

WIARTON DRINKING WATER SYSTEM 897 BAYVIEW ST, SOUTH BRUCE PENINSULA, ON, NON 0N0

Inspection Report

System Number: 220002681
Inspection Start Date: 01/06/2022
Inspection End Date: 02/10/2022
Inspected By: Robert Graham

Badge #: 1667

(signature)

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 signed 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	Question	Legislative
	Type	Requirement
What was the scope of this inspection?	Information	Not Applicable
Observation		

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.

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.

On January 6, 2022, Ministry of the Environment, Conservation and Parks (MECP) Provincial Officer Bob Graham conducted an announced detailed inspection of the Wiarton Drinking Water System (DWS), which included the water treatment plant, the booster station and standpipe. The Wiarton DWS is a Large Municipal Residential System owned by the Town of South Bruce Peninsula (Owner) and operated by the Ontario Clean Water Agency (OCWA). Assistance with the inspection was provided by Leo-Paul Frigault, OCWA Senior Operations Manager, Daniel Caesar, OCWA Operator and Ben Madill, OCWA Operator. During the inspection review period, from December 23, 2021, the date following the previous inspection, to January 6, 2022 at 10:30 hours, the date/time of the inspection, there were no Adverse Water Quality Incidents (AWQIs) reported to the MECP Spills Action Centre (SAC).

The current Municipal Drinking Water Licence (MDWL) No. 094-102, Issue No. 4 and Drinking Water Works Permit (DWWP) No. 094-202, Issue No. 4 were issued on March 6, 2020 for the Wiarton DWS.

Question ID MRDW1000000		
Question	Question	Legislative
	Type	Requirement
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.

Question ID MRDW1010000		
Question	Question	Legislative
	Type	Requirement
Are trends in source water quality being monitored?	BMP	Not Applicable
Observation		
Trends in source water quality were being monitored.		

Question ID MRDW1011000		
Question	Question	Legislative
	Type	Requirement
Does the owner have a harmful algal bloom monitoring plan	BMP	Not Applicable
in place?		
Observation		

Observation

The owner had a harmful algal bloom monitoring plan in place.

Condition 6.0, Schedule C of the MDWL requires the Owner to develop a Harmful Algal (Cyanobacteria) Bloom monitoring, reporting and sampling plan on or before November 16, 2020. A Harmful Algal Bloom Monitoring, Reporting And Sampling Plan Standard Operating Procedure was implemented on 2013-07-02 and was subsequently revised on 2020-11-16, 2020-12-18 and 2020-12-22 to meet the above-referenced Licence.

Question ID MRDW1012000		
Question	Question	Legislative
	Type	Requirement
Does the owner have a harmful algal bloom monitoring plan	Legislative	SDWA 31 (1)
in place that meets the requirements of the MDWL?		
Observation		·
The owner had a harmful algal bloom monitoring plan in place	e.	

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

The Wiarton DWS has the following control documents in place associated with maximum flow rate or the rated capacity conditions:

Municipal Drinking Water Licence Number: 094-102 Issue Number: 4 issued March 6, 2020 with a rated capacity of 5,400 m3/d;

Drinking Water Works Permit 094-202 Issue Number: 4 issued March 6, 2020;

Permit to Take Water (PTTW) 5181-9DFR4C with a drinking water source from Colpoy's Bay, expiring November 14, 2023, with a maximum water taking of 5394 cubic metres/day (3764 Litres/minute). It's noted the owner can increase the maximum water taking to 4500 L/m for not greater than one hour for pump start up circumstances. The document holder shall document any readings greater than 3764 Litres/minute and the rationale for each exceedance.

Question ID MRDW1015000		
Question	Question	Legislative
	Type	Requirement
Are the flow measuring devices calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Oh		

Observation

The flow measuring devices were calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SWDA.

MDWL Schedule C Section 3.0 identifies that all flow metres that are required by regulation, by a condition in the drinking water works permit #094-202, or by a condition otherwise imposed by the Ministry, shall be checked and where necessary calibrated in accordance with the manufacturer's instructions. If the manufacturer's instructions do not indicate how often to check and calibrate a flow measuring device, the equipment shall be checked and where necessary calibrated at least once every 12 months during which the DWS is in operation, and not more than 30 days after the first anniversary of the day the equipment was checked and calibrated in the previous 12-month period.

The Wiarton DWS flow meters were checked/verified, and where necessary calibrated, by IndusControl on June 8, 2021, and within a 12-month period of the previous checks which occurred on July 31, 2020.

Question ID MRDW1016000		
Question	Question	Legislative
	Type	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.

Question ID MRDW1017000		
Question	Question	Legislative
	Type	Requirement
Were appropriate records of flows and any capacity	Legislative	SDWA 31 (1)
exceedances made in accordance with the MDWL issued		
under Part V of the SDWA?		

Appropriate records of flows and any capacity exceedances were made in accordance with the Municipal Drinking Water Licence issued under Part V of the SDWA.

Question ID MRDW1013000		
Question	Question Type	Legislative Requirement
Is the owner in compliance with all conditions of the PTTW?	Legislative	OWRA 34 (3)
Observation		
The owner was in compliance with all conditions of the PT	ΓW.	

