

**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*



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January 19, 2022

Town of Wasaga Beach
30 Lewis Street
Wasaga Beach, Ontario
L9Z 1A1

Attention: Mr. George Vadeboncoeur - Chief Administrative Officer, CAO

**Re: Drinking Water System Inspection Report - Wasaga Beach Drinking Water System
(220002137)**

Please find enclosed the Ministry of the Environment, Conservation and Parks Inspection Report for the Wasaga Beach Drinking Water System (Drinking Water System # 220002137) inspection. The compliance assessment took place on September 14, 2021.

The primary focus of this inspection was to confirm compliance with Ministry of the Environment, Conservation and Parks legislation and control documents, as well as conformance with Ministry drinking water related policies for the inspection period. The Ministry is implementing a rigorous and comprehensive approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as water system management practices.

Section 9 of the Safe Drinking Water Act (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils" found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater.

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), included as Appendix A of the inspection report, 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. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspector's Annual Report.

Please note that as of June 29, 2018 the Ministry of the Environment and Climate Change's name has changed to the Ministry of the Environment, Conservation and Parks. This name change will take some time to be reflected in ministry materials and systems.

If you have any questions or concerns regarding the rating, please contact Sheri Broeckel, Drinking Water Program Supervisor, at 705-716-3712.

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

Sincerely,

A handwritten signature in black ink, appearing to be 'DH' followed by a long horizontal line.

Darren Haines
Drinking Water Inspector/ Provincial Officer
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CC Simcoe Muskoka District Health Unit (water@smdhu.org)
Christina Weider, Simcoe Muskoka District Health Unit
Kevin Lalonde, Town of Wasaga Beach, Director of Public Works
Richard Eagle, OCWA, Operations Manager
Kristen Tilotta, OCWA, Process Compliance Technician
Barrie District Office File, Ministry of the Environment, Conservation and Parks



WASAGA BEACH DRINKING WATER SYSTEM
700 VETERANS WAY, WASAGA BEACH, ON, L0L 2P0

Inspection Report

System Number:	220002137
Inspection Start Date:	09/14/2021
Inspection End Date:	01/14/2022
Inspected By:	Darren Haines
Badge #:	759

(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. On September 8, 2021, the Ministry conducted an announced inspection of the Wasaga Beach drinking water system (DWS# 220002137). The Wasaga Beach DWS services the Town of Wasaga Beach and is classified as a Large Municipal Residential drinking water system. The Town of Wasaga Beach Public Works Department holds responsibility for the water distribution system while the treatment works and elevated tanks are the responsibility of OCWA.</p> <p>The Town of Wasaga Beach currently obtains its water supply from two well fields; the Powerline Road Well Field and the Jenetta Street Well Field, each with an associated structure housing treatment equipment. The Powerline Road facility has a capacity of 15,707 m³/day with four drilled groundwater wells. Treatment processes at this facility include a sodium hypochlorite disinfection system and a sodium silicate iron sequestration system. An in-ground 3405 m³ reservoir and a back-up diesel generator are also provided at this facility. The Jenetta Street facility has a capacity of 15,707 m³/day with three drilled groundwater wells. Treatment processes at this facility include a sodium hypochlorite disinfection system and a sodium silicate iron sequestration system. A 400 kW diesel back-up generator is provided.</p> <p>Both the Powerline Road pump house and the Jenetta Street pump house were visited by the Ministry as part of this inspection.</p> <p>The inspection review period for this report is from September 9, 2020 to September 8, 2021. During this review period, the Owner operated under Municipal Drinking Water License 131-101 and Drinking WaterWorks Permit 131-201 and is also subject to the regulatory requirements of the Safe Drinking Water Act and the Drinking Water Systems Regulation 170/03.</p> <p>This report includes a compliance review of both the License and Permit for the Wasaga Beach</p>		

DWS.

