



TRI-COUNTY DRINKING WATER SYSTEM
Physical Address: 9210 GRAHAM RD, , WEST
ELGIN, ON

INSPECTION REPORT

System Number: 260091117
Entity: ONTARIO CLEAN WATER
AGENCY
TRI-COUNTY WATER BOARD
Inspection Start Date: February 18, 2025
Inspection End Date:
Inspected By: Meghan Morgan
Badge #: 1315



(signature)

INTRODUCTION

Purpose

This announced, focused 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 TriCounty Water Board and operated by the Ontario Clean Water Agency. The system serves an estimated population of 265 and is categorized as a Large Municipal Residential System. Information reviewed for this inspection covered the time period of January 1, 2024 to December 31, 2024.

The TriCounty DWS supplies water to the West Elgin Distribution System, the Southwest Middlesex Distribution System and the Dutton-Dunwich Distribution System, as well as the Village of Newbury and the community of Bothwell. These distribution systems are connected but each municipality operates their own distribution system. All of these municipal water systems are inspected separately from this drinking water system.

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: the Low Lift Pump Station, the TriCounty Water Treatment Plant and the West Lorne Standpipe.

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:

Municipal Drinking Water Licence #043-101, Issue 8

Drinking Water Works Permit #043-201, Issue 10

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

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. Municipal Drinking Water Licence #043-101 – Issue #8, Schedule C, Section 7 requires the owner to develop and keep an up to date Harmful Algal Bloom monitoring, reporting, and sampling plan. A review of documentation submitted indicated that the owner/operating authority developed a Standard Operating Procedure entitled "Harmful Algal Bloom, Monitoring, Reporting and Sampling Plan" dated August 16, 2019. The plan includes all information required by the MDWL.			

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. Municipal Drinking Water Licence #043-101 - Issue #8, Section 2 of Schedule C requires continuous flow measurement and recording to be undertaken for the flow rate (L/s) and daily volume (m3/day) of treated water that flows from the treatment subsystem to the distribution system and water that flows into the treatment subsystem. At the time of the inspection, it was observed that flow meters were installed on each of the two (2) raw water discharge headers to measure the raw water flow from Lake Erie to the treatment plant. Individual flow meters were also observed on each of the two (2) treated water discharge headers which were located downstream of the highlift pumps but prior to treated water entering the distribution system. In addition to these required flow meters, additional process flow meters were installed throughout the system.			

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. Municipal Drinking Water Licence #043-101– Issue #8, Section 1 of Schedule C stipulates that the treated water from the treatment facility to the distribution system must not exceed the rated capacity of 12,160 m3/day for the Tri-County Drinking Water System. Despite the above conditions, the system may be operated above the maximum flow rate for firefighting purposes or for maintenance on the system. Records submitted for review indicate that the rated capacity was not exceeded for the inspection period.			

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 owner/operating authority provided one (1) Form 2 document pertaining to the following minor modification for the Tri-County Drinking Water System: - Replacement of existing discharge header from the valve located in the middle of the high lift pumps to the valves before the PRVs.			

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. The Procedure for Disinfection of Drinking Water in Ontario states that a raw water source that is surface water shall ensure at least a 2-log (99%) removal or inactivation of Cryptosporidium, 3-log (99.9%) removal or inactivation of Giardia Cysts and a 4-log removal (99.99%) removal or inactivation of Viruses by the time the water enters the distribution system. At least 0.5-log removal or inactivation of Giardia cysts and 2-log removal or inactivation of viruses must be provided through the disinfection portion of the overall water treatment process. The Tri-County Drinking Water System utilizes four (4) racks of the Pall Microza microfiltration membrane modules. The system has been validated to provide greater than 2-log (99%) removal of Cryptosporidium, greater than 3-log removal of Giardia and 0.5-log (99.99%) removal of viruses with a filtered water turbidity of less than or equal to 0.1 NTU, 99% of the time. Primary disinfection at the plant is achieved through the use of Sodium Hypochlorite, which is injected downstream of the filter racks and the UV units. The UV units have the capability to be used for primary disinfection in the event of a membrane failure, but they are generally used for taste and odour control within the Advanced Oxidation Process. During the warmer months, chlorine gas is added to the raw water intake for zebra mussel control and therefore additional CT credits can be applied during these months. Under normal conditions, contact time is achieved by maintaining a minimum water level in the two (2) treated water			

storage tanks. The calculations are as follows:

Operation with both Storage Tanks online

Maximum Design Flow Rate = 12,160 m³/day

Total Volume of Storage Tanks = 4551.28 m³

Free Chlorine Residual = 1.00 mg/L

CT for Giardia = 61 mg/L*min

CT for Viruses = 12 mg/L*min

Therefore, based on the aforementioned, the minimum storage tank levels should be no less than 3.75 m.

