose
- adjusting pH
- adjusting alkalinity

Additionally, the filter media was replaced in Filter #1. However, there was no significant affect on TOC/DOC.

Operators continue to make process adjustments while monitoring TOC/DOC in raw water and after the clarifiers.

Question ID	DWMR1110001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 11 | (6);

Question:
Was the annual report prepared by February 28th of the following year and did it contain the required information?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The annual report requirements were met.

Question ID	DWMR1111001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 22-2 | (1); SDWA | O. Reg. 170/03 | 22-2 | (2); SDWA | O. Reg. 170/03 | 22-2 | (3); SDWA | O. Reg. 170/03 | 22-2 | (4);

Question:
Did the summary report contain the required information and was it completed and distributed as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The summary report requirements were met.

Question ID	DWMR1098001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13 | (1); SDWA | O. Reg. 170/03 | 13 | (2); SDWA | O. Reg. 170/03 | 13 | (3);

Question:
Were the required records kept for the periods prescribed by section 13 of O. Reg. 170/03?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The required records were kept for the prescribed periods.

Question ID	DWMR1053001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Was the owner able to maintain proper pressures in the distribution system and was pressure monitored to alert the operator of conditions of loss of pressure below the value under which the system was designed to operate?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.

There is a low pressure alarm when water pressure at the WTP drops to 45 psi. There have been no low pressure complaints.

Question ID	DWMR1048001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Had the owner implemented a program for the flushing of watermains as per industry standards?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had implemented a program for the flushing of watermains.

A review of records and discussions with operators indicates that hydrants are flushed directionally twice per year in the spring and fall.

Question ID	DWMR1050001	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Was there a program in place for inspecting and exercising valves?

Compliance Response(s)/Corrective Action(s)/Observation(s):
There was a program in place for inspecting and exercising valves.

Valves are exercised and inspected in the fall of each year.

Question ID	DWMR1051000	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Is there a program in place for inspecting and operating hydrants?

Compliance Response(s)/Corrective Action(s)/Observation(s):
There was a program in place for inspecting and operating hydrants.

Hydrants are inspected and operated in the spring of each year during the spring flushing program.

Question ID	DWMR1052001	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Was there a bylaw or policy in place limiting access to hydrants?

Compliance Response(s)/Corrective Action(s)/Observation(s):
There was no bylaw or policy in place limiting access to hydrants.

*RECOMMENDED ACTION(S)
The Town of Latchford should develop a formal written policy or bylaw surrounding access to

municipal fire hydrants.

ADDITIONAL INFORMATION
Town policy is to not allow access to fire hydrants to anyone other than the fire department or water operators. However, there is no written policy.

Question ID	DWMR1058001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 28;

Question:
Did operators and maintenance personnel have ready access to operations and maintenance manuals?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators and maintenance personnel had ready access to operations and maintenance manuals.

Question ID	DWMR1059001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 28;

Question:
Did the operations and maintenance manuals contain plans, drawings, and process descriptions sufficient for the safe and efficient operation of the system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The operations and maintenance manuals contained plans, drawings, and process descriptions sufficient for the safe and efficient operation of the system.

Question ID	DWMR1060001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the operations and maintenance manual(s) meet the requirements of the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The operations and maintenance manual(s) met the requirements of the Municipal Drinking Water Licence.

Question ID	DWMR1064001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 26 | (2);

Question:
Did an operator-in-charge ensure that records were maintained of all adjustments to the processes within their responsibility?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The operator-in-charge ensured that records were maintained of all adjustments to the processes within their responsibility.

Question ID	DWMR1062001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-5;

Question:
Did records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment was done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03.

Question ID	DWMR1063001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-10 | (1);

Question:
For every required operational test and sample, was a record made of the date, time, location, results, and name of the person conducting the test?

Compliance Response(s)/Corrective Action(s)/Observation(s):
For every required operational test and sample, a record was made as required.