Question ID MRDW1030000		
Question	Question	Legislative
	Type	Requirement
Is primary disinfection chlorine monitoring being conducted	Legislative	SDWA O. Reg.
at a location approved by MDWL and/or DWWP issued		170/03 7-2 (1),
under Part V of the SDWA, or at/near a location where the		SDWA O. Reg.
intended CT has just been achieved?		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 MRDW1038000		
Question	Question	Legislative
	Type	Requirement
Is continuous monitoring equipment that is being utilized to	Legislative	SDWA O. Reg.
fulfill O. Reg. 170/03 requirements performing tests for the		170/03 6-5 (1)
parameters with at least the minimum frequency specified in		1-4
the Table in Schedule 6 of O. Reg. 170/03 and recording		
data with the prescribed format?		

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.

Schedule 6, O.Reg.170/03, outlines the recording frequency requirements for continuous monitoring equipment. It requires that the free chlorine residual for primary disinfection be tested and recorded with a frequency of every five minutes. Turbidity monitoring must be performed with a minimum frequency of at least once every 15 minutes. Complying with these requirements, continuous monitoring data is reportedly recorded and trended on the SCADA system at 30 second intervals.

Question ID MRDW1036000		
Question	Question	Legislative
	Type	Requirement
Where continuous monitoring equipment is not used for chlorine residual analysis, are samples tested using an acceptable portable device?	Legislative	SDWA O. Reg. 170/03 6-7 (1)
Observation		
Samples for chlorine residual analysis were tested using an acceptable portable device.		

Question ID MRDW1037000		
Question	Question	Legislative
	Type	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		0 0 (1.1)

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 Wiarton water treatment plant is equipped with continuous analyzers and alarms for free chlorine and turbidity. The alarm set points for the clearwell water chlorine analyzer is low 0.75 mg/L and low/low 0.70 mg/L; when triggered the system locks out ceasing water production, ensuring the system meets their CT requirements and allows time for an operator to intervene. The turbidity set points on the two filter trains is high 0.30 NTU and high/high 0.8 NTU at which time the plant shuts down ceasing water production until rectified. In both instances, the alarms are sent to OCWA operators notifying of the plant shutdown.

Question ID MRDW1039000		
Question	Question	Legislative
	Type	Requirement
If primary disinfection equipment that does not use	Legislative	SDWA O. Reg.
chlorination or chloramination is provided, has the owner		170/03 1-6 (3)
and operating authority ensured that the equipment has a		

recording device that continuously records the performance of the disinfection equipment?	
of the distinction equipment:	

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	Legislative
	Type	Requirement
If UV disinfection is used were duty sensors and reference	Legislative	SDWA 31 (1)
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?		

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
	Type	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.

Continuous monitoring report results are printed, reviewed/examined by operators and signed on a daily basis and within 72 hours of the tests.

Question ID MRDW1040000		
Question	Question	Legislative
	Type	Requirement
Are all continuous analysers calibrated, maintained, and	Legislative	SDWA O. Reg.
operated, in accordance with the manufacturer's instructions		170/03 6-5 (1)
or the regulation?		1-4,SDWA O.

	Reg. 170/03 6-5
	(1)5-10

All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.

The potable water plant is equipped with continuous analysers for pH, chlorine residual, turbidity, and temperature. Analyzer verifications are completed by operators a minimum of once per month, or as needed to meet the manufacturer's recommendations, to ensure effective operation and accuracy. The calibration results are recorded in facility log books and monthly process and compliance status reports. Annual analyzer accuracy verification checks and calibrations were performed by HACH on May 4, 2021. Annual flow meters accuracy verification checks and calibrations were performed by IndusControl Incorporated on June 8, 2021.

Question ID	MRDW1108000		
Question		Question	Legislative
		Type	Requirement
Where continuou	us monitoring equipment used for the	Legislative	SDWA O. Reg.
monitoring of fro	ee chlorine residual, total chlorine residual,		170/03 6-5 (1)
combined chlori	ne 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 qualific	ed person respond in a timely manner and		O. Reg. 170/03
take appropriate	actions?		6-5 (1.1)
01 4			

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	Legislative
	Type	Requirement
If the system uses equipment for primary disinfection other	Legislative	SDWA O. Reg.
than chlorination or chloramination and the equipment has		170/03 1-6 (1)
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?		

Observation

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 MRDW1033000	
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Question	Question Type	Legislative Requirement
Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?	Legislative	SDWA O. Reg. 170/03 7-2 (3), SDWA O. Reg. 170/03 7-2 (4)

The secondary disinfectant residual was measured as required for the distribution system.