Operation with only one Storage Tank online

Maximum Design Flow Rate = 12,160 m³/day

Total Volume of one Storage tank = 2275.64 m³

Free Chlorine Residual = 1.00 mg/L

CT for Giardia = 61 mg/L*min

CT for Viruses = 12 mg/L*min

Therefore, based on the aforementioned, the minimum storage tank level should be no less than 7.52 m.

Documentation submitted for review indicated that the concentration of free chlorine for the treated water was consistently greater than the minimum requirements. Reservoir levels were maintained at a level greater than the minimum level as well as flow rates were consistently lower than the maximum flow rate indicated.

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. Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.			

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.

Ontario Regulation 170/03, Schedule 7-2 (3) requires the owner/operating authority of a large municipal residential system that provides secondary disinfection to ensure that at least seven distribution samples are taken each week and tested immediately for free chlorine residual. At least four of the samples must be taken on one day of the week, and at least three samples must be taken on a second day of the week, at least 48 hours after the samples taken on the first day.

Operators typically collect free chlorine grab samples from different locations in the system on two separate days during the week, at least 48 hours apart. Four samples are collected on the first day of the week followed by at least three samples taken around four days later. A review of the log sheets submitted for free chlorine residual grab samples collected during this inspection period determined that secondary disinfectant monitoring requirements were met with the exception of one week (the week of July 4, 2024) where the chlorine residuals were taken less than 48hrs apart from the first samples taken.

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. The operators document these checks in the log book.			

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. Online data that was submitted for review for the inspection period was found to be within the frequencies specified in the table in Schedule 6 of O.Reg 170/03, including the maximum, minimum and average concentration of free chlorine in addition to other operating parameters.			

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			

All alarms associated with the drinking water system are transmitted from the PLC to an auto dialer to notify an on-call operator should a parameter output reading fluctuate above or below the alarm set points. Lowlift and highlift pumps have shut down capabilities in the event of a critical alarm to prevent the discharge of improperly treated water to the next stage of the treatment train, distribution system or to protect equipment. Minor adjustments to the alarm set points may occur based on operating conditions at the operator's discretion. Additional alarms include but are not limited to equipment failures, loss of power and illegal entry.

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. The current minimum regulatory requirements under O. Reg 170/03 Schedule 6-5 stipulate that continuous monitoring equipment calibrations are to be conducted as often as necessary to ensure that test results are within the appropriate margin of error. Documents submitted for review indicated that the owner/operating authority conducts in-house calibrations on the chlorine analyzers frequently. In addition to regular calibrations, the operating authority frequently performs verification checks on the equipment and adjusts them accordingly to ensure accuracy. All adjustments are documented in the logbook. Handheld equipment is also verified on a monthly basis. Documentation was also provided for calibration of flow meters, level transmitters and temperature transmitter.			

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. In accordance with Ontario Regulation 170/03, Section 10-3, the owner of the Tri-County Drinking Water System shall ensure that a treated sample is taken at least once every week and tested for, (a) Escherichia coli; (b) total coliforms; and (c) HPC. According to a review of the laboratory data and logs provided by the owner/operator, over the course of this inspection period, the operating authority collected weekly treated water microbiological samples from the Tri-County Water Treatment Facility in accordance with legislative requirements.			

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. In accordance with Ontario Regulation 170/03, Section 10-2, the owner of the TriCounty DWS shall ensure that at least eight (8) distribution samples are taken every month with at least one of the samples being taken in each week and tested for: (a) E.coli, (b) Total Coliforms			

and (c) HPC. According to a review of the laboratory data and logs provided by the owner/operator, over the course of this inspection period the operating authority typically collected 8-10 microbiological samples per month for testing in accordance with the legislative requirements.

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. In accordance with Ontario Regulation 170/03, Schedule 13-2, the owner of the Tri-County DWS shall ensure that a sample is taken and tested for every parameter listed in Schedule 23 of the regulation at least every 12 months. The most recent samples were taken in accordance with this section of the regulation on the following dates with all sample results being below the standard: 1) January 16, 2023 2) January 22, 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.

In accordance with Ontario Regulation 170/03, Schedule 13-4, the owner of the Tri-County DWS shall ensure that a sample is taken and tested for every parameter listed in Schedule 24 of the regulation at least every 12 months.