Question ID	DWMR1061001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 27 | (1); SDWA | O. Reg. 128/04 | 27 | (2); SDWA | O. Reg. 128/04 | 27 | (3); SDWA | O. Reg. 128/04 | 27 | (4); SDWA | O. Reg. 128/04 | 27 | (5); SDWA | O. Reg.

128/04 | 27 | (6); SDWA | O. Reg. 128/04 | 27 | (7);

Question:
Were logbooks properly maintained and did they contain the required information?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Logbooks were properly maintained and contained the required information.

Question ID	DWMR1065001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 27 | (6);

Question:
Were logs and other record keeping mechanisms available for at least five (5) years?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Logs or other record keeping mechanisms were available for at least five (5) years.

Question ID	DWMR1066001	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Was spill containment provided for process chemicals and standby power generator fuel?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Spill containment was provided for process chemicals and/or standby power generator fuel.

Question ID	DWMR1067001	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Were equipment and materials in place for the clean up of spills?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Equipment and materials were in place for the clean up of spills.

Question ID	DWMR1068001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
If available, were standby power generators tested under normal load conditions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Standby power generators were tested under normal load conditions.

Question ID	DWMR1071001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Did the owner provide security measures to protect components of the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner provided security measures to protect components of the drinking water system.

Question ID	DWMR1072001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Had the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.

During periods of high demand, the town will issue water conservation notices to reduce water usage (e.g. odd/even lawn-watering restrictions).

It is also noted that the distribution system experiences minimal water loss though leaks, with night-time low flows from 0 to 0.3 L/s.

Question ID	DWMR1073001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 23 | (1);

Question:
Was an overall responsible operator designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
An overall responsible operator was designated for all subsystem.

Question ID	DWMR1078001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 23 | (1); SDWA | O. Reg. 128/04 | 23 | (2); SDWA | O. Reg. 128/04 | 23 | (4); SDWA | O. Reg. 128/04 | 23 | (6); SDWA | O. Reg. 128/04 | 23 | (7);

Question:
When the overall responsible operator was unable to act, was a properly certified operator designated to act in their place?

Compliance Response(s)/Corrective Action(s)/Observation(s):
A properly certified operator was designated to act in place of the overall responsible operator.

Pat Tressider acted as backup ORO during the inspection period.

Question ID	DWMR1074001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 25 | (1);

Question:
Were operators-in-charge designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators-in-charge were designated for all subsystems.

Rico Guindon is the overall responsible operator of the water treatment plant and the distribution system. Pat Tressider is the backup ORO.

Both operators are adequately licensed to be the overall responsible operator of each subsystem.

Question ID	DWMR1075001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 22;

Question:
Were all operators certified as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All operators were certified as required.

Question ID	DWMR1076001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Were adjustments to the treatment equipment only made by certified operators?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Adjustments to the treatment equipment were only made by certified operators.

APPENDIX A

DWS Component Information Report

DWS Component Information Report for 210000960

as of 31-JAN-2024

Drinking Water System Profile Information

DWS #	210000960
MOE Assigned Name	Latchford Drinking Water System
Category	LMRS
Regulation	O.REG 170/03
DWS Type	Water Treatment Plant
Source Type	Surface Water
Address	1 Mcleod Street, Latchford, Ontario, P0J 1N0, Canada
Region	Northern Region
District	North Bay Area Office
Municipality	Latchford
Public Health Unit	Timiskaming Health Unit