The Wiarton DWS provides chlorination for secondary disinfection purposes in accordance with Section 1-5, Schedule 1, Ontario Regulation (O.Reg.) 170/03. There is currently no continuous monitoring of secondary disinfectant occurring within the distribution system and the municipality is required to conduct secondary disinfection monitoring by grab samples. Subsection 7-2 (3), Schedule 7, O.Reg.170/03 requires the Owner to ensure that at least seven distribution samples are taken each week and that those samples be tested immediately for free chlorine residual. Where secondary disinfection chlorine testing is not being conducted on a daily basis or by continuous monitoring, Subsection 7-2 (4), Schedule 7, O.Reg.170/03 requires that:

- 1. At least four of the samples must be taken on one day of the week, at least 48 hours after the last sample was taken in the previous week.
- 2. At least three of the samples must be taken on a second day of the week, at least 48 hours after the last sample was taken on the day referred to in paragraph 1.
- 3. When more than one sample is taken on the same day of the week under paragraph 1 or 2, each sample must be taken from a different location.

Records provided by OCWA and reviewed during the inspection indicate that OCWA complied with these requirements, typically testing free chlorine residual for secondary disinfection monitoring purposes from 2 locations 7 days a week. On the date of this inspection, OCWA operators measured the free available chlorine residual in the drinking water within the distribution system at two locations in the distribution system and found the free available chlorine residual to be adequate with results of 0.82 mg/L and 1.03 mg/L being measured at extremities within the system.

	~	Legislative
		C
Ty	Гуре	Requirement
Are operators aware of the operational criteria necessary to achieve primary disinfection within the drinking water system?	BMP	Not Applicable

Observation

Operators were aware of the operational criteria necessary to achieve primary disinfection within the drinking water system.

Question ID MRDW1032000		
Question	Question	Legislative
	Type	Requirement
If the drinking water system obtains water from a surface	Legislative	SDWA O. Reg.

water source and provides filtration, is continuous monitoring of each filter effluent line being performed for turbidity?		170/03 7-3 (2)
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Continuous monitoring of each filter effluent line was being performed for turbidity.

For large 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. Continuous monitoring for turbidity is required only of the filter effluent that is directed to the next treatment process/stage (and eventually to the distribution system). Gaps in data should correlate to times when the plant was not treating water, or for maintenance of the analyzer; this is being met. The filter train alarms are present to help ensure compliance with the Procedure for Disinfection of Drinking Water in Ontario effluent turbidity requirements of being less than or equal to 0.30 NTU in 95% of the measurements recorded each month on each filter effluent line.

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.

The equipment installed at the Wiarton DWS plant compares favourably to the equipment listed in the DWWP issued for the Wiarton DWS. The process flow diagram included in Schedule D of the Permit also appears to be accurate. All equipment described in the Permit appeared to be installed and operating on the date of this inspection, with exception of the activated carbon feed system for taste and odour control (which is described as typically not used). There were no reported alterations undertaken during this inspection review period which required a Form 2 – Record of Modification or Replacement document to be prepared, nor did the Municipality undertake any alterations to the works which required Director Notifications to be made under Condition 2.4, Schedule B of the Permit. Watermain additions or modifications were undertaken which necessitated the completion of a Form 1 document during this inspection review period. There have been no modifications undertaken or additions made which required the completion of any Form 3 documents.

Question ID MRDW1020000		
Question	Question	Legislative Requirement
	Type	Requirement
Is the owner/operating authority able to demonstrate that,	Legislative	SDWA 31 (1)
when required during the inspection period, Form 1		
documents were prepared in accordance with their Drinking		

Water Works Permit?

Observation

The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water Works Permit during the inspection period.

The Owner undertook construction of a new single 300 mm diameter watermain to replace two existing 150 mm diameter watermains on Berford Street from George Street to Division Street including the transfer of water service connections, as part of Contract No. 20-16, in the community of Wiarton in the Town of South Bruce Peninsula.

Question ID MRDW1023000		
Question	Question	Legislative
	Type	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.

Treatment for a surface water source is required to achieve 2-log removal or inactivation of Cryptosporidium oocysts, a 3-log removal or inactivation of Giardia cysts and a 4-log removal or inactivation of viruses. These requirements are reportedly met by coagulation, clarification and filtration followed by UV disinfection and chlorination with sodium hypochlorite for both primary and secondary disinfection purposes. According to Schedule E of the Licence, the direct filtration process is credited with 2 log Giardia cyst removal, 2 log Cryptosporidium oocyst removal and 1 log virus removal credits, if the filtration process meets the following criteria:

- -a chemical coagulant is used at all times when the treatment plant is in operation;
- -chemical dosages are monitored and adjusted in response to variations in raw water quality;
- -effective backwash procedures are maintained, including filter-to-waste or an equivalent procedure during filter ripening to ensure that the effluent turbidity requirements are met at all times:
- -filtrate turbidity is continuously monitored from each filter; and, -the performance criterion for filtered water turbidity of less than or equal to 0.3 NTU in 95% of the measurements each month are met for each filter. The UV disinfection process is credited with 3 log Giardia cyst removal, 2 log Cryptosporidium oocyst removal and 2 log virus removal credits, if the UV disinfection process meets Licence Schedule E UV treatment criteria. The Chlorination process is credited with 1+ log virus removal credits if the chlorination process meets Licence Schedule E chlorination treatment criteria. Records reviewed indicate that the Wiarton Water

Treatment Plant was operated to achieve the necessary UV criteria, CT requirements and filter performance criteria for primary disinfection purposes during the inspection cycle.

