

Ministry of the Environment, Conservation & Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

Owen Sound District Office

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Bureau de district d'Owen Sound

October 14, 2021

Sent by Email: lara.widdifield@southbrucepeninsula.com

Town of South Bruce Peninsula 315 George Street, PO Box 310, Wiarton, Ontario, NOH 2TO

Attention: Lara Widdifield, Director of Public Works

Dear Ms. Widdifield,

**Re: 2021/2022 Inspection Report No. 1-63729093 Foreman Drinking Water System** Municipal Drinking Water Licence No. 094-104, Issue No. 4 Drinking Water Works Permit No. 094-204, Issue No. 4

The enclosed report documents findings of the inspection that was performed on September 22, 2021. Two sections of the report, namely "Actions Required" and "Recommended Actions", specify due dates for the submission of information or plans to my attention. Please note that "Actions Required" are linked to incidents of non-compliance with regulatory requirements contained within an Act, a Regulation, or site-specific approvals, orders or instructions; "Recommended Actions" convey information that the owner or operating authority should consider implementing in order to conform with existing and emerging industry standards.

The report includes an Inspection Summary Rating Record as an appendix. This record forms part of the ministry's comprehensive, risk-based inspection process. The rating provides a quantitative measure of the inspection results for this specific drinking water system for the reporting year. An inspection rating that is less than 100 per cent does not mean that the drinking water from the system is unsafe. The primary goals of this assessment are to encourage ongoing improvement of drinking water systems and to measure this progress from year to year.

I would like to remind you that Section 19 of the Safe Drinking Water Act, 2002 (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems, including members of municipal councils. "Taking Care of Your Drinking Water: A guide for members of municipal council", a publication found on the Drinking Water Ontario website (<u>https://www.ontario.ca/page/taking-care-your-drinking-waterguidemembers-municipal-councils</u>), provides further information about these obligations.

Should you have any questions regarding the content of the enclosed report, please do not hesitate to contact me.

Yours Truly,

Bob Graham Provincial Officer/Water Inspector Owen Sound District Office 101-17th Street East Owen Sound, ON N4K 0A5 Telephone (519) 374-0216 Fax: (519) 371-2905 E-mail: robert.g.graham@ontario.ca

Enclosure

ec: Carl Seider, Project Manager, Source Water Protection Program Leo-Paul Frigault, Senior Operations Manager, OCWA Karla Young, Process Compliance Technician, OCWA Mark Smith, Water Compliance Supervisor, MECP Dr. Ian Arra, Medical Officer of Health, GBHU

c: File SI-BR-SBP-FD-540 (2021)



# FOREMAN DRINKING WATER SYSTEM 50 FOREMAN DR, SOUTH BRUCE PENINSULA, ON, NOH 1A0 **Inspection Report**

System Number:	220007711
Inspection Start Date:	09/13/2021
Inspection End Date:	10/14/2021
Inspected By:	Robert Graham
Badge #:	1667



(signature)

Ministère de l'Environnement, de la Protection de la nature et des Parcs

## **NON-COMPLIANCE/NON-CONFORMANCE ITEMS**

This should not be construed as a confirmation of full compliance with all potential applicable legal requirement and 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 undersigned Provincial Officer.

## **INSPECTION DETAILS**

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

## Ministry Program: Regulated Activity: DRINKING WATER : DW Municipal Residential

Question ID MRDW1001000				
Question				
	Туре	Requirement		
What was the scope of this inspection?	Information	Not Applicable		
Observation				
The primary focus of this inspection is to confirm complia Conservation and Parks (MECP) legislation as well as eva drinking water policies and guidelines during the inspecti comprehensive, multi-barrier approach in the inspection of source, treatment, and distribution components as well as This drinking water system is subject to the legislative rec Act, 2002 (SDWA) and regulations made therein, includin Water Systems" (O.Reg. 170/03). This inspection has been the SDWA.	luating conformanc on period. The min f water systems that management practic uirements of the Sa og Ontario Regulatio en conducted pursua	e with ministry istry utilizes a focuses on the res. fe Drinking Water on 170/03, "Drinking nt to Section 81 of		
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.				
On September 22, 2021, Ministry of the Environment, Co Officer Bob Graham conducted an announced focused ins System (DWS). The Foreman DWS is a Small Municipal of South Bruce Peninsula and operated by the Ontario Cle with the inspection was provided by Leo-Paul Frigault, Of Young, OCWA Process & Compliance Technician and Of (ORO) James Learn. During the inspection review period inspection, September 22, 2021, there was one (1) Adverse reported to the MECP Spills Action Centre.	pection of the Foren Residential DWS ov an Water Agency (O CWA Senior Operat CWA Overall Respo , from September 5,	nan Drinking Water wned by the Town DCWA). Assistance ions Manager, Karla onsible Operator 2020, to the date of		

