

**Ministry of the Environment,
Conservation and Parks**
*Drinking Water and Environmental
Compliance Division*

**Ministère de l'Environnement de la
Protection de la nature et des Parcs**
*Division de la conformité en matière d'eau
potable et d'environnement*



Central Region

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February 15, 2022

The Corporation of the Township of Ramara
2297 Highway 12 Hwy, Post Office Box Delivery, 130, Brechin, ON, L0K 1B0

Attention: Jessica Gunby, Chief Administrative Officer

Re: **Inspection of Somerset / Knob Hill Distribution System on December 9, 2021**
Event No. 1-31511998

The ministry undertakes inspections of the regulated community including industry, businesses and individuals. The primary focus of this inspection is to confirm compliance with ministry legislation as well as evaluating compliance and conformance with related permissions, policies and guidelines.

Attached to this letter is the report for the inspection completed at Somerset / Knob Hill Distribution System on December 9, 2021. This report provides an assessment of compliance and conformance based on observations and information available during the inspection review period only. As always, please refer to the applicable legislative requirements, permissions, policies, guidelines and best management practices to clarify your specific obligations.

Instances of non-compliance and/or non-conformance may have been identified during the inspection. Please refer to the "NON-COMPLIANCE/NON-CONFORMANCE ITEMS" section within the report to determine the actions required and take any necessary steps by the date(s) prescribed to bring the system/facility into compliance/conformance. Additional findings and applicable comments, where provided, will be found within the report.

In order to measure individual inspection results, the ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal and risk experts. The Inspection Summary Rating Record (IRR) provides the ministry, the system owner and the associated Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. Please note that due to a recent change in IT systems, the IRR cannot currently be generated at the same time as the inspection report. The IRR will be sent separately, typically within one to two months, and prior to any public release. IRR ratings are published (for the previous inspection year) in the ministry's Chief Drinking Water Inspector's Annual Report.

If you have any questions or concerns regarding this inspection report, please contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Vreugdenhil".

Peter Vreugdenhil
Provincial Officer
Ministry of the Environment, Conservation and Parks
Barrie District Office
(705) 727-8769 (Tel)
peter.vreugdenhil@ontario.ca

CC Nick Leroux, Senior Operations Manager, OCWA
Christine Craig, Process And Compliance Technician, OCWA
Medical Officer of Health, Simcoe Muskoka District Health Unit
Barrie District Office File, Ministry of the Environment, Conservation and Parks



SOMERSET/ KNOB HILL DISTRIBUTION SYSTEM
3398 QUENTON ST, RAMARA, ON, L0K 1B0

Inspection Report

System Number: 260046137
Inspection Start Date: 12/09/2021
Inspection End Date: 02/15/2022
Inspected By: Peter Vreugdenhil
Badge #: 924

A handwritten signature in black ink, appearing to read "P. Vreugdenhil", written over a horizontal line.

(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 Type	Legislative Requirement
What was the scope of this inspection?	Information	Not Applicable
Observation		
<p>The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.</p> <p>This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O.Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.</p> <p>This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements. The Somerset/Knob Hill Distribution System is a stand-alone distribution, small municipal residential drinking water system, as defined by Ontario Regulation 170/03, and operates under drinking water system number 260046137. The distribution system serves an estimated population of 44 people. Seventeen of the available 20 lots have been developed. The distribution system is owned by the Corporation of the Township of Ramara and was operated by the Operators employed by the Township of Ramara (until September 1, 2020) and the Ontario Clean Water Agency (OCWA) (from September 1, 2020 to present).</p> <p>Drinking water is supplied by the Township of Severn from the Washago Drinking Water System (drinking water system number 220005161). The Washago Drinking Water System is a surface water treatment plant which provides coagulation, flocculation, filtration and disinfection.</p> <p>The Somerset/Knob Hill Distribution System consists of approximately 700 m of 50 mm diameter watermains, including a watermain that conveys treated water across the Severn River. There are three sample stations, a blow off, and an air vent installed in the distribution system. There are no storage structures or rechlorination facilities within the distribution system.</p> <p>This inspection was conducted pursuant to section 81 of the Safe Drinking Water Act in order to assess compliance with the requirements of Ontario Regulation 170/03 and other Ministry control documents. The drinking water inspection included: chlorine residual testing within the distribution system; interview with Ontario Clean Water Agency (OCWA) staff; and a review of relevant documents and data from the period of April 9, 2020 to December 9, 2021 (hereafter referred to as the "inspection review period").</p>		

Question ID	MRDW1000000
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Question	Question Type	Legislative Requirement
Does this drinking water system provide primary disinfection?	Information	Not Applicable
Observation		
This Drinking Water System provides for only secondary disinfection and distribution of water. Primary disinfection is undertaken by another regulated Drinking Water System which provides treated water to this Drinking Water System.		