Question ID MRDW1024000		
Question	Question	Legislative
	Type	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?		

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.

Following completion of the intended chlorine contact time for primary disinfection purposes, free available chlorine residual is maintained out 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 1-5 of Schedule 1, O.Reg.170/03. During the inspection review period, the free chlorine residual in the distribution system exceeded the minimum distribution system chlorine residual regulatory limit of 0.05 mg/L, with a low free chlorine residual concentration level of 0.57 mg/L sample test result conducted on August 30, 2021 at Dawson F-Line.

Question	Legislative
Type	Requirement
Legislative	SDWA 31 (1)
	Type

Observation

All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.

Question ID MRDW1026000		
Question	Question Type	Legislative Requirement
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	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 Ontario Regulation 170/03.

Question ID MRDW1027000		
Question	Question	Legislative
	Type	Requirement
Does the owner have evidence indicating that all chemicals and materials which come in contact with water within the drinking water system have met all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)

Observation

The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

Question ID MRDW1028000		
Question	Question	Legislative
	Type	Requirement
Are up-to-date plans for the drinking water system kept in place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)

Observation

Up-to-date plans for the drinking water system were kept in a place, or made available in such a manner, that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA.

Question ID MRDW1029000		
Question	Question Type	Legislative Requirement
Where a potential bypass of primary or secondary treatment equipment exists, have measures been taken to ensure that raw or partially treated water is not directed to the distribution system?	ВМР	Not Applicable

Observation

Where a potential bypass of primary or secondary treatment equipment existed, measures were taken to ensure that raw or partially treated water was not directed to the distribution system.

Question ID	MRDW1043000

Question	Question	Legislative
	Type	Requirement
Are the process wastewater and residual solids/sludges being treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water	Legislative	SDWA 31 (1)
Works Permit and the Municipal Drinking Water Licence?		

The process wastewater and residual solids/sludges were treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence.

Question ID MRDW1044000		
Question	Question	Legislative
	Type	Requirement
Does the process wastewater discharge monitoring program	Legislative	SDWA 31 (1)
and discharge quality comply with requirements established		
in the MDWL issued under Part V of the SDWA?		

Observation

The process wastewater discharge monitoring program and discharge quality complied with requirements established in the Municipal Drinking Water Licence Issued under Part V of the SDWA.

Question ID MRDW1045000		
Question	Question	Legislative
	Type	Requirement
Has the owner updated the document describing the	Legislative	SDWA 31 (1)
distribution components within 12 months of completion of		
alterations to the system?		
Observation		

Observation

The owner had up-to-date documents describing the distribution components as required.

Question ID MRDW1046000		
Question	Question	Legislative
	Type	Requirement
Is there a backflow prevention program, policy and/or bylaw	BMP	Not Applicable
in place that addresses cross connections and connections to		
high hazard facilities?		
Observation		
There is a backflow prevention program, policy and/or bylaw in place.		

Question ID	MRDW1047000		
Question		Question	Legislative
		Type	Requirement

Does the owner have a program or maintain a schedule for	BMP	Not Applicable
routine cleanout, inspection and maintenance of reservoirs		
and elevated storage tanks within the distribution system?		
Observation	•	

The owner had a program or maintained a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system.

Question ID	MRDW1048000		
Question		Question	Legislative
		Type	Requirement
	mplemented a program for the flushing of per industry standards?	BMP	Not Applicable
Observation			
The owner had	implemented a program for the flushing of wa	atermains as per i	ndustry standards.

Question ID MRDW1049000		
Question	Question	Legislative
	Type	Requirement
Do records confirm that disinfectant residuals are routinely	BMP	Not Applicable
checked at the extremities and dead ends of the distribution		
system?		

Observation

Records confirmed that disinfectant residuals were routinely checked at the extremities and "dead ends" of the distribution system.

Question ID MRDW1050000		
Question	Question	Legislative
	Type	Requirement
Is there a program in place for inspecting and exercising	BMP	Not Applicable
valves?		
Observation		
A program was in place for inspecting and exercising valves	S.	

Question ID MRDW1051000		
Question	Question	Legislative
	Type	Requirement
Is there a program in place for inspecting and operating	BMP	Not Applicable
hydrants?		
Observation		
There was a program in place for inspecting and operating hydrants.		

Question	Legislative
Type	Requirement
BMP	Not Applicable
	Type

There was a by-law or policy in place limiting access to hydrants.

The Corporation of the Town of South Bruce Peninsula By-Law Number 120-2015, Being a By-Law to Regulate the Use of Municipally Owned Fire Hydrants came into force and effect on November 3, 2015.

Question	Legislative Requirement
ВМР	Not Applicable
	Type

Observation

The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.

Question ID MRDW1054000		
Question	Question Type	Legislative Requirement
For stand alone connected distribution systems, if the receiving system is claiming the exemptions to O. Reg. 170/03 available under subsection 5(4), does the agreement with the donor satisfy the requirements prescribed by subsection 5(4)?	Information	Not Applicable

Observation

The receiving system was claiming exemptions to O. Reg. 170/03 available under subsection 5(4), and the agreement with the donor satisfied the requirements prescribed by subsection 5(4).