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

Question ID	MRDW1007000	
Question	Question Type	Legislative Requirement
Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?	Legislative	SDWA O. Reg. 170/03 1-2 (1)
Observation		
The owner was maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials. On the Wasaga Beach DWS, the Powerline production Wells #1, Well #2, Well #3, and Well #4 are within the pumphouse. The Jenetta production Well #1, Well #2 and Well #3 are all contained within the Jenetta pump house. At the time of the inspection, it appeared that the Owner was maintaining all of the production wells in a sufficient manner in order to prevent the entry of surface water and other foreign materials.		

Question ID	MRDW1009000	
Question	Question Type	Legislative Requirement
Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
Measures were in place to protect the groundwater and/or GUDI source in accordance with any the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA. Drinking Water Works Permit #131-201 and Drinking water Works License #131-101 do not stipulate any specific conditions in order to protect the groundwater wells for the Wasaga Beach DWS. An excerpt from the Wasaga Beach 2015 raw water assessment report dated January 2015, states that the Nottawasaga Valley Source Protection Area Approved Assessment Report was completed with Chapter 17 covering the Town of Wasaga Beach Drinking Water Supply System. This report examined the wellhead protection area and assessed groundwater vulnerability with the intent of identifying any drinking water issues. To quote from this report "No Drinking Water Issues were identified for the Wasaga Beach		

municipal water supply system."

Question ID	MRDW1014000	
Question	Question Type	Legislative 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)
Observation		
<p>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. Schedule C, Section 2.0 of Municipal Drinking Water Licence# 131-101, issued on 3/23/2016, requires continuous flow measurement and recording of the flow rate and daily volume of water flowing into and from the treatment systems at both the Powerline Road Pump house and Jenetta Street Pump house locations.</p> <p>To capture flow data, the Owner has installed mechanical flow measuring devices on both the lines from the raw water into the treatment system and the treatment system into the distribution system at both the Jenetta and Powerline pump houses. All flows from the Jenetta and Powerline pump houses are recorded and monitored by the Operating Authority and were provided to the Ministry as part of this inspection.</p>		

Question ID	MRDW1016000	
Question	Question Type	Legislative Requirement
Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
<p>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. Section 1 of Schedule C of Drinking Water Licence# 131-101, issued on 3/23/2016 provides the rated capacity of 20,943 m3/day for the Powerline facility and 15,707 m3/day for the Jenetta facility. Permit To Take Water (PTTW)# 8041-BFHJV2 issued to the Owner for the Wasaga Beach DWS on September 20, 2019, restricts water taking to a maximum of 31,415,040L per day from the combined seven raw water wells (Powerline road and Jenetta pump houses).</p> <p>Based on flow records provided to the Ministry by the Operating Authority, for the Wasaga Beach DWS, none of the above stated maximum flow rate parameters for the above noted authorizing documents, were exceeded during the inspection review period.</p>		

Question ID	MRDW1030000	
Question	Question Type	Legislative Requirement
Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the	Legislative	SDWA O. Reg. 170/03 7-2 (1), SDWA O. Reg.

intended CT has just been achieved?		170/03 7-2 (2)
Observation		
<p>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. The Owner has installed, at both the Powerline Road and Jenetta pump house, a free chlorine residual analyzer which is supplied with continuous samples taken from a point where the intended contact time has just been completed for primary disinfection purposes. Both analyzers are linked via a Programmable Logic Controller (PLC) to the Supervisory Control and Data Acquisition (SCADA) system for monitoring and alarming purposes. Additional pre and post contact time analyzers are installed at both treatment facilities to provide an advance warning of potential disinfection issues.</p>		

Question ID	MRDW1033000	
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)
Observation		
<p>The secondary disinfectant residual was measured as required for the distribution system. Secondary disinfection residual sampling and testing is being performed by continuous monitoring equipment located at the Wasaga Beach Wastewater Treatment Plant (30 Woodland Drive). The Owner and Operating Authority staff also utilize handheld colourimeters to perform tests within the distribution system and perform comparisons for calibration of the on-line analyzers several times each week.</p>		

