



FOREMAN DRINKING WATER SYSTEM
50 FOREMAN DR, SOUTH BRUCE PENINSULA, ON, N0H
1A0

Inspection Report

System Number: 220007711

Entity: ONTARIO CLEAN WATER
AGENCY
THE CORPORATION OF THE
TOWN OF SOUTH BRUCE
PENINSULA

Inspection Start Date: 09/21/2022

Inspection End Date: 09/29/2022

Inspected By: Robert Graham

Badge #: 1667



(signature)

NON-COMPLIANCE/NON-CONFORMANCE ITEMS

The following item(s) have been identified as non-compliance/non-conformance, based on a "No" response captured for a legislative or best management practice (BMP) question (s), respectively.

Question Group: Other Inspection Findings

Question ID	MRDW1115001	Question Type	Legislative
Question:			
Were the inspection questions sufficient to address other non-compliance items identified during the inspection period?			
Legislative Requirement	Not Applicable		
Observation/Corrective Action(s)			
<p>The following instance(s) of non-compliance were also noted during the inspection:</p> <p>The following instance(s) of non-compliance were also noted during the inspection:</p> <p>On March 24, 2022, OCWA reported two (2) non-compliance incidents to the MECP Owen Sound District Office concern water taking exceedances of Permit To Take Water (PTTW) No. 0725-BTFKTF for the Foreman DWS Well. Section 3.2 (Amounts of Taking Permitted) of the PTTW identifies the following:</p> <p>The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A. Table A identifies the maximum water taking per minute is 114 litres/minute.</p> <p>On January 4, 2022 water taking exceeded the maximum flow rate of 114 litres/minute when water taking was taken/recorded at a rate of 2.4 litres/second for 45 minutes, resulting in a water taking of 144 litres/minute for 45 minutes.</p> <p>On January 16, 2022 water taking exceeded the maximum flow rate of 114 litres/minute when water taking was taken/recorded at a rate of 2.3 litres/second for 150 minutes, resulting in a water taking of 138 litres/minute for 150 minutes. OCWA reported that the exceedances occurred due to debris being dislodged from the colorimeter when the raw water line was flushed, causing the flow regulating/pressure reducing valve not to operate properly.</p> <p>No further actions are required by the MECP at this time. The reported non-compliance</p>			

appears to be a result of temporary equipment failure due to debris.

INSPECTION DETAILS

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

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

Question ID	MRDW1001001	Question Type	Information
Question:			
What was the scope of this inspection?			
Legislative Requirement	Not Applicable		
Observation			
<p>The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. 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 practices.</p> <p>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.</p> <p>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.</p> <p>On September 21, 2022, Ministry of the Environment, Conservation and Parks (MECP) Provincial Officer Bob Graham conducted an unannounced focused inspection of the Foreman Drinking Water System (DWS). The Foreman DWS is a Small Municipal Residential DWS owned by the Town of South Bruce Peninsula and operated by the Ontario Clean Water Agency (OCWA/Operating Authority/OA). Assistance with the inspection was provided by Leo-Paul Frigault, OCWA Senior Operations Manager, Karla Young, OCWA Process & Compliance Technician, James Learn, OCWA Overall Responsible Operator (ORO) and Cole Hutchinson, OCWA Operator in Training.</p> <p>The Foreman DWS operates under MECP issued Municipal Drinking Water Licence Number 094-104, Issue Number 4 and Drinking Water Works Permit Number 094-204, Issue Number 4, both dated March 6, 2020. The well serving the Foreman DWS is drilled to a depth of 73 meters, has a 125 mm diameter steel casing and is considered ground water under the direct influence of surface water (GUDI). During the inspection review period, from September 23, 2021, the day following the previous inspection, to the date of</p>			

inspection, September 21, 2022, there were no Adverse Water Quality Incidents (AWQI's) reported to the MECP Spills Action Centre (SAC) and two (2) non-compliance notifications reported to the MECP Owen Sound District Office.