Question ID MRDW1055000		
Question	Question	Legislative
	Type	Requirement
If there are stand alone distribution systems connected to this	Information	Not Applicable
system, and exemptions to O. Reg. 170/03 are being claimed		
by the receiving system under subsection 5(4), does the		
agreement with the receiver satisfy the requirements		

prescribed by subsection 5(4)?	
Ol	

The donor had an agreement with a receiver system, and the agreement satisfied the requirements prescribed by subsection 5(4) under O. Reg. 170/03.

Question ID MRDW1056000		
Question	Question Type	Legislative Requirement
Has the donor provided an Annual Report to the receiver drinking water system?	Information	Not Applicable
Observation		

The donor had provided an Annual Report to the receiver drinking water system.

Question ID MRDW1057000		
Question	Question	Legislative
	Type	Requirement
If there are stand alone distribution systems connected to this	Legislative	SDWA O. Reg.
system, when prepared, has the donor provided an Annual		170/03 11 (2.1)
Report to the receiver?		
Observation		

Observation

The donor had provided an Annual Report to the receiver stand alone distribution system(s) connected to this system.

Question ID MRDW1058000		
Question	Question	Legislative
	Type	Requirement
Do operators and maintenance personnel have ready access	Legislative	SDWA O. Reg.
to operations and maintenance manuals?		128/04 28
Observation		
Operators and maintenance personnel had ready access to operations and maintenance manuals.		

Question ID MRDW1063000		
Question	Question	Legislative
	Type	Requirement
For every required operational test and for every required	Legislative	SDWA O. Reg.
sample, is a record made of the date, time, location, name of		170/03 6-10 (1)
the person conducting the test and result of the test?		
Observation		

For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.

Question ID MRDW1064000		
Question	Question	Legislative
	Type	Requirement
Did the operator-in-charge ensure that records were	Legislative	SDWA O. Reg.
maintained of all adjustments made to the processes within		128/04 26 (2)
his or her responsibility?		
Observation		_

The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility.

Question ID	MRDW1065000		
Question		Question	Legislative
		Type	Requirement
Are logs and o	ther record keeping mechanisms available for	Legislative	SDWA O. Reg.
at least five (5)	years?		128/04 27 (6)
Observation			
Logs or other record keeping mechanisms were available for at least five (5) years.			

Question ID MRDW1059000		
Question	Question	Legislative
	Type	Requirement
Do the operations and maintenance manuals contain plans,	Legislative	SDWA O. Reg.
drawings and process descriptions sufficient for the safe and		128/04 28
efficient operation of the system?		
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	Question	Legislative
	Type	Requirement
Do the operations and maintenance manuals meet the	Legislative	SDWA 31 (1)
requirements of the DWWP and MDWL issued under Part V		
of the SDWA?		

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.

Condition 16, Schedule B of the Licence prescribes that the operations and maintenance manual include at a minimum:

- -the requirements of the licence and associated procedures;
- -the requirements of the drinking water works permit for the drinking water system;
- -a description of the processes used to achieve primary and secondary disinfection within the drinking water system, including where applicable a copy of the CT calculations that were used as

the basis for primary disinfection under worst case operating conditions; -procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;

- -procedures for the operation and maintenance of monitoring equipment;
- -contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown; and,
- -procedures for the dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint. Procedures necessary for the operation and maintenance of any alterations to the drinking water system must also be incorporated into the operations and maintenance manual prior to the alterations coming into operation. Operations and maintenance manuals are available to staff at the potable water plant. The Owner has also developed and maintains standardized SOPs for each of their drinking water systems, which are maintained and made fully available in an electronic format. The contents of the SOPs and manuals appear to be sufficient, enabling staff to safely operate the drinking water system. As it pertains to the CT provisions, operators are familiar with the operational criteria necessary to achieve primary disinfection.

Question ID MRDW1061000		
Question	Question	Legislative
	Type	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 required information.

Question ID MRDW1062000		
Question	Question	Legislative
	Type	Requirement
Do records or other record keeping mechanisms confirm that	Legislative	SDWA O. Reg.
operational testing not performed by continuous monitoring	_	170/03 7-5
equipment is being done by a certified operator, water		
quality analyst, or person who meets the requirements of 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 MRDW1066000		
Question	Question Type	Legislative Requirement
Is spill containment provided for process chemicals and standby power generator fuel?	BMP	Not Applicable
Observation		
Spill containment was provided for process chemicals and/or standby power generator fuel.		

Question ID MRDW1067000		
Question	Question Type	Legislative Requirement
Are clean-up equipment and materials in place for the clean up of spills?	BMP	Not Applicable
Observation		
Clean-up equipment and materials were in place for the clean up of spills.		

Question ID MRDW1068000			
Question	Question Type	Legislative Requirement	
If available, are standby power generators tested under normal load conditions?	BMP	Not Applicable	
Observation			
Standby power generators were tested under normal load c	onditions.		

