Ontario

Ministry of the Environment, Conservation and Parks

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July 26, 2024 by email: CAO@Temagami.ca

Laala Jahanshahloo
Chief Administrative Officer/ Treasurer
The Corporation of the Municipality of Temagami
P.O. Box 220
Temagami, Ontario
P0H 2H0

RE: Inspection of Temagami North Drinking Water System at 5 Cedar Avenue South, Temagami on June 13, 2024
Planned Event No. 1-334412482

RE: 2024-2025 Inspection Report for the Temagami North Drinking Water System No. 1-334412482

Attached to this letter is the report for the recent announced inspection completed at Temagami North Drinking Water System at 5 Cedar Avenue South, Temagami on June 13, 2024 and the corresponding Incident Rating Report (IRR) and Risk Methodology document. This report provides an assessment of compliance and conformance based on observations and information available during the inspection review period only.

One instances of non-compliance was identified during the inspection. The operating authority took necessary steps to bring the system into compliance therefore there are no required actions to address this non-compliance. This non-compliance is described in the *"Non-compliance"* section within the report. Additional findings and applicable comments, where provided, will be found within the report.

The IRR is a summarized quantitative measure of the drinking water system's annual inspections and is published in the Ministry's Chief Drinking Water Inspector's Annual Report. The Risk Methodology document describes the risk rating methodology which has been applied to the findings of the Ministry's municipal residential drinking water system inspection results. Please find attached the corresponding IRR in Appendix A and Risk Methodology document.

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 Councils” on the Drinking Water Ontario website at https://www.ontario.ca/environment-and-energy/taking-care-your-drinking-water-guide-members-municipal-councils.

Attached in Appendix B is a document entitled “DWS Components Information” and in Appendix C is a document titled “Key Reference and Guidance Material for Municipal Residential Drinking Water Systems”.

Electronic copies of this inspection report have been sent to the Timiskaming Health Unit in accordance with the Ministry’s Municipal Drinking Water Inspection Protocol.

Thank you for your co-operation. If you have any questions about this inspection report, please contact me at (705) 491-2781 or by email at vesna.alimpic@ontario.ca.

Sincerely,

Vesna Alimpic
Water Compliance Officer
Provincial Officer Badge No. 1882
Drinking Water and Environmental Compliance Division
Ministry of the Environment, Conservation and Parks
North Bay Office

c: Sabrina Pandolfo, Municipality of Temagami, Deputy Treasurer,
Barry Turcotte, Municipality of Temagami, Public Works Superintendent Bryce Logan,
OCWA Northeastern Region, ORO Temagami North and South WTP
Ilona Bruneau, OCWA Northeastern Region, Process & Compliance Technician
Ryan Peters, Timiskaming Health Unit, Program Manager
Sherry Ilersich, Water Compliance Supervisor, Timmins/North Bay, Northern Region, Drinking Water and Environmental Compliance Division, Ministry of the Environment, Conservation and Parks

TEMAGAMI NORTH DRINKING WATER SYSTEM
Physical Address: 5 CEDAR AVE S, , TEMAGAMI, ON P0H 2H0

INSPECTION REPORT

System Number:	220000433
Entity:	ONTARIO CLEAN WATER AGENCY THE CORPORATION OF THE MUNICIPALITY OF TEMAGAMI
Inspection Start Date:	June 13, 2024
Site Inspection Date:	June 13, 2024
Inspection End Date:	July 08, 2024
Inspected By:	Vesna Alimpic
Badge #:	1882

VAlimpic

_____
(signature)

INTRODUCTION

Purpose

This announced/unannounced, detailed/focused (choose accordingly) 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 in section 4 "Systems Components" of the report 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 by the Corporation of the Municipality of Temagami and operated by Ontario Clean Water Agency (OCWA).

The system serves an estimated population of 300 and is categorized as a Large Municipal Residential DWS . Information reviewed for this inspection covered the time period from October 4, 2023 to June 12, 2024.