Question ID	MRDW1037000	
Question	Question Type	Legislative Requirement
Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg.170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?	Legislative	SDWA O. Reg. 170/03 6-5 (1) 1-4,SDWA O. Reg. 170/03 6-5 (1)5-10,SDWA O. Reg. 170/03 6-5 (1.1)
Observation		
<p>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 Operating Authority utilizes continuous analyzers to monitor chlorine residuals for primary and secondary disinfection as well as turbidity on the Wasaga Beach DWS. These analyzers are linked to the Owner's SCADA system for monitoring and alarming purposes. Should continuous monitoring equipment generate a measurement of results above or below the prescribed set point,</p>		

the continuous monitoring equipment malfunctions, or if there is a loss of power to the continuous monitoring equipment, an alarm is sounded, the well pumps are locked out and the on-duty Operator notified.
Documents provided to the Ministry by the Operating Authority indicated that continuous monitoring equipment alarms are regularly tested and the results documented on the daily sheets and in the pumphouse logbook.

Question ID	MRDW1038000	
Question	Question Type	Legislative Requirement
Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?	Legislative	SDWA O. Reg. 170/03 6-5 (1) 1-4
Observation		
Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.		

Question ID	MRDW1035000	
Question	Question Type	Legislative 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. Based on documents given to the Ministry by the Operating Authority for this inspection, they indicate that Operators examine continuous monitoring test results within 72 hours after the test is conducted and make a note of this review within a log sheet maintained at the Jenetta Street and Powerline Road facilities. Specifically, Operators note minimum, average and maximum readings of chlorine residual and turbidity at the Powerline Road location as well as chlorine at the distribution system analyzer located at the Water Pollution Control Plant.		

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

		Reg. 170/03 6-5 (1)5-10
Observation		
<p>All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation. Documents provided by the Operating Authority for the Wasaga Beach DWS indicated that they perform a weekly maintenance check and calibration on all the Free chlorine analyzers. Annual calibrations of the analyzers are performed by an external contractor in accordance with the operations manual procedure and manufacturer's manual. Monthly verification records for all handheld colourimeters used by the Operating Authority, which are used to perform weekly calibrations on all chlorine analyzers, were provided as part of this inspection.</p>		

Question ID	MRDW1108000	
Question	Question Type	Legislative Requirement
Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by Regulation 170, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?	Legislative	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		
<p>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. Logbooks that were provided by the Operating Authority were reviewed where the Operator (or the on-call Operator if the call was received after hours) responded to alarm calls during the review period. In all cases, the Operator/On-call Operator responded in a timely manner and took the appropriate actions. The Operating Authority does have a written procedure for responding to alarms which is found within their Emergency and Contingency plan.</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. All equipment that is identified in Schedule A and C of Drinking Water Works Permit 131-101, issued to the Owner for the Wasaga Beach DWS, has been installed. The Owner stated during the course of this inspection that no new treatment equipment has been installed, besides what was stated on their Form 1,2 or 3 and no alterations have been made to the Wasaga Beach DWS during the inspection review period.</p>		

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Question ID	MRDW1021000	
Question	Question Type	Legislative Requirement
Is the owner/operating authority able to demonstrate that, when required during the inspection period, Form 2 documents were prepared in accordance with their Drinking Water Works Permit?	Legislative	SDWA 31 (1)
Observation		
<p>The owner/operating authority was in compliance with the requirement to prepare Form 2 documents as required by their Drinking Water Works Permit during the inspection period. The Operating Authority submitted two Form 2 submissions during the review period for the Wasaga Beach DWS. Form 2 submissions included the existing Free Chlorine Distribution Chart Recorder to be replaced with an E&H Digital Multi Unit; the existing ABB turbidimeter to be replaced with a like-for-like, newer model ABB turbidimeter; the Reservoir Ultrasonic Meter to be replaced with a like-for-like, newer model Ultrasonic Meter and General Control System upgrades. The diesel fuel storage tanks at both pumphouses were also upgraded in order to support a required TSSA upgrade.</p>		