Question ID	MRDW1000001	Question Type	Information
Question: Does this drinking water system provide primary disinfection?			
Legislative Requirement	Not Applicable		
Observation This Drinking Water System provides for both primary and secondary disinfection and distribution of water.			

Question ID	MRDW1018001	Question Type	Legislative
Question: Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?			
Legislative Requirement	SDWA 31 (1);		
Observation The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.			

Question ID	MRDW1024001	Question Type	Legislative
Question: Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated as required?			
Legislative Requirement	SDWA O. Reg. 170/03 1-2 (2);		
Observation 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	MRDW1038001	Question Type	Legislative
--------------------	-------------	----------------------	-------------

Question:	
Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?	
Legislative Requirement	SDWA O. Reg. 170/03 6-5 (1)1-4;
Observation	
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 specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.	

Question ID	MRDW1035001	Question Type	Legislative
Question:			
Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?			
Legislative Requirement	SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;		
Observation			
Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.			

Question ID	MRDW1037001	Question Type	Legislative
Question:			
Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?			
Legislative Requirement	SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);		
Observation			
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, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.			
The water treatment plant is equipped with continuous analyzers and alarms for free chlorine and turbidity. The SCADA system low alarm set point for the treated water chlorine			

analyzer is 0.50 mg/L, which, if triggered, activates the trim chlorination system to increase the chlorine concentration. If the chlorine residual lowers to 0.20 mg/L the SCADA system low low alarm is activated which locks out the DWS ensuring the system meets CT requirements. The SCADA system turbidity analyzer high alarm set point downstream of the filters is set at 0.30 NTU, which, if triggered, notifies the operator. The SCADA system turbidity analyzer high high alarm set point is set at 0.60 NTU, which, if triggered, locks out the filters ceasing water production and prevents any adverse conditions.

Question ID	MRDW1040000	Question Type	Legislative
Question:			
Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?			
Legislative Requirement	SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;		
Observation			
All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.			
Routine analyzer maintenance, accuracy verification checks and calibrations are conducted by the operator(s) which are recorded in facility log books and daily SCADA reports. Annual analyzer calibrations were performed by HACH in April 2022.			

Question ID	MRDW1108001	Question Type	Legislative
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, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?			
Legislative Requirement	SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);		
Observation			
Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.			

Question ID	MRDW1034001	Question Type	Legislative
--------------------	-------------	----------------------	-------------

Question:	
Is the secondary disinfectant residual measured as required for the small municipal residential distribution system?	
Legislative Requirement	SDWA O. Reg. 170/03 7-2 (5); SDWA O. Reg. 170/03 7-2 (6);
Observation	
The secondary disinfectant residual was measured as required for the small municipal residential distribution system.	
Subsection 7-2 (5) of schedule 7, O.Reg.170/03 the owner of a small municipal residential system that provides secondary disinfection and the operating authority for the system shall ensure that at least two distribution samples are taken each week in accordance with subsection (6) and are tested immediately for, (a) free chlorine residual. Records provided by the owner and reviewed during the inspection indicate that the owner complied with these requirements, testing free chlorine residual for secondary disinfection monitoring purposes 2 days each week and at least 48 hours apart.	

Question ID	MRDW1099001	Question Type	Information
Question:			
Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03)?			
Legislative Requirement	Not Applicable		
Observation			
Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03).			

Question ID	MRDW1082001	Question Type	Legislative
Question:			
For SMR systems, are all microbiological water quality monitoring requirements for distribution samples prescribed by legislation being met?			
Legislative Requirement	SDWA O. Reg. 170/03 11-2 (1); SDWA O. Reg. 170/03 11-2 (2);		
Observation			
All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a small municipal residential system were being met.			

For a SMR DWS, distribution bacteriological samples shall be taken:
1) once every 2 weeks provided that the system is in compliance with Schedule 1 of O.Reg. 170/03, or 2) one sample every week if the system does not meet the requirements of Schedule 1 of O. Reg.170/03. Each sample must be tested for EC + TC and, if secondary disinfection is provided, must also be tested for HPC. OCWA staff conduct distribution bacteriological samples weekly satisfying this requirement.