The water compliance officer met with Bryce Logan, Overall Responsible Operator for the Water Treatment and Distribution subsystems, OCWA, Ilona Bruneau, Process Compliance Technician, OCWA and Shannen Knott, operator, OCWA.

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:
- Temagami North Water Treatment Plant and
- Temagami North standpipe.

Permissions/Approvals

- Municipal Drinking Water Licence (MDWL) No. 201-102, Issue No. 3 dated July 10, 2021 and
- Drinking Water Works Permit (DWWP) No. 201-202, Issue No. 4 dated July 10, 2021.

NON-COMPLIANCE

The following item(s) have been identified as non-compliance, based on a "No" response captured for a legislative 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	Compliance Response/Corrective Action(s)
NC-1	**Question ID:** DWMR1016001 Was the owner in compliance with the conditions associated with maximum flow rate or the rated/operational capacity in the Municipal Drinking Water Licence?	The owner was not in compliance with the conditions associated with maximum flow rate and/or the rated/operational capacity conditions in the Municipal Drinking Water Licence. The operating authority took adequate action to address the exceedance of rated capacity. No further action required.

RECOMMENDATIONS

This should not be construed as a confirmation of full conformance with all potential applicable BMPs. 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.

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.

Condition 6 to MDWL requires the owner to develop and keep up-to-date a Harmful Algal Bloom (HAB) monitoring, reporting and sampling plan, to be implemented when a potential harmful algal bloom is suspected or present. Conditions 6.1 to 6.4 specify the requirements for the content of the plan, implementation, training, definition of a HAB and sampling.

A review of the facility's round sheets confirmed that the operators performed weekly visual monitoring of the surface water during the inspection period as Standard Operating Procedure – Harmful Algal Bloom Monitoring, Reporting and Sampling Plan (Issued on May 11, 2023, Revision 0). Operators' training records confirm that the water treatment plant operators received training of the SOP prior to the start of the 2024 warm season.

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.

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 not in compliance with the conditions associated with maximum flow rate and/or the rated/operational capacity conditions in the Municipal Drinking Water Licence.

The operating authority took adequate action to address the exceedance of rated capacity.

No further action required.

Condition 1.0 of Schedule C of the Municipal Drinking Water Licence (MDWL) identifies the rated capacity for the Temagami North Water Treatment Plant (WTP) as 328 m^3/day of total flow into the distribution system on any given calendar day.

The operating authority reported the following exceedances of the rated capacity in the inspection period due to a water main break on Birch Street:
1. January 29, 2024 - High treated flow of 329 m^3,
2. January 30 - High treated flow of 329 m^3,
3. February 1 - High treated flow = 349 m^3,
4. February 3 - High treated flow = 368 m^3 and
5. February 4 - High treated flow = 340 m^3.

The operating authority followed their 2021 Water Conservation Procedure and informed the municipality of the increased flows as soon as the flows exceeded 90% of the rated capacity.

Based on the review of flow records for the inspection period and the information provided by the operating authority, there were no exceedances of the rated capacity after repairs of the watermain break on February 6, 2024.

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.

The following Form 2 documents were prepared during the inspection period:
- Replacement of polymer chemical feed panels,
- Addition of a reporting package to SCADA (supervisory control and data acquisition) system and
- Replacement of HMI (human machine interface) for SCADA system.

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.

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.

In accordance with O. Reg. 170/03, Schedule 1-2(2)3, surface water systems must consist of chemically assisted filtration and disinfection and achieve an overall performance of at least a 2-log 99% removal/inactivation of Cryptosporidium oocysts, a 3-log 99.9% removal/inactivation of Giardia cysts, and a 4-log 99.99% removal/inactivation of viruses by the time the water is delivered to the first consumer.

Temagami North DWS MDWL requires the following minimum log removal/inactivation: 2-log removal/inactivation of Cryptosporidium oocysts, 3-log removal/inactivation of Giardia cysts and 4-log removal/inactivation of viruses. The process of conventional filtration in Temagami North WTP is assigned 2-log removal/inactivation of Cryptosporidium oocysts, 2.5-log removal/inactivation of Giardia cysts and 2-log removal/inactivation of viruses. The process of chlorination is assigned 0.5+ log removal of Giardia cysts and 2+-log removal/inactivation of viruses.