Question ID	MRDW1034000		
Question	Question Type	Legislative 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			
<p>The secondary disinfectant residual was measured as required for the distribution system. Subsections 7-2(5) and 7-2(6) of Ontario Regulation 170/03 prescribe the following:</p> <p>(5) 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, if the system provides chlorination and does not provide chloramination; or (b) combined chlorine residual, if the system provides chloramination.</p> <p>(6) At least one of the distribution samples referred to in subsection (5) must be taken at least 48 hours after, and during the same week as, one of the other distribution samples referred to in subsection (5).</p> <p>Based on records reviewed, the Operating Authority is testing secondary disinfection residuals in the distribution system at the appropriate frequencies and are taking the requisite number of samples.</p>			

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			
<p>The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit. Drinking Water Works Permit 147-207 contains a description of the length and diameter of the installed watermains. There are also three sample stations, a blow-off and air vent installed in the distribution system. A flow meter and bypass flow meter are housed in a metering chamber and used to measure the treated water flows to the Somerset/Knob Hill water distribution system. There is not a Schedule C in the Drinking Water Works Permit. At the time of the physical inspection, the equipment appeared to be</p>			

installed in accordance with this authorizing document.

Question ID MRDW1024000		
Question	Question Type	Legislative Requirement
Do records confirm 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?	Legislative	SDWA O. Reg. 170/03 1-2 (2)
Observation		
<p>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. Subsection 1-2 (2), paragraph 4 of Schedule 1 of Ontario Regulation 170/03 states that if chlorination is provided for secondary disinfection, the owner shall ensure that the equipment is operated so that, at all times and at all locations within the distribution system, the free chlorine residual is never less than 0.05 milligrams/Litre.</p> <p>The Owner of Somerset/Knob Hill Distribution System does not provide primary or secondary disinfection for the drinking water. The Township of Severn provides the treatment of the drinking water, and it is then sent across the municipal boundary into the Township of Ramara, and the Somerset/Knob Hill Distribution System. Records indicated that there were no free chlorine residuals less than 0.05 milligrams/Litre within the distribution system at any time during the inspection review period.</p>		

Question ID MRDW1025000		
Question	Question Type	Legislative Requirement
Were all parts of the drinking water system that came in contact with drinking water (added, modified, replaced or extended) disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?	Legislative	SDWA 31 (1)
Observation		
<p>All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit. Condition 2.3 of Schedule B of Drinking Water Works Permit 147-207 states that all parts of the drinking water system in contact with drinking water which are:</p> <p>2.3.1 Added, modified, replaced, extended; or</p> <p>2.3.2 Taken out of service for inspection, repair or other activities that may lead to contamination, shall be disinfected before being put into service in accordance with a procedure approved by the Director or in accordance with the applicable provisions of the following documents:</p> <p>a) The ministry's Watermain Disinfection Procedure;</p> <p>b) AWWA C652 – Standard for Disinfection of Water Storage Facilities;</p> <p>c) AWWA C653 – Standard for Disinfection of Water Treatment Plans; and</p> <p>d) AWWA C654 - Standard for Disinfection of Wells.</p>		

The Operating Authority for the Somerset/Knob Hill Distribution System use the ANSI/AWWA C651 Standard for Disinfecting Water Mains where required. The Operations and Maintenance Manual, which was updated in December 2021, contains the AWWA document and the Contingency Emergency Plan for watermain breaks or service interruption notes that operators are to follow the procedure outlined in the AWWA document in the event of a break or service interruption.

Question ID	MRDW1027000	
Question	Question Type	Legislative 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. Condition 14.1 of Schedule B of Municipal Drinking Water Licence 147-107 states that all chemicals and materials used in the alteration or operation of the drinking water system that come into contact with water within the system shall meet all applicable standards set by both the American Water Works Association ("AWWA") and the American National Standards Institute ("ANSI") safety criteria standards NSF/60, NSF/61 and NSF/372.		

Question ID	MRDW1028000	
Question	Question Type	Legislative 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	MRDW1045000	
Question	Question Type	Legislative 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		
The owner had up-to-date documents describing the distribution components as required.		