Question	Legislative
	Requirement
BMP	Not Applicable
_	
	Question Type BMP

Question ID	MRDW1070000		
Question		Question	Legislative
		Type	Requirement
Are air vents a	nd overflows associated with reservoirs and	BMP	Not Applicable

elevated storage structures equipped with screens?	
Observation	

Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens.

Question ID MRDW1071000		
Question	Question	Legislative
	Type	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 Wiarton water treatment plant has lockable doors and is equipped with an intruder alarm and signage restricting access to the site. The Wiarton Booster station and standpipe have perimeter fencing with a lockable gate restricting access to the site. At the time of inspection there were no reported issues of unauthorized access, vandalism and/or cyber security issues impacting the DWS during the inspection time period.

Question ID MRDW1072000		
Question	Question	Legislative
	Type	Requirement
Has the owner and/or operating authority undertaken efforts	BMP	Not Applicable
to promote water conservation and reduce water losses in		
their system?		

Observation

The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.

The Owner/OCWA have the following documents available to the public to promote water conservation and reduce water losses in their system:

- Tips for Conserving Water;
- Beautiful Lawns and Gardens Through Water-Efficient Landscaping.

Question ID	MRDW1073000		
Question		Question	Legislative
		Type	Requirement
Has the overall	responsible operator been designated for all	Legislative	SDWA O. Reg.
subsystems wh	ich comprise the drinking water system?	_	128/04 23 (1)
01			

Observation

The overall responsible operator has been designated for each subsystem.

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

Question ID MRDW1074000		
Question	Question	Legislative
	Type	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	Legislative
	Type	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
	Type	Requirement
Do only certified operators make adjustments to the	Legislative	SDWA O. Reg.
treatment equipment?		170/03 1-2 (2)
Observation		

Observation

Only certified operators made adjustments to the treatment equipment.

Records provided for review indicate that the Wiarton DWS certified operators appear to be the only persons who are adjusting water treatment equipment and processes at the potable water plant.

Question ID MRDW1078000		
Question	Question Type	Legislative Requirement
In instances where the overall responsible operator was unable to act, was an adequately certified operator designated to act in place of the overall responsible operator?	Legislative	SDWA O. Reg. 128/04 23 (1), SDWA O. Reg. 128/04 23 (2), SDWA O. Reg. 128/04 23 (3), SDWA O. Reg. 128/04 23 (4),

SDWA O. Reg.
128/04 23 (5),
SDWA O. Reg.
128/04 23 (6),
SDWA O. Reg.
128/04 23 (7)

An adequately licenced operator was designated to act in place of the overall responsible operator when the overall responsible operator was unable to act.

Question ID MRDW1099000		
Question	Question	Legislative
	Type	Requirement
Do records show that all water sample results taken during	Information	Not Applicable
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)?		

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).

The standards for drinking water quality in Ontario are prescribed in O.Reg.169/03 "Ontario Drinking Water Quality Standards" (ODWQS). Background and supporting information for each of the standards can be found in the Ministry's "Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines". During this inspection review period, there were no Adverse Water Quality Incidents (AWQI) reported for the drinking water system. All results for sampling conducted during this inspection review period met the microbiological and chemical requirements of O.Reg.169/03, and there were no reports made relating to adverse chlorine or turbidity monitoring.

Question ID MRDW1079000		
Question	Question	Legislative
	Type	Requirement
Are all microbiological water quality monitoring requirements for raw water samples prescribed by legislation being met?	Legislative	SDWA O. Reg. 170/03 10-4 (1),SDWA O. Reg. 170/03 10-4 (2),SDWA O. Reg. 170/03 10-4 (3)

Observation

All microbiological water quality monitoring requirements for raw water samples were being met.

Schedule 10, Section 10-4(1) of Ontario Regulation 170/03 identifies that the owner of a drinking water system and the operating authority for the system shall ensure that a water sample is taken at least once every week from the drinking water system's raw surface water, before any treatment is applied to the water and tested for ,

- (a) Escherichia coli; and
- (b) total coliforms.

Records reviewed in the course of this inspection indicate that the Owner complied with these requirements. There were no concerns identified with the results obtained.

Question ID MRDW1081000		
Question	Question	Legislative
	Type	Requirement
Are all microbiological water quality monitoring requirements for distribution samples being met?	Legislative	SDWA O. Reg. 170/03 10-2 (1),SDWA O. Reg. 170/03 10- 2 (2),SDWA O. Reg. 170/03 10- 2 (3)
Ob		2 (3)

Observation

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

The owner of a large municipal residential drinking water system shall ensure that if the system serves a population of 100,000 or less, at least 8 distribution samples plus one for every thousand people served by the system are taken every month. At least one of the samples must be taken each week. As Wiarton's DWS population is estimated to be 2300 residents, ten samples must be collected from the distribution system on a monthly basis at a minimum. These samples are required to be tested for E.Coli. and total coliform; and at least 25 percent of the samples are required to be tested for general bacteria populations expressed as colony counts on a heterotrophic plate count.