Question ID MRDW1000000		
Question	Question	Legislative Requirement
	Туре	Kequitement
Does this drinking water system provide primary	Information	Not Applicable
disinfection?		
Observation		
This Drinking Water System provides for both primary and secondary disinfection and		
distribution of water.		

<b>Question ID</b>	MRDW1007000		
Question		Question	Legislative
		Туре	Requirement
Is the owner m	aintaining the production well(s) in a manner	Legislative	SDWA   O. Reg.
sufficient to pr	event entry into the well of surface water and		170/03   1-2   (1)
other foreign n	naterials?		

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 MRDW1009000		
Question	Question	Legislative
	Туре	Requirement
Are measures in place to protect the groundwater and/or	Legislative	SDWA   31   (1)
GUDI source in accordance with any MDWL and DWWP		
issued under Part V of the SDWA?		
Observation		
Measures were in place to protect the groundwater and/or GUDI source in accordance with any the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.		

Question ID MRDW1014000		
Question	Question	Legislative
	Туре	Requirement
Is there sufficient monitoring of flow as required by the	Legislative	SDWA   31   (1)
MDWL or DWWP issued under Part V of the SDWA?		
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	MRDW1016000		
Question		Question	Legislative
		Туре	Requirement

Is the owner in compliance with the conditions associated	Legislative	SDWA   31   (1)
with maximum flow rate or the rated capacity conditions in		
the MDWL issued under Part V of the SDWA?		
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 MRDW1030000		
Question	Question Type	Legislative Requirement
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	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 MRDW1032000		
Question	Question	Legislative
	Туре	Requirement
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	SDWA   O. Reg. 170/03   7-3   (2)
Observation		
Continuous monitoring of each filter effluent line was being performed for turbidity		

Continuous monitoring of each filter effluent line was being performed for turbidity.

Question ID MRDW1034000		
Question	Question	Legislative
	Туре	Requirement
Is the secondary disinfectant residual measured as required for the small municipal residential distribution system?	Legislative	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 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 MRDW1037000		
Question	Question Type	Legislative Requirement
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	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, notifies the operator and 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 notifies the operator and locks out the DWS ceasing water production 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 and locks out the filters ceasing water production and prevents any adverse conditions.

Question ID MRDW1038000		
Question	Question Type	Legislative Requirement
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	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 MRDW1039000		
Question	Question	Legislative
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	<b>Type</b> Legislative	Requirement   SDWA   O. Reg.   170/03   1-6   (3)
recording device that continuously records the performance of the disinfection equipment?		
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 MRDW1042000		
Question	Question Type	Legislative Requirement
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	SDWA   31   (1)

#### Observation

All UV sensors were checked and calibrated as required.

Records provided by OCWA identify that duty UV sensors were checked monthly against a reference UV sensor, with the calibration ratio (intensity measured with the duty sensor/intensity measured with the reference UV sensor) documented to be less than or equal to 1.2, in compliance with Schedule E of the MDWL. Reference UV sensors shall be checked against a Master Reference Assembly at a minimum frequency of once every three years or on a more frequent basis depending upon the recommendations of the equipment manufacturer.

Question ID MRDW1035000		
Question	Question	Legislative
	Туре	Requirement
Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?	Legislative	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.

The operators review the SCADA system monitoring test results daily and sign/date the daily

#### SCADA reports.

Question ID MRDW1040000		
Question	Question	Legislative
	Туре	Requirement
Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?	Legislative	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 May 2021.