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
Distribution System	Other	Other		The water distribution system for the Town of Latchford services an approximate population of 300 residents and 190 homes (First Engineer's Report, Earth Tech, 2001). Based on this information, the Latchford Drinking Water System is classified as a Large Municipal Residential Drinking Water System under O. Reg. 170/03. The Latchford distribution system is comprised of piping, valves, and fire hydrants. It also includes a 100 mm diameter return line back to the water treatment plant, complete with a 19 mm diameter by-pass, solenoid actuated flow valve and totalizing flow meter. The discharge from the return line is to the clearwell. The return line originated from historical problems with freezing lines in the distribution system during the winter months due to the frost penetrating into the ground deeper than the depth of the water lines. According to the First Engineer's Report, the return line assists in the maintenance of good chlorine residuals in the distribution system; allows for frequent and reliable measurements of water quality in the distribution system; reduces the freezing of the water lines; and moderates the water temperature. Additionally, each year Aqua-Flo™ tanks are installed in approximately 50 homes. These in-home water recirculation systems provide greater water movement in the service connections, helping to raise the water temperature and thus reduce the likelihood of frozen waterlines.
	John Vanthof			
Raw Water	Source	Surface	1 Mcleod St., Lot: 17, Conc.: 1,	The source water for the Latchford Drinking Water System is Bay Lake which was created with the construction of the Latchford dam on the Montreal River. The First Engineer's Report for the Latchford facility (Earth Tech, 2001) states that Bay Lake water is very soft with very low alkalinity. It is also characterized by low turbidity but high colour.

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
				As a surface water source, Bay Lake and the Montreal River are susceptible to seasonal effects and changing raw water quality typical of a riverine system. The watershed for Bay Lake is large and includes the upper reaches of the Montreal River. Active and inactive mining facilities activities are located within the watershed which makes Bay Lake possibly more susceptible to contamination from spills. However, there have been no specific incidents in recent history. According to the First Engineer's Report and the Drinking Water Works Permit (DWWP) 277-201 (Issue No. 3), the intake structure for the water treatment plant is located approximately 140 m offshore. The structure is a timber crib and sits approximately 1.15 m off the bottom of Bay Lake in at least 5.5 m of water. Located upstream of the dam, the intake structure resides in an area which is below the low water level for the Lake. Raw water flows by gravity from the intake structure to the water treatment plant via 210 metres of 250 mm diameter pipe.
Treatment System	Treated Water Poe	Treatment Facility	1 Mcleod St., Lot: 17, Conc.: 1,	Surface water is drawn from Bay Lake via gravity and the low lift pumping station. According to DWWP 277-201 (Issue No. 3), the treatment system is comprised of the following: Low lift Pumping Station: A raw water intake well is equipped with a 250 mm diameter raw water intake pipe, an intake screen and a 100 mm diameter intake flush line from the high lift pumps. The low lift pumping station contains a wet well and is equipped with three (3) vertical turbine pumps (two duty and one standby); each rated at 2.9 L/s. Coagulation, Flocculation, Clarification and Filtration: Two parallel trains, each capable of treating water at a rate of 6.3 L/second. Each unit is equipped with a coagulation vessel, an upflow adsorption clarifier and a multimedia filter. There is provision to direct effluent from each filter unit to waste (Filter-to-Waste). Alum is injected into the raw water pump discharge pipe located immediately downstream of the raw water flow meter, upstream of the flocculation tanks and treatment units. The coagulant dosing system includes two chemical metering pumps (on duty and one standby) each delivering a flow of 1.6 GPH (6.0 L/hr) and one 600 L chemical storage tank with spill containment. Polymer is injected into the coagulated water supply using one of two chemical metering pumps (one duty and one standby) each capable of delivering a flow of 2.0 GPH (7.6 L/hr) from one 380 L chemical storage tank with spill containment. There are two optional injection points (one upstream and one downstream of the flocculation tanks, both prior to the treatment units). pH/Alkalinity: There are three pH/Alkalinity adjustment systems; one pre-coagulation, one post-filtration and one distribution. The pre-coagulation injection point is in the