Records obtained indicate that the Owner is routinely collecting three distribution samples each week in order to comply with, and exceed, the regulatory requirement. Each of those samples were tested for E.Coli., total coliform, and approximately one third of the samples were tested for general bacteria populations expressed as colony counts on a heterotrophic plate count. There were no concerns identified with the results obtained.

Question ID MRDW1083000		
Question	Question	Legislative
	Type	Requirement
Are all microbiological water quality monitoring	Legislative	SDWA O. Reg.
requirements for treated samples being met?		170/03 10-3
Observation		
All microbiological water quality monitoring requireme	ents for treated samples	s were being met.

Section 10-3 of Schedule 10, O.Reg.170/03 requires the Owner to ensure samples are collected at least once every week from the system's treated water at the point of entry into the distribution system. The samples collected are required to be tested for E.Coli and total coliform, and general bacteria populations expressed as colony counts on a heterotrophic plate count. Records reviewed in the course of this inspection indicate that the Owner complied with these requirements. There were no concerns identified with the results obtained.

Question	Legislative
Type	Requirement
Legislative	SDWA O. Reg.
	170/03 13-2
	Type

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 Wiarton DWS in accordance with Schedule 13-2 of Ontario Regulation 170/03. The regulation requires that samples are to be collected every 12 months and tested for each parameter listed in Schedule 23; this requirement has been met. The most recent samples were collected on January 6, 2021 and there were no concerns identified from the results obtained.

Question ID MRDW1085000		
Question	Question	Legislative
	Type	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 (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 Wiarton DWS in accordance with Schedule 13-4 of Ontario Regulation 170/03. The regulation requires that samples are to be collected every 12 months and tested for each parameter listed in Schedule 24; this requirement has been met. The most recent samples were collected on January 6, 2021 and there were no concerns identified from the results obtained.

Question ID	MRDW1086000

Question	Question	Legislative
	Type	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)

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/OCWA 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 (HAA), 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. A drinking water quality standard of 80 micrograms per Litre (ug/L) for haloacetic acids took effect under O.Reg.169/03 "Ontario Drinking Water Quality Standards" (ODWQS) on January 1, 2020. It 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. HAAs will generally form at the beginning of the distribution system. Sampling occurred January 4, April 6, July 5 and October 4, 2021. There were no concerns identified with the sample results obtained.

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

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/OCWA (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, or in plumbing that is connected to the drinking water system,

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. A drinking water quality standard of 100 micrograms per Litre (ug/L) for THMs is in effect under O.Reg.169/03 "Ontario Drinking Water Quality Standards" (ODWQS) and it 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. Sampling occurred January 4, April 6, July 5 and October 4, 2021. There were no concerns identified with the sample results obtained.

Question	Legislative
Type	Requirement
Legislative	SDWA O. Reg.
	170/03 13-7
	Type

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

Question ID MRDW1089000		
Question	Question	Legislative Requirement
Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required	Type Legislative	SDWA O. Reg. 170/03 13-8
frequency?		170,05 15 0

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 the Owner/OCWA to ensure that a treated water sample is taken every 60 months and is tested for sodium. Records previously provided by the Owner indicate that OCWA conducted sampling for sodium on January 8, 2018 with a result of 7.41 mg\L. The next sodium sample results are due in January 2023.

Question ID	MRDW1090000

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

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 the Owner/OCWA to ensure that at least one water sample is taken every 60 months and tested for Fluoride. OCWA last conducted Fluoride sampling on January 8, 2018 and achieved a result of 0.07 mg/L. The next fluoride sample results are due in January 2023.

Question ID MRDW1092000		
Question	Question	Legislative
	Type	Requirement
Has the owner ensured that water samples are taken at the	Legislative	SDWA O. Reg.
prescribed location?	_	170/03 6-2
Observation		
The owner ensured that water complex were taken at the prescribed leastion		

The owner ensured that water samples were taken at the prescribed location.

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

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 chemically-assisted filtration system is discharged to a wastewater sedimentation tank where suspended solids are permitted to settle. MDWL Schedule C, Table 3 identifies that the annual average concentration of Backwash Wastewater Facility Suspended Solids discharged from the holding tank shall not exceed 25 mg/L and the annual average concentration of total chlorine residual shall not exceed 0.02 mg/L. Table 7 identifies that Backwash Wastewater Suspended Solids and total chlorine residual parameters shall be comprised of manual composite samples taken monthly at the point of discharge from the filter backwash tank. During the inspection review period this requirement was met. The annual average concentration of Backwash Wastewater Facility Suspended Solids discharged from the holding tank 7.16 mg/L and the annual average concentration of total chlorine residual was 0.00083 mg/L.