Question ID MRDW1108000		
Question	Question Type	Legislative Requirement
Where continuous monitoring equipment used for the	Legislative	SDWA   O. Reg.
monitoring of free chlorine residual, total chlorine residual,		170/03   6-5   (1)
combined chlorine residual or turbidity, required by		1-4,SDWA   O.
Regulation 170, an Order, MDWL, or DWWP issued under		Reg. 170/03   6-5
Part V, SDWA, has triggered an alarm or an automatic shut-		(1)5-10,SDWA
off, did a qualified person respond in a timely manner and		O. Reg. 170/03
take appropriate actions?		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 MRDW1109000		
Question	Question Type	Legislative Requirement
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	SDWA   O. Reg. 170/03   1-6   (1)
<b>Observation</b> When the primary disinfection equipment, other than that used for chlorination or chloramination,		

has failed causing 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 MRDW1018000

Question	Question Type	Legislative Requirement
Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?	Legislative	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 MRDW1023000		
Question	Question	Legislative
	Туре	Requirement
Do records indicate that the treatment equipment was	Legislative	SDWA   O. Reg.
operated in a manner that achieved the design capabilities		170/03   1-2   (2)
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?		
Observation		÷

Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 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 MRDW1024000		
Question	Question	Legislative
	Туре	Requirement
Do records confirm that the water treatment equipment	Legislative	SDWA   O. Reg.
which provides chlorination or chloramination for secondary	-	170/03   1-2   (2)
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?		
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.		-

Free available chlorine residual is maintained out of the clearwell and into the distribution system for secondary disinfection purposes to reduce the potential for microbial re-growth within the distribution system, and in accordance with Section 1- 2(2)4 of Schedule 1, O.Reg.170/03. During

the inspection review period, free chlorine residual in the distribution system exceeded the minimum secondary disinfection chlorine residual limit of 0.05 mg/L for treatment equipment which provides chlorination.

Question ID MRDW1026000		
Question	Question Type	Legislative Requirement
If primary disinfection equipment that does not us chlorination or chloramination is provided, is the equipped with alarms or shut-off mechanisms tha standards described in Section 1-6 (1) of Schedul Ontario Regulation 170/03?	equipment t satisfy the	SDWA   O. Reg. 170/03   1-6   (1)
<b>Observation</b> 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 Ontario Regulation 170/03.		

Question ID MRDW1062000		
Question	Question Type	Legislative Requirement
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	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 MRDW1060000		
Question	Question	Legislative
	Туре	Requirement
Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?	Legislative	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 MRDW1071000		
Question	Question	Legislative
	Туре	Requirement
Has the owner provided security measures to protect	BMP	Not Applicable

components of the drinking water system?	
Observation	

The owner had provided security measures to protect components of the drinking water system.

The pump house and treatment facility is fenced and has lockable doors equipped with an intruder alarm. 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 MRDW1073000		
Question	Question	Legislative
	Туре	Requirement
Has the overall responsible operator been designated for all	Legislative	SDWA   O. Reg.
subsystems which comprise the drinking water system?	-	128/04   23   (1)

#### Observation

The overall responsible operator has been designated for each subsystem.

The ORO for the Foreman DWS is James Learn, with back-up being provided by Andrew Bellamy.

Question ID MRDW1074000			
Question	Question	Legislative	
	Туре	Requirement	
Have operators in charge been designated for all subsystems	Legislative	SDWA   O. Reg.	
for which comprise the drinking water system?	_	128/04   25   (1)	
Observation			
Operators-in-charge had been designated for all subsystems which comprised the drinking water			
system.	_	-	

Question ID MRDW1075000		
Question	Question Type	Legislative Requirement
Do all operators possess the required certification?	Legislative	SDWA   O. Reg. 128/04   22
Observation		
All operators possessed the required certification.		

Question ID MRDW1076000		
Question	Question	Legislative
	Туре	Requirement
Do only certified operators make adjustments to the	Legislative	SDWA   O. Reg.
treatment equipment?		170/03   1-2   (2)
Observation		

Only certified operators made adjustments to the treatment equipment.