Conventional filtration
Based on the review of available documents and interview with the ORO and PCT, it appears the following criteria for achievement of assigned log removal/inactivation credits for the process of conventional filtration were met at Temagami North WTP during the inspection period:
1. A chemical coagulant was used at all times when the treatment plant was in operation.
2. Chemical dosages were monitored and adjusted in response to variations in raw water quality.
3. Effective backwash procedures were maintained including filter-to-waste or an equivalent procedure during filter ripening to ensure that effluent turbidity requirements are met at all times;
4. Filtrate turbidity was continuously monitored from each filter using continuous turbidity meters and
5. Provided filtered water turbidity spreadsheet sheet for Temagami North WTP confirms that the performance criterion for filtered water turbidity of less than or equal to 0.3 NTU in 95% of the measurements each month was met for each filter during the inspection period.

Chlorination
At the time of the inspection the following operational CT parameters were used to initiate a CT calculation per the facility's CT Calculation SOP:
- treated flow greater than 19 L/s,
- free chlorine residual less than 0.85 mg/L,
- clearwell level less than 1.75 m or
- pH greater than 8.0.

The above scenario can be considered as a 'worst case scenario' at the raw water temperature of 0.50ºC.

Based on the review of the available documents (operational parameters and CT calculations), it appears that the criteria for achievement of assigned log removal/inactivation credits for the process of chlorination at Temagami North WTP were met during the inspection period:
1. Sampling and testing for free chlorine residual was carried out near a location where the intended contact time has just been completed, i.e. on the high lift pump discharge header.
2. At all times, CT provided was greater than or equal to the CT required to achieve the log removal credits assigned.

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.

Subsection 1-2(2) to Schedule 2 of O. reg. 170/03 requires that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes is operated so that at all times and all locations in the distribution system the concentration of free chlorine residual is never less than 0.05 mg/L.

Based on the provided sampling records, the lowest recorded free chlorine residual was 0.26 mg/L during the inspection period.

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	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	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

Observation:

Free chlorine residual concentrations required to achieve primary disinfection for the worst case conditions is 0.85 mg/L. Minimum alarm setting at the continuous chlorine analyzer is set to 0.90 mg/L for low free chlorine concentration which will reset the water treatment plant and 0.85 mg/L for low low free chlorine residual which will shut down the plant immediately and call out to operators on call. Maximum alarm setting for free chlorine residual is set at 3.00 mg/L for high free chlorine concentration and 3.50 mg/L for high high free chlorine residual concentration. The alarming system is also set up to alert in case the continuous chlorine analyzer loses power or malfunctions (loss of comms signal from the chlorine analyzer will trigger a call out).

When any of the two continuous filter turbidity analyzers measures turbidity of filter effluent at 0.9 NTU, there is a call out to the on-call operators. Measured turbidity of 1 NTU results in an immediate shut down of the treatment trains. The turbidity analyzers are equipped with a self-diagnostic function to recognize malfunction or loss of power, which triggers a call-out to the on-call operators.

The alarms have an audible signal at the water treatment plant and automatically call out to the operator on call.

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.

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 all water sample results met the Ontario Drinking Water Quality Standards.

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 of O. Reg. 170/03 requires the owner of a drinking-water system and the operating authority for the system must ensure that a treated water sample is taken at least once every week and tested for Escherichia coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic plate count (HPC).

During the inspection period, samples of treated water were collected once every week and tested for Escherichia coli, total coliforms and HPC.

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.