Question ID	MRDW1046000	
Question	Question Type	Legislative Requirement
Is there a backflow prevention program, policy and/or bylaw in place that addresses cross connections and connections to high hazard facilities?	BMP	Not Applicable
Observation		
<p>There is a backflow prevention program, policy and/or bylaw in place. The Owner of the Somerset/Knob Hill Distribution System has installed backflow preventers on all service connections within the system. The backflow preventers were installed as part of the water metering program.</p> <p>The Corporation of the Township of Ramara has a cross connection bylaw which requires backflow prevention devices for all industrial, commercial, institutional, agricultural and multi-residential buildings, or if a condition exists in any building or structure that may be hazardous or detrimental to the potable water supply as determined by the Township, including lawn sprinkler systems for residential connections.</p>		

Question ID	MRDW1048000	
Question	Question Type	Legislative Requirement
Has the owner implemented a program for the flushing of watermains as per industry standards?	BMP	Not Applicable
Observation		
The owner had implemented a program for the flushing of watermains as per industry standards. Annually, in the fall, the distribution system is flushed using the sole available blow-off.		

Question ID	MRDW1049000	
Question	Question Type	Legislative Requirement
Do records confirm that disinfectant residuals are routinely checked at the extremities and dead ends of the distribution system?	BMP	Not Applicable
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 valves?	BMP	Not Applicable
Observation		
A program was in place for inspecting and exercising valves. The Operations Manual indicates that each distribution system main valve must be operated once per year to ensure it is in good working order. In the event that a valve is found to not function properly, it is to be fixed and the superintendent notified. All valve maintenance activities are to be recorded in the valve log book.		

Question ID	MRDW1053000		
Question	Question Type	Legislative Requirement	
Is the Owner able to maintain proper pressures in the distribution system and is pressure 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?	BMP	Not Applicable	
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. Positive pressure was maintained in the distribution system during the inspection review period, with one exception. A category 2 watermain break (hole) occurred on November 5, 2021 within a 50 mm diameter main. An air gap was maintained throughout the repair, which took place on the same day as the break.			

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 Type	Legislative Requirement	
If there are stand alone distribution systems connected to this system, when prepared, has the donor provided an Annual Report to the receiver?	Legislative	SDWA O. Reg. 170/03 11 (2.1)	
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 Type	Legislative Requirement	
Do operators and maintenance personnel have ready access to operations and maintenance manuals?	Legislative	SDWA O. Reg. 128/04 28	
Observation			
Operators and maintenance personnel had ready access to operations and maintenance manuals. Operations and maintenance manuals, including the contingency plans for the Somerset/Knob Hill Distribution System are located at the pumphouse and at the Environmental Services office. Operators are aware of where the operations and maintenance manuals are located.			

Question ID	MRDW1063000		
Question	Question Type	Legislative Requirement	
For every required operational test and for every required sample, is a record made of the date, time, location, name of the person conducting the test and result of the test?	Legislative	SDWA O. Reg. 170/03 6-10 (1)	
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. Section 6-10 of Ontario Regulation 170/03 requires that the Owner of a drinking water system and the Operating Authority for the system shall ensure that, for every sample required by this Regulation, a record is made of the date and time the sample was taken, the location where the sample was taken, the name of the person who took the sample, and the result of the test where applicable. All required information was recorded during the inspection review period, either on the chain of custody form for samples submitted to an accredited laboratory, on the logsheets for the Somerset/Knob Hill Distribution System or in the person logs of operators, with one exception. A chlorine residual test conducted in the distribution system on September 3, 2021 did not include the name or initials of the Operator conducting the test, however it was possible through handwriting analysis to verify that a certified Operator conducted the test.			

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

Question ID	MRDW1059000		
Question	Question Type	Legislative Requirement	
Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and	Legislative	SDWA O. Reg. 128/04 28	

efficient operation of the system?		
Observation		
<p>The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system. In December 2021, the Operating Authority undertook a review and performed revisions of the Operations and Maintenance Manuals for the Somerset/Knob Hill Distribution System. The revisions were performed to ensure that the procedures and information contained in the Manuals accurately reflected the activities performed by operators and the installed equipment. The Manual indicates that all adjustments or works undertaken on the system are to be incorporated into the Manual prior to work being completed and that the Operating Authority and all operators are to review the documents annually to ensure accuracy and familiarity with the content.</p>		