Ouestion ID	MRDW1095000
VIII COLLUII III	

Question	Question	Legislative
Question	Type	Requirement
Have all lead sampling requirements prescribed by Schedule	Legislative	SDWA O. Reg.
15.1 of O.R. 170/03 been met?	Legislative	170/03 15.1-10,
		SDWA O. Reg.
		170/03 15.1-4
		(1),SDWA O.
		Reg. 170/03
		15.1-5 (1),
		SDWA O. Reg.
		170/03 15.1-5
		(10),SDWA O.
		Reg. 170/03
		15.1-5 (11),
		SDWA O. Reg.
		170/03 15.1-5
		(12),SDWA O.
		Reg. 170/03
		15.1-5 (2),
		SDWA O. Reg.
		170/03 15.1-5
		(3),SDWA O.
		Reg. 170/03
		15.1-5 (4),
		SDWA O. Reg.
		170/03 15.1-5
		(5),SDWA O.
		Reg. 170/03 15.1-5 (6),
		SDWA O. Reg. 170/03 15.1-5
		(7),SDWA O.
		Reg. 170/03
		15.1-5 (8),
		SDWA O. Reg.
		170/03 15.1-5
		(9),SDWA O.
		Reg. 170/03
		15.1-7 (1),
		SDWA O. Reg.
		170/03 15.1-7
		(2),SDWA O.
		Reg. 170/03
		15.1-7 (3),
		SDWA O. Reg.
		170/03 15.1-7
		(4),SDWA O.
		Reg. 170/03

	15.1-9 (1),
	SDWA O. Reg.
	170/03 15.1-9
	(2),SDWA O.
	Reg. 170/03
	15.1-9 (3),
	SDWA O. Reg.
	170/03 15.1-9
	(4),SDWA O.
	Reg. 170/03
	15.1-9 (5),
	SDWA O. Reg.
	170/03 15.1-9
	(6),SDWA O.
	Reg. 170/03
	15.1-9 (7),
	SDWA O. Reg.
	170/03 15.1-9
	(8),SDWA O.
	Reg. 170/03
	15.1-9 (9)
Ol and the second secon	. , , , ,

All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.

The Wiarton DWS qualifies for the plumbing exemption as per Ontario Regulation 170/03 Schedule 15.1-5 (9) (10). Four (4) distribution lead samples are taken every 36 months (i.e. 2 samples per period). The most recent set of samples were taken in 2021 and there were no concerns with the results obtained. The next set of lead samples are due in 2024.

Question ID MRDW1096000		
Question	Question Type	Legislative 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 MRDW1098000		
Question	Question	Legislative
	Type	Requirement
Has the owner indicated that the required records are kept	Legislative	SDWA O. Reg.
and will be kept for the required time period?		170/03 13 (1),

	SDWA O. Reg.
	170/03 13 (2),
	SDWA O. Reg.
	170/03 13 (3)
Observation	

The owner indicated that the required records are kept and will be kept for the required time period.

Question ID MRDW1100000		
Question	Question	Legislative
	Type	Requirement
Did any reportable adverse/exceedance conditions occur	Information	Not Applicable
during the inspection period?		
Observation		

Observation

There were no reportable adverse/exceedances during the inspection period.

There were no events required to be reported as an adverse water quality incident or lead exceedance notification.

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

Observation

All changes to the system registration information were provided within ten (10) days of the change.

Question ID MRDW1110000		
Question	Question	Legislative
	Type	Requirement
Was an Annual Report containing the required information	Legislative	SDWA O. Reg.
prepared by February 28 of the following year?		170/03 11 (6)
Oh		

The Annual Report containing the required information was prepared by February 28th of the following year.

Question ID	MRDW1114000		
Question		Question	Legislative
		Type	Requirement
Does the owne	r have evidence that, when required, all legal	Legislative	SDWA 31 (1)
owners associa	ted with the DWS were notified of the		

The owner had evidence that all required notifications to all legal owners associated with the Drinking Water System had been made during the inspection period.

Question ID MRDW1111000		
Question	Question	Legislative
	Type	Requirement
Have Summary Reports for municipal council been	Legislative	SDWA O. Reg.
completed on time, include the required content, and		170/03 22-2
distributed in accordance with the regulatory requirements?		(1),SDWA O.
		Reg. 170/03 22-
		2 (2),SDWA O.
		Reg. 170/03 22-
		2 (3),SDWA O.
		Reg. 170/03 22-
		2 (4)

Observation

Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements.



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 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 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 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 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



Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2021-2022)

DWS Name: WIARTON DRINKING WATER SYSTEM

DWS Number: 220002681

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: Detailed **Inspection Date:** Jan-6-2022

Ministry Office: Owen Sound District Office

Maximum Risk Rating: 670

Inspection Module	Non Compliance Rating
Source	0 / 12
Capacity Assessment	0 / 42
Treatment Processes	0 / 273
Effluent Quality and Quantity	0 / 20
Distribution System	0/8
Operations Manuals	0 / 42
Logbooks	0/30
Certification and Training	0 / 49
Water Quality Monitoring	0 / 136
Reporting & Corrective Actions	0 / 58
Overall - Calculated	0 / 670

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2021-2022)

DWS Name: WIARTON DRINKING WATER SYSTEM

DWS Number: 220002681

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: Detailed **Inspection Date:** Jan-6-2022

Ministry Office: Owen Sound District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 670

Inspection Risk Rating: 0.00%

FINAL INSPECTION RATING: 100.00%