Section 10-2 of Schedule 10 of O. Reg. 170/03 requires that the owner of a drinking-water system and the operating authority for the system must ensure that at least eight distribution samples are taken every month (based on estimated population of 300), with at least one of the samples being taken in each week. The owner of the drinking-water system and the operating authority for the system must ensure that each of the samples is tested for Escherichia coli (E. Coli) and total coliforms and that at least 25 per cent of the samples required to be taken are tested for general bacteria population expressed as colony counts on a heterotrophic plate count (HPC).

During the inspection period, two samples from distribution were collected weekly and tested for E. coli and total coliforms, resulting in 8 to 10 monthly samples. Every week, a distribution sample was tested for HPC, meeting the requirement to have at least 25 per cent of the samples tested for this parameter.

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.

Subsection 13-2 of Schedule 13 of O. Reg. 170/03 requires that owner of a large municipal residential system and the operating authority for the system must ensure that at least one water sample is taken every 12 months, if the system obtains water from a raw water supply that is surface water and that each of the samples is tested for every parameter set out in Schedule 23.

Samples were collected and tested for every parameter set out in Schedule 23 on October 16, 2023.

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.

Subsection 13-4 of Schedule 13 of O. Reg. 170/03 requires the owner of a large municipal residential system and the operating authority for the system shall ensure that at least one water sample is taken every 12 months, if the system obtains water from a raw water supply that is surface water and tested for every parameter set out in Schedule 24.

Samples were collected and tested for every parameter set out in Schedule 24 on October 16, 2023.

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 that the owner of a drinking water system that provides chlorination and the operating authority for the system must ensure that

at least one distribution sample is taken in each calendar quarter, from a point in the drinking water systems 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 and tested for haloacetic acids (HAAs). The standard for HAAs is 0.08 mg/L (80 µg/L) and is expressed as a running annual average (RAA) of quarterly results.

Samples were collected and tested for HAAs from the distribution system in the three month periods meeting the requirements of Section 13-6.1 of Schedule 13 to O. Reg. 170/03. As of the date of this inspection report, the RAA was 0.043 mg/L (43.25 µg/L).

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.

Subsection 13-6 of Schedule 13 of O. Reg. 170/03 requires the owner of a drinking water system that provides chlorination and the operating authority for the system must ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water system's distribution system that is likely to have an elevated potential for the formation of trihalomethanes and tested for trihalomethanes (THMs). O. Reg.169/03 sets the standard for THMs at 0.100 mg/L (100 µg/L) expressed as a RAA for THMs for a drinking water system.

Data review confirmed that quarterly samples were collected and tested for THMs during the inspection period. As of the date of this inspection report, the RAA was 0.063 mg/L (62.8 µg/L).

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 that the owner of a drinking water system and the operating authority for the system must ensure that at least one water sample is taken every three months and tested for nitrate and nitrite.

Data review confirmed that samples of treated water were collected and tested for nitrate/nitrite with the required frequency.

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.

Section 13-8 of Schedule 13 requires that the owner of a drinking water system and the operating authority for the system must ensure that at least one treated water sample is taken every 60 months and tested for sodium.

The most recent sodium samples were collected on October 17 and 24, 2022.

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 requires the owner and the operating authority for the system to ensure that at least one treated water sample is collected every 60 months and tested for fluoride.

The most recent fluoride sample was collected on October 17, 2022.

Question ID	DWMR1113001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10.1 | (3);

Question:
Were changes to the system registration information provided to the ministry within ten (10)

days of the change?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Changes to the system registration information were provided as required.

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	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	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.

Current security measures provided for the Temagami North DWS include the following:
- Locked doors on all buildings (i.e. water treatment plant and standpipe),
- The standpipe is fenced in,
- An intrusion alarm system at the water treatment plant,
- Frequent visits by operational staff and
- Remote dual authentication to sign into SCADA through a secure sign-in portal.

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.

OCWA has designated Bryce Logan to be the Overall Responsible Operator (ORO) for the Temagami North DWS (both water treatment and distribution subsystems). In Bryce's absence Victor Legault will be the ORO.

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.

The operator on site with adequate certification and training is considered an operator-in-charge.