Question ID	MRDW1023000	
Question	Question Type	Legislative Requirement
Do records indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?	Legislative	SDWA O. Reg. 170/03 1-2 (2)
Observation		
<p>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. Section 1-3 of Schedule 1 Ontario Regulation (O.Reg.) 170/03 requires the Owner of a drinking water system that obtains water from a raw water supply that is ground water to ensure provision of water treatment equipment that is designed to be capable of achieving, at all times, primary disinfection in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario, including at least 99 per cent (2.0-log) removal or inactivation of viruses by the time water enters the distribution system. This is the case for the treatment train comprising the Wasaga Beach drinking water system.</p> <p>To satisfy these requirements, the Owner/Operating Authority has installed free available chlorine residual chemical disinfection systems, and employs the CT disinfection concept to quantify the capability of the chemical disinfection system and ensure the provision of effective pathogen inactivation for primary disinfection purposes.</p> <p>Documents viewed and observations made indicate that the primary disinfection treatment equipment was being operated in compliance with Schedule 1 of O.Reg.170/03.</p>		

Specifically, disinfectant contact time required for the CT concept is provided in a dedicated baffled reservoir as is the case with the Powerline facility or a dedicated water main for Jenetta prior to the conveyance of drinking water to users connected to the distribution system.

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		
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. During the review of records provided by the Owner, it was found that during the inspection review period, that all of the free chlorine residuals obtained by system operators within the Wasaga Beach distribution system, had residuals above 0.05 mg/L. Secondary disinfectant residuals are monitored by the Owner through the use of continuous chlorine analyzers, which are linked to the Owner's SCADA system and through the collection of weekly distribution chlorine residuals obtained by system operators.		

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		
All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit. The Owner, who operates the distribution system for the Wasaga Beach DWS, provided documents (microbiological sample results and chlorine residuals) to the Ministry which showed that they followed all AWWA standards for new and repaired water-mains during the review period.		

Question ID	MRDW1062000	
Question	Question Type	Legislative Requirement
Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O.	Legislative	SDWA O. Reg. 170/03 7-5

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. Only adequately certified operators are employed by the Operating Authority to operate the Wasaga Beach drinking water system. These operators conduct all of the operational tests, record all of the results obtained, make all of the log entries, and collect all of the required samples to be sent to the appropriate accredited laboratory.		

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

Question ID	MRDW1071000	
Question	Question 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. Both the Powerline Road and Jenetta pump houses are locked and equipped with an intrusion alarm. Both pump houses are generally visited on a daily basis by operational staff. All other monitoring stations and sample stations within the Wasaga Beach distribution system are locked to prevent unauthorized access. Access to all locked premises is restricted solely to the Owner/Operating Authority's water system operators.		

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. The Overall Responsible Operators have been designated by the operating authority (treatment system) and the Owner (Distribution system), who have an overall operational responsibility for the Wasaga Beach drinking water system. Both ORO's are in possession of an operator's certificate to match the classification of the facility. The Operating Authority/Owner have		

formally designated an Overall Responsible Operator (ORO) with the provision of a back-up ORO in the event the designated ORO is unable to act.

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.		

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. Both the Owner and the Operating Authority provided Operator Certificates to the Ministry as part of this inspection. All Operator Certificates provided by the Owner and the Operating Authority were valid and current.		

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

Question ID	MRDW1099000	
Question	Question Type	Legislative Requirement
Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg.. 169/03)?	Information	Not Applicable
Observation		
Records 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 Owner/Operating Authority did not report any AWQI's for any exceedences of any Reg 169/03 values for the Wasaga Beach DWS during the review period.		

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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. A review of the Wasaga Beach DWS records provided by the Owner for the inspection period found that each time a microbiological sample was taken by the Owner/Operating Authority in the distribution system or at the pump house, a corresponding chlorine residual was also obtained. All of the in-house monitoring and sampling information that the Operating Authority undertakes for the Wasaga Beach DWS is recorded on a monthly data spreadsheet as well as on the sample submission sheet.		