Question ID MRDW1099000		
Question	Question Type	Legislative Requirement
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)?	Information	Not Applicable

#### Observation

Records did not 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).

On August 5, 2021 a microbiological distribution water sample test result exceedance of Total Coliform (TC) = 31 cfu and E. coli (EC) = 23 cfu was reported to the Grey Bruce Health Unit Medical Officer of Health (MOH) and the MECP SAC by the OA. The Ontario Drinking Water Quality Standards, Ontario Regulation 169/03, maximum for TC and EC is Not Detectable.

The Ontario Regulation 170/03 Schedule 18 Corrective Action requirements for small municipal residential systems were undertaken by the OA as required and the resample test results (two (2) resample sets) were 0 TC and 0 EC.

Question ID MRDW1094000		
Question	Question	Legislative
	Туре	Requirement
Are all water quality monitoring requirements imposed by	Legislative	SDWA   31   (1)
the MDWL and DWWP being met?		
Observation		

#### 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 the above requirements were met.

Question ID	MRDW1096000		
Question		Question	Legislative
		Туре	Requirement

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	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 MRDW1082000			
Question	Question	Legislative	
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),SDWA   O.   Reg. 170/03   11-   2   (2),SDWA   O.   Reg. 170/03   11-	
		2   (6)	

#### Observation

All microbiological water quality monitoring requirements for distribution samples prescribed by legislation were being met.

For a Small Municipal Residential 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 MRDW1084000		
Question	Question Type	Legislative Requirement
Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	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 MRDW1085000

	Туре	Legislative Requirement
Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	SDWA   O. Reg.   170/03   13-4     (1),SDWA   O.   Reg. 170/03   13-   4   (2),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.

Question ID MRDW1086000		
Question	Question Type	Legislative Requirement
Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?	Legislative	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 are being 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 on October 6, 2020, January 4, 2021, April 6, 2021 and July 5, 2021. The inspection review period RAA concentration for HAAs in the Foreman DWS is 5.3 ug/L. The Ontario Drinking Water Quality Standard is a RAA concentration of 80 ug/L.

Question ID MRDW1087000		
Question	Question Type	Legislative Requirement
Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?	Legislative	SDWA   O. Reg. 170/03   13-6   (1)

#### 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 on October 6, 2020 (11.0 ug/L), January 4, 2021 (6.0 ug/L), April 6, 2021 (7.1 ug/L) and July 5, 2021 (9.6 ug/L). The inspection review period RAA concentration for THMs in the Foreman DWS is 8.4 ug/L. The Ontario Drinking Water Quality Standard is a RAA concentration of 100 ug/L.

Question	Legislative
Гуре	Requirement
Legislative	SDWA   O. Reg. 170/03   13-7
Ī	уре

#### 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. OCWA staff complied with these requirements when they conducted the required monitoring on October 6, 2020, January 4, 2021, April 6, 2021 and July 5, 2021. There were no concerns identified with the sample results.

Question ID MRDW1089000		
Question	Question	Legislative
	Туре	Requirement
Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	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 9, 2017 with a result of 16.2 mg\L.

Question ID MRDW1090000		
Question	Question	Legislative
	Туре	Requirement
Where fluoridation is not practiced, are all fluoride water	Legislative	SDWA   O. Reg.
quality monitoring requirements prescribed by legislation		170/03   13-9
conducted within the required frequency?		
Ob servers the se		

#### 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. OCWA staff conducted Fluoride sampling on January 9, 2017 with a result of 1.30 mg/L.

Question ID MRDW1100000		
Question	Question	Legislative
	Туре	Requirement
Did any reportable adverse/exceedance conditions occur	Information	Not Applicable
during the inspection period?		
Observation		
There were reportable adverse/exceedances during the inpsection period.		
AWQI No. 154957 was reported to the Grey Bruce Health Unit Medical Officer of Health (MOH)		
and the MECP SAC on August 5, 2021 concerning a microbiological distribution water sample		

and the MECP SAC on August 5, 2021 concerning a microbiological distribution water sample test result exceedance of Total Coliform (TC) = 31 cfu and E. coli (EC) = 23 cfu. The Ontario Regulation 169/03 Ontario Drinking Water Quality Standards maximum for TC and EC is Not Detectable.