The most recent samples were taken in accordance with this section of the regulation on the following dates with all sample results being below the standard:

- 1) January 16, 2023
- 2) January 22, 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.			
In accordance with Ontario Regulation 170/03, Schedule 13-6.1, the owner of the TriCounty DWS shall ensure that at least one distribution sample is taken in each calendar quarter and tested for haloacetic acids.			
Sampling in accordance with this section was conducted on:			
<ol style="list-style-type: none"> 1) October 3, 2023 2) January 2, 2024 3) April 2, 2024 4) July 2, 2024 5) October 1, 2024 			
The standard is expressed as a Running Annual Average (RAA), where the RAA is defined as the average for quarterly HAA results for a drinking water system. The quarterly results for this inspection period are below the standard of 80mg/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.

In accordance with Ontario Regulation 170/03, Schedule 13-6, the owner of the TriCounty DWS shall ensure that at least one distribution sample is taken in each calendar quarter and tested for trihalomethanes.

Sampling in accordance with this section was conducted on:

- 1) October 3, 2023
- 2) January 2, 2024
- 3) April 2, 2024
- 4) July 2, 2024
- 5) October 1, 2024

The standard for trihalomethanes is expressed as a Running Annual Average (RAA), where the RAA is defined as the average for quarterly THM results for a drinking water system. The quarterly results for this inspection period are below the standard of 100mg/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.			
In accordance with Ontario Regulation 170/03, Schedule 13-7, the owner of the Tri-County DWS shall ensure that at least one water sample is collected every three months and tested for nitrate and nitrite.			
Sampling in accordance with this section was completed on the following dates and all results were below the standard:			
<ol style="list-style-type: none"> 1) October 3, 2023 2) January 2, 2024 3) April 2, 2024 4) July 2, 2024 5) October 1, 2024 			

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. In accordance with Ontario Regulation 170/03, Schedule 13-8, the owner of the Tri-County DWS shall ensure that at least one water sample is collected every 60 months and tested for sodium. Sampling in accordance with this section was most recently completed May 21, 2024 with the sample result being below the standard.			

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. In accordance with Ontario Regulation 170/03, Schedule 13-9, the owner of the Tri-County DWS shall ensure that at least one water sample is collected every 60 months and tested for fluoride. Sampling in accordance with this section was most recently completed May 21, 2024 with the sample result being below the standard.			

Question ID	DWMR1094001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were water quality sampling requirements imposed by the Municipal Drinking Water Licence and Drinking Water Works Permit met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Water quality sampling requirements were met. The Municipal Drinking Water Licence, Schedule C, Section 1.5 requires the owner to sample			

and test for suspended solids each from the point of discharge from the settling lagoons (outlet weir). The licence requires the sample to be taken monthly, and the sample must be a composite grab sample (3 samples, each taken 2hrs apart). Documentation provided by the operating authority indicate that suspended solids water quality monitoring requirements have been met during this inspection period.

The Municipal Drinking Water Licence also requires microcystin sampling in accordance with the Harmful Algal Bloom plan required under Schedule C, Section 7.0. Documentation provided by the operating authority indicate this requirement has been met.

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. Municipal Drinking Water Licence # 043-101 - Issue #8, Section 16 of Schedule B outlines the requirements for the Operations and Maintenance Manual. The Tri-County Drinking Water System's Operations and Maintenance Manual provides chlorine contact time calculations that are used as the basis for primary disinfection under worst case operating conditions along with contingency plans, emergency procedures as well as procedures to deal with complaints. The manual also includes other information pertinent to the operations of the drinking water system. It should be noted that the UV equipment has the capability to be utilized for primary disinfection in the event of a membrane filter failure. The UV is currently used for the Advanced Oxidation Process for taste and odour control. In the event that UV is to be used as primary disinfection, the validated operating conditions for the UV disinfection equipment			

including a copy of the validation certificate is required to be included in the Operations and Maintenance manual.

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. The Tri-County Water Treatment Plant remains locked at all times and is equipped with a security system which includes intrusion alarms, motion detectors and security cameras. The intrusion and motion alarms are connected to an auto-dialer to alert the owner/operating authority of any unauthorized entry. Visitors to the facility are required to sign in and out of the facility. The Lowlift pumping station and the West Lorne Elevated Water Tower also remains locked at all times and are also equipped with intrusion alarms to alert the owner/operating authority of an unauthorized entry. The Lowlift Pumping Station is also equipped with security cameras. In addition to the aforementioned, all facilities are enclosed with security fencing with lockable gates and are visited regularly by operators.			

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	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.			

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.			