Question ID	MRDW1060000	
Question	Question Type	Legislative 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		
<p>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 16.2 of Schedule B of Municipal Drinking Water Licence 147-107 prescribes that the following must be contained within the Operations Manual:</p> <p>16.2.1 The requirements of this licence and associated procedures;</p> <p>16.2.2 The requirements of the drinking water works permit for the drinking water system;</p> <p>16.2.3 A description of the processes used to maintain secondary disinfection within the drinking water system.</p> <p>16.2.4 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;</p> <p>16.2.5 Procedures for the operation and maintenance of monitoring equipment;</p> <p>16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;</p> <p>16.2.7 Procedures for 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;</p> <p>16.3 Procedures necessary for the operation and maintenance of any alterations to the drinking water system shall be incorporated into the operations and maintenance manual or manuals prior to those alterations coming into operation.</p> <p>The Operations Manual for the Somerset/Knob Hill Distribution System appears to include the prescribed requirements. In addition, all manufacturer's manuals for equipment in use at the treatment facilities are retained for operator's reference and use.</p>		

Question ID	MRDW1061000	
Question	Question	Legislative

	Type	Requirement
Are logbooks properly maintained and contain the required information?	Legislative	SDWA O. Reg. 128/04 27 (1), SDWA O. Reg. 128/04 27 (2), SDWA O. Reg. 128/04 27 (3), SDWA O. Reg. 128/04 27 (4), SDWA O. Reg. 128/04 27 (5), SDWA O. Reg. 128/04 27 (6), SDWA O. Reg. 128/04 27 (7)

Observation

Logbooks were properly maintained and contained the required information. Section 27 of Ontario Regulation 128/04 requires the following:

- (1) The Owner or Operating Authority of a subsystem shall ensure that logs or other recordkeeping mechanisms are provided to record information concerning the operation of the subsystem.
- (2) Entries in the logs or other record-keeping mechanisms shall be made chronologically.
- (3) No person shall make an entry in a log or other record-keeping mechanism unless the person is an overall responsible operator, an operator-in-charge or is authorized to make an entry by the owner, the operating authority, the overall responsible operator or an operator-in-charge.
- (4) A person who makes an entry in a log or other record-keeping mechanism shall do so in a manner that permits the person to be unambiguously identified as the maker of the entry.
- (5) An operator-in-charge shall record the following information in the logs or other recordkeeping mechanisms in respect of each operating shift:
 1. The date, the time of day the shift began and ended and the number or designation of the shift.
 2. The names of all operators on duty during the shift.
 3. Any departures from normal operating procedures that occurred during the shift and the time they occurred.
 4. Any unusual or abnormal conditions that were observed in the subsystem during the shift, any action that was taken and any conclusions drawn from the observations.
 5. Any equipment that was taken out of service or ceased to operate during the shift and any action taken to maintain or repair equipment during the shift.

Logbooks are maintained for the Somerset/Knob Hill Distribution System. Operators on duty are indicated on the logsheets. Operators record notes on the log sheets, such as explanations of any maintenance activities.

Question ID	MRDW1062000	Question	Question Type	Legislative Requirement
		Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring	Legislative	SDWA O. Reg. 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. Subsection 7-5 (1) of Schedule 7 of Ontario Regulation 170/03 prescribes that chlorine residual tests not performed by continuous monitoring equipment must be conducted by a certified operator or water quality analyst. A review of records indicated that manual chlorine residual tests undertaken during the inspection review period were conducted by certified operators.		

Question ID	MRDW1071000	
Question	Question Type	Legislative Requirement
Has the owner provided security measures to protect components of the drinking water system?	BMP	Not Applicable
Observation		
The owner had provided security measures to protect components of the drinking water system. The three sampling stations are kept locked. Periodic checks are done of the watermain running through the Severn River.		

Question ID	MRDW1072000	
Question	Question Type	Legislative Requirement
Has the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in their system?	BMP	Not Applicable
Observation		
The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system. All service connections to the Somerset/Knob Hill Distribution System are outfitted with water meters. The Owner is moving towards billing that is more weighted to consumption than a base rate for delivery. The Owner has a Bylaw to regulate the supply of water, including restrictions for lawn watering and non-domestic water use.		

Question ID	MRDW1073000	
Question	Question Type	Legislative Requirement
Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?	Legislative	SDWA O. Reg. 128/04 23 (1)
Observation		
The overall responsible operator has been designated for each subsystem. Subsection 23 (1) of Ontario Regulation 128/04 prescribes that a municipal residential drinking water system must have a designated overall responsible operator (ORO). The ORO shall be an		

operator who holds a certificate for that type of subsystem and that is of the same class or higher than the class of that subsystem. The Somerset/ Knob Hill Distribution System is classified as a Water Distribution Class I subsystem. At the time of the inspection the Overall Responsible Operator was designated for the subsystem.