Question ID	MRDW1096001	Question Type	Legislative
Question:			
Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?			
Legislative Requirement	SDWA O. Reg. 170/03 6-3 (1);		
Observation			
Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.			

Question ID	MRDW1086001	Question Type	Legislative
Question:			
Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?			
Legislative Requirement	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);		
Observation			
All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.			
Section 13-6.1 (1)of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one distribution sample is taken every 3 months from a point in the drinking water system's distribution system that is connected to the drinking water system, that is likely to have an elevated potential for the formation of Haloacetic Acids (HAAs), and tested for HAAs. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. The standard for HAAs is expressed as a Running Annual Average (RAA), where the RAA is defined as the average for quarterly HAAs results for a DWS. Sampling for the inspection period occurred as required and there were no concerns with the results. The Ontario Drinking Water Quality			

Standard is a RAA concentration of 80 ug/L.

Question ID	MRDW1087001	Question Type	Legislative
Question:			
Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?			
Legislative Requirement	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);		
Observation			
All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.			
Section 13-6 of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one distribution sample is taken every 3 months from a point in the DWS distribution system, or in plumbing that is connected to the DWS, that is likely to have an elevated potential for the formation of Trihalomethanes (THMs), and tested for THMs. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. Sampling for the inspection period occurred as required and there were no concerns with the results. The Ontario Drinking Water Quality Standard is a RAA concentration of 100 ug/L.			

Question ID	MRDW1094001	Question Type	Legislative
Question:			
Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?			
Legislative Requirement	SDWA 31 (1);		
Observation			
All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.			
Wastewater from the backwash process for the iron and manganese filter system is discharged to a wastewater holding tank where suspended solids are permitted to settle. MDWL Schedule C, Table 3 identifies that the annual average concentration of Backwash Wastewater Facility Total Suspended Solids and Total Chlorine Residual discharged from the holding tank shall not exceed 25 mg/L and 0.02 mg/L, respectively. Table 7 identifies			

that Backwash Wastewater Total Suspended Solids and Total Chlorine Residuals shall be comprised of grab samples (reference MDWL Section 5.0 for details) taken monthly at the point of discharge from the filter backwash tank.

During the inspection review period this requirement has been met. The annual average concentration of Backwash Wastewater Suspended Solids discharged during the inspection time period and the annual average concentration of Total Chlorine Residual discharged during the inspection time period did not exceed not exceed 25 mg/L and 0.02 mg/L, respectively.

Question ID	MRDW1113000	Question Type	Legislative
Question: Have all changes to the system registration information been provided to the Ministry within ten (10) days of the change?			
Legislative Requirement	SDWA O. Reg. 170/03 10.1 (3);		
Observation All changes to the system registration information were provided within ten (10) days of the change.			

Question ID	MRDW1059000	Question Type	Legislative
Question: Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?			
Legislative Requirement	SDWA O. Reg. 128/04 28;		
Observation The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.			

Question ID	MRDW1060000	Question Type	Legislative
Question: Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?			
Legislative Requirement	SDWA 31 (1);		
Observation			

The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.

Question ID	MRDW1061001	Question Type	Legislative
Question: Are logbooks properly maintained and contain the required information?			
Legislative Requirement	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);		
Observation Logbooks were properly maintained and contained the required information.			

Question ID	MRDW1062001	Question Type	Legislative
Question: Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?			
Legislative Requirement	SDWA O. Reg. 170/03 7-5;		
Observation Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.			

Question ID	MRDW1071000	Question Type	BMP
Question: Has the owner provided security measures to protect components of the drinking water system?			
Legislative Requirement	Not Applicable		
Observation The owner had provided security measures to protect components of the drinking water system. The pump house and treatment facility is fenced with a locked gate. The treatment facility			

has lockable doors equipped with an intruder alarm to notify operators in the event of a security breach. The drilled well was locked and signage restricts access to the site. At the time of inspection there was no apparent visual evidence of unauthorized access and/or vandalism.

Question ID	MRDW1073001	Question Type	Legislative
Question: Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
Legislative Requirement	SDWA O. Reg. 128/04 23 (1);		
Observation			
The overall responsible operator had been designated for each subsystem.			
The ORO for the Foreman DWS is James Learn, with back-up being provided by Andrew Bellamy.			