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
				raw water pump discharge header and is comprised of two metering pumps (one duty and one standby) each capable of delivering a flow of 1.6 GPH (6.1 L/hr) and one 350 L chemical storage tank with spill containment. The post filtration injection point is into the filter effluent discharge header upstream of the treated water storage reservoir (clear wells). It is comprised of one metering pump capable of delivering a flow of 1.1 GPH (4.2 L/hr) and one 600 L chemical storage tank with spill containment. The distribution injection point is into the treated water distribution header, immediately prior to discharge from the plant. It uses the same dosing system as the post-filtration system and typically is only used when the post-filtration system is not in service. Liquid soda ash is current used for pH/Alkalinity adjustment. Disinfection: The chlorine disinfection dosing system is comprised of two primary dosing metering pumps (one duty and one standby) each capable of delivering a flow of 1.4 L/hr, injecting into the inlet of the clear well for primary disinfection. Sodium hypochlorite storage consists of one storage tank with spill containment. Process Waste Management System: This system is comprised of a backwash holding tank that is approximately 3.3 m x 2.65 m x 2.4 m with a usable volume of 21 m3 and two submersible backwash pumps (one duty and one spare) each rate at 22.7 L/s. The pumps discharge wastewater from the holding tank to the sanitary sewer via a 100 mm diameter forcemain. Clearwell and High Lift Pumping System: The clearwell is a 340 m3 reinforced concrete reservoir comprised of two cells (one with a volume of 248 m3 and the other of 92 m3); two pump wells, one with a volume of 76 m3 housing high lift pumps #1 and #2 and the other housing high lift pump #3 and a high capacity pump). The total storage capacity of the clearwell is approximately 484 m3 at water depth of 3.65 m. The high lift pumps consist of one vertical turbine pump rated at 3.7 L/s (variable speed), two vertical turbine pumps each rated at 7.3 L/s (variable speed) and one vertical turbine high capacity pump rated at 38 L/s with fixed speed drive. Standby Power System: There is one outdoor 141 kW standby power diesel engine generator. Instrumentation and Control Equipment: The instrumentation and control system is comprised of; a PLC and in-plant SCADA system; raw water and treated water flow meters; four chlorine residual analyzers (raw water discharge line, filter effluent discharge line, high lift pump discharge line, treated water plant discharge header); pH indicator on the raw water discharge line and treated water plant discharge; three hydropneumatic tanks; one pressure transmitter on the plant discharge, and turbidity meters (located upstream of water treatment units, on each filter effluent line and on the treated water plant discharge).

APPENDIX B

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

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

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

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

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

Ontario

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

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

Pour plus de renseignements sur l'eau potable en Ontario, consultez le site www.ontario.ca/eaupotable

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

PIBS 8990b01

Ontario

APPENDIX C

Inspection Rating Report (IRR)

Ontario

Ministry of the Environment, Conservation, and Parks
Drinking Water System Inspection Report

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2024-25)

DWS Name:	LATCHFORD DRINKING WATER SYSTEM
DWS Number:	210000960
DWS Owner:	CORPORATION OF THE TOWN OF LATCHFORD
Municipal Location:	LATCHFORD
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Detailed
Compliance Assessment Start Date:	Aug-7-2024
Ministry Office:	North Bay Area Office

Maximum Risk Rating: 600

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	0/38
Certification and Training	0/49
Logbooks	0/30
Operations Manuals	0/42
Reporting & Corrective Actions	0/59
Source	0/12
Treatment Processes	0/234
Water Quality Monitoring	0/136
Overall - Calculated	**0/600**

Inspection Risk Rating:	**0.00%**

Final Inspection Rating:	**100.00%**

Inspection Rating Record Generated On 2024-09-27 (Inspection ID: 1-334412274)

DWS Name:	LATCHFORD DRINKING WATER SYSTEM
DWS Number:	210000960
DWS Owner Name:	CORPORATION OF THE TOWN OF LATCHFORD
Municipal Location:	LATCHFORD
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Detailed
Compliance Assessment Start Date:	Aug-7-2024
Ministry Office:	North Bay Area Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 600

Inspection Risk Rating:	**0.00%**

FINAL INSPECTION RATING:	**100.00%**