Question ID	MRDW1074000	
Question	Question Type	Legislative Requirement
Have operators in charge been designated for all subsystems for which comprise the drinking water system?	Legislative	SDWA O. Reg. 128/04 25 (1)
Observation		
Operators-in-charge had been designated for all subsystems which comprised the drinking water system. Subsection 25 (1) of Ontario Regulation 128/04 prescribes that one or more operators shall be designated as operators-in-charge (OIC) of the drinking water system. Subsection 25 (5) states that a person who holds an operator-in-training certificate shall not be designated as an OIC. Duties of an OIC are laid out in section 26 of Ontario Regulation 128/04. Operators in charge have been designated for the Water Distribution Class I subsystem.		

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. Section 22 of Ontario Regulation 128/04 prescribes that the owner or Operating Authority of a subsystem shall ensure that every operator employed in the subsystem holds, (a) a certificate applicable to that type of subsystem; or (b) a certificate applicable to that subsystem, in the case of an operator who holds a conditional certificate issued or renewed under section 10. It appears that all operators employed in the subsystems hold an appropriate certificate.		

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 showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03). The standards for drinking water quality in Ontario are prescribed in Ontario Regulation 169/03 "Ontario Drinking Water Quality Standards". 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".
Results of sampling conducted during this inspection review period met the microbiological and chemical requirements of the ODWQS.

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 of Schedule 13 of Ontario Regulation 170/03 requires that the owner of a drinking water system that provides chlorination or chloramination and the Operating Authority for the system shall ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water system's distribution system, or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of haloacetic acids (HAA), and have the samples tested for haloacetic acids. The requirement to sample for HAA came into effect on January 1, 2017. The standard for HAA as a reportable limit came into effect on January 1, 2020. During the inspection review period, samples were collected from the Somerset/Knob Hill Distribution System distribution system on the following dates and submitted to an accredited laboratory for analysis of HAAs: May 5, 2020, August 12, 2020, November 19, 2020, February 9, 2021, May 12, 2021, August 4, 2021, and November 2, 2021. The requisite number of samples were collected throughout the inspection review period with at least one sample being taken in each calendar quarter.		

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
<p>All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. Subsections 13-6 (1) and (2) of Schedule 13 of Ontario Regulation 170/03 prescribes that the owner/Operating Authority of a drinking water system that provides chlorination shall ensure at least one distribution system sample is taken in each calendar quarter, from a point in the drinking water system's distribution system, or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of trihalomethanes and have that sample tested for trihalomethanes (THMs).</p> <p>During the inspection review period, samples were collected from the Somerset/Knob Hill Distribution System distribution system on the following dates and submitted to an accredited laboratory for analysis of THMs: May 5, 2020, August 12, 2020, November 19, 2020, February 9, 2021, May 12, 2021, August 4, 2021, and November 2, 2021. The requisite number of samples were collected throughout the inspection review period with at least one sample being taken in each calendar quarter.</p>

Question ID	MRDW1095000	
Question	Question Type	Legislative Requirement
Have all lead sampling requirements prescribed by Schedule 15.1 of O.R. 170/03 been met?	Legislative	SDWA O. Reg. 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.

		<p>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)</p>
<p>Observation</p>		
<p>All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met. The Somerset/Knob Hill Distribution System has met the requirements to be eligible for reduced sampling under section 15.1-5 (10) of Schedule 15.1 of Ontario Regulation 170/03. As such, one distribution sample is required to be sampled in each winter and summer period (December 15 to April 15, and June 15 to October 15), and be tested for total alkalinity and for pH. Lead needs to be tested for in winter and summer in every third 12-month period. Samples analyzed for total alkalinity, pH, and lead were collected by the Operating Authority within the predefined sampling periods as required. Lead sampling was last conducted in the distribution</p>		

system in 2019.

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. During the inspection review period, free chlorine residual tests were conducted at the same time and location that treated and distribution system samples were collected for microbiological analysis, as required by subsection 6-3(1) of Schedule 6 of Ontario Regulation 170/03.		

Question ID	MRDW1098000	
Question	Question Type	Legislative Requirement
Has the owner indicated that the required records are kept and will be kept for the required time period?	Legislative	SDWA O. Reg. 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 Type	Legislative Requirement
Did any reportable adverse/exceedance conditions occur during the inspection period?	Information	Not Applicable
Observation		
There were no reportable adverse/exceedances during the inspection period.		