Question ID	MRDW1074001	Question Type	Legislative
Question: Have operators-in-charge been designated for all subsystems for which comprise the drinking water system?			
Legislative Requirement	SDWA O. Reg. 128/04 25 (1);		
Observation			
Operators-in-charge had been designated for all subsystems which comprise the drinking water system.			

Question ID	MRDW1075001	Question Type	Legislative
Question: Do all operators possess the required certification?			
Legislative Requirement	SDWA O. Reg. 128/04 22;		
Observation			
All operators possessed the required certification.			

Question ID	MRDW1076001	Question Type	Legislative
Question: Do only certified operators make adjustments to the treatment equipment?			
Legislative Requirement	SDWA O. Reg. 170/03 1-2 (2);		
Observation			
Only certified operators made adjustments to the treatment equipment.			

Question ID	MRDW1115001	Question Type	Legislative
Question: Were the inspection questions sufficient to address other non-compliance items identified during the inspection period?			
Legislative Requirement	Not Applicable		
Observation			
<p>The following instance(s) of non-compliance were also noted during the inspection:</p> <p>The following instance(s) of non-compliance were also noted during the inspection:</p> <p>On March 24, 2022, OCWA reported two (2) non-compliance incidents to the MECP Owen Sound District Office concern water taking exceedances of Permit To Take Water (PTTW) No. 0725-BTFKTF for the Foreman DWS Well. Section 3.2 (Amounts of Taking Permitted) of the PTTW identifies the following:</p> <p>The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A. Table A identifies the maximum water taking per minute is 114 litres/minute.</p> <p>On January 4, 2022 water taking exceeded the maximum flow rate of 114 litres/minute when water taking was taken/recorded at a rate of 2.4 litres/second for 45 minutes, resulting in a water taking of 144 litres/minute for 45 minutes.</p> <p>On January 16, 2022 water taking exceeded the maximum flow rate of 114 litres/minute when water taking was taken/recorded at a rate of 2.3 litres/second for 150 minutes, resulting in a water taking of 138 litres/minute for 150 minutes. OCWA reported that the exceedances occurred due to debris being dislodged from the colorimeter when the raw water line was flushed, causing the flow regulating/pressure reducing valve not to operate properly.</p>			

No further actions are required by the MECP at this time. The reported non-compliance appears to be a result of temporary equipment failure due to debris.

Question ID	MRDW1007001	Question Type	Legislative
Question:			
Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?			
Legislative Requirement	SDWA O. Reg. 170/03 1-2 (1);		
Observation			
The owner was maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials.			
The well serving the Foreman DWS is drilled to a depth of 73 meters, has a 125 mm diameter steel casing and is considered ground water under the direct influence of surface water (GUDI). The well casing is sealed with a proper vermin-proof cap and has a pitless adapter. The well casing is extended at least 40 cm above ground and surface drainage does not collect or pond in the vicinity of the well due to mounding around the well casing. Land uses immediately adjacent to the drilled well are predominantly agricultural. The Foreman DWS drilled well is located in excess of 100m, and upslope, from septic systems servicing a residential development located adjacent to Chesley Lake. Agricultural nutrient application and malfunctioning septic systems could potentially pose a risk to the groundwater quality.			

Question ID	MRDW1009001	Question Type	Legislative
Question:			
Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?			
Legislative Requirement	SDWA 31 (1);		
Observation			
Measures were in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.			

Question ID	MRDW1014001	Question Type	Legislative
Question:			
Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part			

V of the SDWA?	
Legislative Requirement	SDWA 31 (1);
Observation	
There was sufficient monitoring of flow as required by the Municipal Drinking Water Licence or Drinking Water Works Permit issued under Part V of the SDWA.	

Question ID	MRDW1016001	Question Type	Legislative
Question:			
Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?			
Legislative Requirement	SDWA 31 (1);		
Observation			
The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA.			
MDWL Schedule C, Table 1, identifies that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed 165 cubic metres/day. During the inspection review time period, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system was not exceeded.			