Question ID	MRDW1102000		
Question		Question	Legislative

	Туре	Requirement
Have corrective actions (as per Schedule 18) been taken to	Legislative	SDWA   O. Reg.
address adverse conditions, including any other steps as	U	170/03   18-10
directed by the Medical Officer of Health?		(1),SDWA   O.
		Reg. 170/03   18-
		11,SDWA   O.
		Reg. 170/03   18-
		12,SDWA   O.
		Reg. 170/03   18-
		13,SDWA   O.
		Reg. 170/03   18-
		14,SDWA   O.
		Reg. 170/03   18-
		2,SDWA   O.
		Reg. 170/03   18-
		3,SDWA   O.
		Reg. 170/03   18-
		4,SDWA   O.
		Reg. 170/03   18-
		5,SDWA   O.
		Reg. 170/03   18-
		6,SDWA   O.
		Reg. 170/03   18-
		9

Corrective actions (as per Schedule 18) had been taken to address adverse conditions, including any other steps that were directed by the Medical Officer of Health.

AWQI No. 154957 was reported to the Grey Bruce Health Unit Medical Officer of Health (MOH) and the MECP SAC on August 5, 2021 concerning a microbiological distribution water sample test result exceedance of Total Coliform (TC) = 31 cfu and E. coli (EC) = 23 cfu. The Ontario Regulation 169/03 Ontario Drinking Water Quality Standards maximum for TC and EC is Not Detectable.

The OA undertook all required corrective actions as per Schedule 17 under O. Reg. 170/03 to address the adverse conditions, including other steps directed by the Medical Officer of Health which included the issuance of a Boil Water Advisory and written notices delivered to all affected residences/users.

Question ID MRDW1104000		
Question	Question Type	Legislative Requirement
Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?	Legislative	SDWA   O. Reg.   170/03   16-6     (1),SDWA   O.   Reg. 170/03   16-

6   (2),SDWA   O.
Reg. 170/03   16-
6   (3),SDWA   O.
Reg. 170/03   16-
6   (3.1),SDWA
O. Reg. 170/03
16-6   (3.2),
SDWA   O. Reg.
170/03   16-6
(4),SDWA   O.
Reg. 170/03   16-
6   (5),SDWA   O.
Reg. 170/03   16-
6   (6)

All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6.

Question ID MRDW1112000		
Question	Question Type	Legislative Requirement
If the drinking water system was required to post warning notices, were approved warning notices posted in accordance with O. Reg. 170/03 19-2?	Legislative	SDWA   O. Reg. 170/03   19-2   (1),SDWA   O. Reg. 170/03   19- 2   (2),SDWA   O. Reg. 170/03   19- 2   (3)
Observation		

The drinking water system was required to post warning notices and approved warning notices were posted in accordance with O. Reg. 170/03 19-2.

Question	Question Type	Legislative Requirement
Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?	Legislative	SDWA   O. Reg. 128/04   28
Observation	·	
The operations and maintenance manuals contained plans, dra sufficient for the safe and efficient operation of the system.	wings and proce	ess descriptions

<b>Question ID</b>	MRDW1061000		
Question		Question	Legislative

	Туре	Requirement
Are logbooks properly maintained and contain the required	Legislative	SDWA   O. Reg.
information?		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 require	ed information.	



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	012-2149E
Laboratory Services Notification	012-2148E
Adverse Test Result Notification	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	Website
Amendments	
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 cidessous 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 LAPUBLICATION	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 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



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-13-2021
Ministry Office:	Owen Sound District Office

### Maximum Risk Rating: 552

Inspection Module	Non Compliance Rating
Source	0 / 14
Capacity Assessment	0 / 30
Treatment Processes	0 / 228
Operations Manuals	0 / 28
Logbooks	0 / 18
Certification and Training	0 / 42
Water Quality Monitoring	0/91
Reporting & Corrective Actions	0/101
Overall - Calculated	0 / 552

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

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-13-2021
Ministry Office:	Owen Sound District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 552

Inspection Risk Rating: 0.00%

FINAL INSPECTION RATING: 100.00%