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

change. Section 10.1 (3) of Ontario Regulation 170/03 requires that if there is any change to the information given to the Director under subsection (1) or (2), the owner of the drinking water system shall give the Director written notice of the change within 10 days of the change. On September 1, 2020, the Operating Authority submitted an updated system profile to notify the Director of the new Operating Authority (OCWA), as required.

Question ID	MRDW1110000	
Question	Question Type	Legislative Requirement
Was an Annual Report containing the required information prepared by February 28 of the following year?	Legislative	SDWA O. Reg. 170/03 11 (6)
Observation		
<p>The Annual Report containing the required information was prepared by February 28th of the following year. Section 11 of Ontario Regulation 170/03 requires that a small municipal residential system prepare an annual report that covers the period from January 1 to December 31 in a year and must be prepared not later than February 28 of the following year. The annual report must,</p> <ul style="list-style-type: none"> (a) Contain a brief description of the drinking water system, including a list of water treatment chemicals used by the system during the period covered by the report; (b) Summarize any reports made to the Ministry under subsection 18 (1) of the Act or section 16-4 of Schedule 16 during the period covered by the report; (c) Summarize the results of tests required under this Regulation, or under an approval, municipal drinking water licence or order, including an OWRA order, during the period covered by the report and, if tests required under this Regulation in respect of a parameter were not required during that period summarize the most recent results of that parameter; (d) Describe any corrective actions taken under Schedule 17 or 18 during the period covered by the report; (e) Describe any major expenses incurred during the period covered by the report to install, repair or replace equipment; (f) In the case of a large municipal residential system or a small municipal residential system, include a statement of where a report prepared under Schedule 22 will be available for inspection under subsection 12 (4); and (g) In the case of a large municipal residential system, small municipal residential system or non-municipal year-round residential system, specify the number of points sampled during the periods described in subsection 15.1-4 (2) or subsection 15.1-5 (5) of Schedule 15.1 to the Regulation, the number of samples taken, and the number of points where a sample exceeded the prescribed standard for lead during those periods. <p>The annual report was reportedly posted on the Township of Ramara website on February 26, 2021. The annual report contains the required information.</p>		

Question ID	MRDW1082000	
Question	Question Type	Legislative Requirement
Are all microbiological water quality monitoring requirements for distribution samples prescribed by	Legislative	SDWA O. Reg. 170/03 11-2

legislation being met?		(1),SDWA O. Reg. 170/03 11-2 (2),SDWA O. Reg. 170/03 11-2 (6)
<p>Observation</p> <p>All microbiological water quality monitoring requirements for distribution samples prescribed by legislation were being met. Subsection 11-2 of Schedule 11 of Ontario Regulation 170/03 requires that the owner of a small municipal residential drinking water system and the operating authority for the system shall ensure that at least one distribution sample is taken every two weeks, if the system provides treatment equipment in accordance with Schedule 1 or 2 and the equipment is operated in accordance with that Schedule. The owner of the drinking water system and the operating authority for the system shall ensure that each of the samples taken is tested for Escherichia coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic plate count (HPC), as Somerset/ Knob Hill Distribution System has secondary disinfection. Records provided by the Operating Authority and reviewed during the course of this inspection indicate that the Operating Authority took the appropriate number of samples and tested for the requisite parameters during the inspection review period.</p>		

Question ID	MRDW1111000	
Question	Question Type	Legislative Requirement
Have Summary Reports for municipal council been completed on time, include the required content, and distributed in accordance with the regulatory requirements?	Legislative	SDWA O. Reg. 170/03 22-2 (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)
<p>Observation</p> <p>Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements. Section 22-2 (1) of Schedule 22 of Ontario Regulation 170/03 requires that the owner of a drinking water system shall ensure that, not later than March 31 of each year after 2003, a report prepared in accordance with subsections (2) and (3) for the preceding calendar year and is given to, (a) In the case of a drinking water system owned by a municipality, the members of the municipal council.</p> <p>(2) The report must, (a) list the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and (b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure.</p> <p>(3) the report must also include the following information for the purpose of enabling the owner of the system to assess the ability of the system to meet existing and planned uses of the system:</p> <p>1. A summary of the quantities and flow rates of the water supplied during the period covered by</p>		

the report, including monthly average and maximum daily flows.

2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement.

A report was prepared for the Township of Ramara municipal council that contained the required information, within the required timeline.