Question ID	MRDW1023001	Question Type	Legislative
Question:			
Do records indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?			
Legislative Requirement	SDWA O. Reg. 170/03 1-2 (2);		
Observation			
Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under O. Reg. 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.			

Question ID	MRDW1026001	Question Type	Legislative
--------------------	-------------	----------------------	-------------

Question:	
If primary disinfection equipment that does not use chlorination or chloramination is provided, is the equipment equipped with alarms or shut-off mechanisms that satisfy the standards described in Section 1-6 (1) of Schedule 1 of Ontario Regulation 170/03?	
Legislative Requirement	SDWA O. Reg. 170/03 1-6 (1);
Observation	
The primary disinfection equipment was equipped with alarms or shut-off mechanisms that satisfied the standards described in Section 1-6 (1) of Schedule 1 of O. Reg. 170/03.	
The Ultraviolet Disinfection System (UV) alarm setpoints are set for UV Intensity Low 25.0 W/m ² and Low-Low 19.0 W/m ² . The operations manual identifies that two (2) Trojan B03 UV disinfection units are certified to provide a minimum UV dose of 40 mj/cm ² at the design UV transmittance of 80% UVT and the design flow of 1.9 L/sec. If the UVT is higher than 80% and/or the flow rate is lower than 1.9 L/sec, dosage will increase.	

Question ID	MRDW1030000	Question Type	Legislative
Question:			
Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved?			
Legislative Requirement	SDWA O. Reg. 170/03 7-2 (1); SDWA O. Reg. 170/03 7-2 (2);		
Observation			
Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved.			

Question ID	MRDW1032001	Question Type	Legislative
Question:			
If the drinking water system obtains water from a surface water source and provides filtration, is continuous monitoring of each filter effluent line being performed for turbidity?			
Legislative Requirement	SDWA O. Reg. 170/03 7-3 (2);		
Observation			
Continuous monitoring of each filter effluent line was being performed for turbidity.			
For small municipal residential systems that use surface water or GUDI as the source and			

are required to provide filtration, Reg.170/03, Schedule 7 section 7(3)(2) requires continuous monitoring equipment of each filter effluent line. The DWS has two (2) Meyers iron and manganese filters which are continuously regenerated with Potassium Permanganate (one duty and one standby), one (1) cartridge filter housing, pretreatment for the ultraviolet disinfection system. Continuous monitoring of turbidity is measured via one analyzer located downstream of the cartridge filters and UV units.

Question ID	MRDW1039000	Question Type	Legislative
Question: If primary disinfection equipment that does not use chlorination or chloramination is provided, has the owner and operating authority ensured that the equipment has a recording device that continuously records the performance of the disinfection equipment?			
Legislative Requirement	SDWA O. Reg. 170/03 1-6 (3);		
Observation			
The owner and operating authority ensured that the primary disinfection equipment had a recording device that continuously recorded the performance of the disinfection equipment.			

Question ID	MRDW1109001	Question Type	Legislative
Question: If the system uses equipment for primary disinfection other than chlorination or chloramination and the equipment has malfunctioned, lost power or ceased to provide the appropriate level of disinfection, causing an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?			
Legislative Requirement	SDWA O. Reg. 170/03 1-6 (1);		
Observation			
When failure(s) of primary disinfection equipment, other than that used for chlorination or chloramination, caused an alarm to sound or an automatic shut-off to occur, a certified operator responded in a timely manner and took appropriate actions.			

Question ID	MRDW1042001	Question Type	Legislative
Question: If UV disinfection is used were duty sensors and reference UV sensors checked and calibrated as per the requirements of Schedule E of the MDWL or at a frequency as otherwise recommended by the UV equipment manufacturer?			
Legislative Requirement	SDWA 31 (1);		

Observation
All UV sensors were checked and calibrated as required.