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

INSPECTION RATING REPORT

DWS Name:	TEMAGAMI NORTH DRINKING WATER SYSTEM
DWS Number:	220000433
DWS Owner:	THE CORPORATION OF THE MUNICIPALITY OF TEMAGAMI
Municipal Location:	TEMAGAMI
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Jun-13-24
Ministry Office:	North Bay Area Office

Maximum Risk Rating: 451

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	16/30
Certification and Training	0/42
Logbooks	0/14
Operations Manuals	0/14
Reporting & Corrective Actions	0/25
Source	0/0
Treatment Processes	0/214
Water Quality Monitoring	0/112
Overall - Calculated	**16/451**

Inspection Risk Rating:	**3.55%**

Final Inspection Rating:	**96.45%**

DWS Name:	TEMAGAMI NORTH DRINKING WATER SYSTEM
DWS Number:	220000433
DWS Owner Name:	THE CORPORATION OF THE MUNICIPALITY OF TEMAGAMI
Municipal Location:	TEMAGAMI
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Jun-13-24
Ministry Office:	North Bay Area Office

Non-Compliance Question(s)	Non Compliance Risk
Capacity Assessment	
Was the owner in compliance with the conditions associated with maximum flow rate or the rated/operational capacity in the Municipal Drinking Water Licence?	16
Overall - Total	**16**

Maximum Question Rating: 451

Inspection Risk Rating:	**3.55%**
FINAL INSPECTION RATING:	**96.45%**

APPENDIX B

DRINKING WATER SYSTEM COMPONENTS

DWS Component Information Report for 220000433

as of 23-JUL-2024

Drinking Water System Profile Information

DWS # 220000433
MOE Assigned Name Temagami North Drinking Water System
Category LMRS
Regulation O.REG 170/03
DWS Type Water Treatment Plant
Source Type Surface Water
Address 5 Cedar Avenue South, Temagami, Ontario, P0H 2H0, Canada
Region Northern Region
District North Bay Area Office
Municipality Temagami
Public Health Unit Timiskaming Health Unit

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
Net Lake	Source	Surface Water	5 Cedar, Unit: Street,	The intake facility for the Temagami North Water Treatment Plant (WTP) is located approximately 165 m off the west shore of Net Lake at 10 m below the low water level of the lake. The raw water is directed by gravity via a 222 metre 250 mm diameter intake pipe to a low lift pumping station consisting of a wet well and two submersible low lift pumps, each rated at 3.8 L/second (328 m³/day). These pumps are controlled by the system PLC (Programmable Logic Controller) and discharge to the two "BCA" water treatment package plants located within the WTP.
Distribution	Other	Other		Temagami North is classified as a Large Municipal Residential Drinking Water System and has 218 service connections serving an estimated population of 300 residents. The distribution system is equipped with a standpipe known as the "North Tower" which has a storage capacity of 732 m³ and assists with maintaining water pressure in the system. Note: A secondary disinfection booster station was added to the standpipe in 2021. Equipment added includes a chlorine residual analyzer, a sodium hypochlorite chemical feed pump, and a 220 L double walled sodium hypochlorite chemical tank.
	John Vanthof			
Treatment Plant	Treated Water Poe	Treatment Facility	5 Cedar, Unit: Street,	The system is centred on two "BCA" Pre-Fabricated Water Treatment Plants and their associated treatment and process control components. These treatment trains, their controls and chemical dosing equipment produce filtered water which is directed to three clear wells which have a combined working volume of 259.6 m³. Further chemical treatment for disinfection and pH adjustment is undertaken as the filtered water enters the clear wells and is pumped by the high lift pumps to the distribution subsystem. The plant is equipped with an automated monitoring system which records various component operations, system flows and chemical treatment dosages. The plant operates on a distribution demand basis

DWS Component Information Report for 220000433

as of 23-JUL-2024

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
				controlled by water level signals fed back from the water tower. All process and floor drain wastes are directed to waste sumps for pumping to the municipal sewage collection system.

APPENDIX C

REFERENCE MATERIALS

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

Ontario