Question ID	MRDW1084001	Question Type	Legislative
Question:			
Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Legislative Requirement	SDWA O. Reg. 170/03 13-2;		
Observation			
All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
Sampling and testing for inorganic parameters has been conducted for the DWS in accordance with Schedule 13-2 of Ontario Regulation 170/03. The regulation requires that samples be collected every 60 months and tested for each parameter listed in Schedule 23. The most recent samples were collected on January 5, 2021 and there were no concerns identified from the results.			

Question ID	MRDW1088000	Question Type	Legislative
Question:			
Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?			
Legislative Requirement	SDWA O. Reg. 170/03 13-7;		
Observation			
All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS.			
Section 13-7 of Schedule 13, O.Reg.170/03 requires the Owner and Operating authority to ensure that at least one water sample is taken every three months and tested for nitrates and nitrites. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. Sampling for the inspection period occurred as required and there were no concerns with the results.			

Question ID	MRDW1089000	Question Type	Legislative
--------------------	-------------	----------------------	-------------

Question:	
Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?	
Legislative Requirement	SDWA O. Reg. 170/03 13-8;
Observation	
All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.	
Section 13-8 of Schedule 13, O.Reg.170/03 requires that a treated water sample is taken every 60 months and is tested for sodium. Records provided by OCWA indicate that sampling for sodium was conducted on January 4, 2022, with a result of 16.5 mg/L.	

Question ID	MRDW1090000	Question Type	Legislative
Question:			
Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Legislative Requirement	SDWA O. Reg. 170/03 13-9;		
Observation			
All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
Section 13-9 of Schedule 13, O.Reg.170/03 requires that at least one water sample is taken every 60 months and tested for Fluoride. Records provided by OCWA indicate that sampling for fluoride was conducted on January 4, 2022, with a result of 1.21 mg/L.			

Question ID	MRDW1085001	Question Type	Legislative
Question:			
Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Legislative Requirement	SDWA O. Reg. 170/03 13-4 (1); SDWA O. Reg. 170/03 13-4 (2); SDWA O. Reg. 170/03 13-4 (3);		
Observation			
All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
Sampling and testing for organic parameters has been conducted for the DWS in			

accordance with Schedule 13-4 of Ontario Regulation 170/03. The regulation requires that samples be collected every 60 months and tested for each parameter listed in Schedule 24. The most recent samples were collected on January 5, 2021 and there were no concerns identified from the results.



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

APPENDIX B

REFERENCE GUIDE FOR STAKEHOLDERS

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

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	012-2149F
Avis de demande de services de laboratoire	012-2148F
Avis de résultats d'analyse insatisfaisants et de règlement des problèmes	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 potable 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

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2022-2023)

DWS Name: FOREMAN DRINKING WATER SYSTEM
DWS Number: 220007711
DWS Owner: THE CORPORATION OF THE TOWN OF SOUTH BRUCE PENINSULA
Municipal Location: SOUTH BRUCE PENINSULA

Regulation: O.REG. 170/03
DWS Category: DW Municipal Residential
Type of Inspection: Focused
Inspection Date: Sep-21-2022
Ministry Office: Owen Sound District Office

Maximum Risk Rating: 497

Inspection Module	Non Compliance Rating
Treatment Processes	0 / 39
Operations Manuals	0 / 28
Water Quality Monitoring	0 / 24
Reporting & Corrective Actions	0 / 4
Other Inspection Findings	0 / 402
Overall - Calculated	0 / 497

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2022-2023)

DWS Name: FOREMAN DRINKING WATER SYSTEM
DWS Number: 220007711
DWS Owner Name: THE CORPORATION OF THE TOWN OF SOUTH BRUCE PENINSULA
Municipal Location: SOUTH BRUCE PENINSULA

Regulation: O.REG. 170/03
DWS Category: DW Municipal Residential
Type of Inspection: Focused
Inspection Date: Sep-21-2022
Ministry Office: Owen Sound District Office

Non-Compliant Question(s)	Question Rating
Other Inspection Findings	
Were the inspection questions sufficient to address other non-compliance items identified during the inspection period?	0
Overall - Total	0

Maximum Question Rating: 497

Inspection Risk Rating: 0.00%

FINAL INSPECTION RATING: 100.00%