Question ID	MRDW1081000	
Question	Question Type	Legislative 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)
Observation		
<p>All microbiological water quality monitoring requirements for distribution samples were being met. Subsection 10-2 of Schedule 10 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system to collect at a minimum 8 microbiological samples within the distribution system plus one additional sample for every 1000 people served on a monthly basis; with at least one distribution sample taken each week. Subsection 10- 2 further stipulates that each of the distribution samples collected are tested for Escherichia coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic plate count, if subsection 2-5 (1) of Schedule 2 applies to the system, as is the case for the Wasaga Beach drinking water system.</p> <p>Records provided and reviewed in the course of this inspection indicate that the Operating Authority has complied with these sampling requirements as stated above. Documents indicate that typically 8 distribution water samples were obtained and tested once per week of which at least two of these samples were additionally tested for Heterotrophic Plate Count (HPC) in addition to Escherichia Coli and Total Coliform bacteria.</p>		

Question ID	MRDW1083000	
Question	Question	Legislative

	Type	Requirement
Are all microbiological water quality monitoring requirements for treated samples being met?	Legislative	SDWA O. Reg. 170/03 10-3
Observation		
<p>All microbiological water quality monitoring requirements for treated samples were being met. Subsection 10-3 of schedule 10 of O. Reg. 170 requires that the Owner and the operating authority of a large municipal residential DWS such as the Wasaga Beach DWS, ensure that a water sample is taken at least once every week from the point at which water enters the distribution system. The Owner and operating authority are required to ensure that each of these samples are tested for E.coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic plate count. Records reviewed for this inspection indicate that the Owner/Operating Authority has complied with these requirements. Documents indicate that treated water point of entry locations (Powerline Road and Jenetta) are sampled and tested once per week and tested for Escherichia coli, total coliforms, and general bacteria population expressed as colony counts on a heterotrophic plate count.</p>		

Question ID	MRDW1084000	Question	Question Type	Legislative Requirement
		Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	SDWA O. Reg. 170/03 13-2
Observation				
<p>All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Section 13-2 of Schedule 13 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system to ensure that at least one water sample is taken every 36 months if the system obtains water from a raw water supply that is ground water, such is the case for the Wasaga Beach drinking water system, and have those samples tested for every parameter set out in Schedule 23. The Operating Authority obtained Inorganic sample analysis for the Wasaga Beach DWS on January 28, 2021. The Operating Authority did not report any AWQI's as a result of these samples.</p>				

Question ID	MRDW1085000	Question	Question Type	Legislative Requirement
		Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	SDWA O. Reg. 170/03 13-4 (1),SDWA O. Reg. 170/03 13-4 (2),SDWA O. Reg. 170/03 13-4 (3)
Observation				

All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Section 13-4 of Schedule 13 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system to ensure that at least one water sample is taken every 36 months if the system obtains water from a raw water supply that is ground water, such is the case for the Wasaga Beach drinking water system, and have those samples tested for every parameter set out in Schedule 24. The Operating Authority obtained Organic sample analysis for the Wasaga Beach DWS on January 28, 2021. The Operating Authority did not report any AWQI's as a result of these samples.

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		
<p>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 requires the owner of a drinking water system that provides chlorination or chloramination and the operating authority for the system to ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water systems 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. The owner of the drinking water system and the operating authority for the system shall also ensure that each of the samples taken under subsection (1) is tested for haloacetic acids.</p> <p>The Operating Authority conducted this required Haloacetic acid monitoring on October 14, 2020, January 28, 2021, April 27, 2021 and July 21, 2021. No HAA AWQI's were reported by the Owner/Operating Authority as a result of those samples.</p>		

Question ID	MRDW1087000	
Question	Question Type	Legislative Requirement
Have all trihalomethane water quality monitoring	Legislative	SDWA O. Reg.

requirements prescribed by legislation been conducted within the required frequency and at the required location?		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. Section 13-6 of Schedule 13 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system, such as the Wasaga Beach drinking water system, 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 (THM's), and tested for Trihalomethanes.</p> <p>The Operating Authority conducted this required monitoring on October 14, 2020, January 28, 2021, April 27, 2021 and July 21, 2021.</p> <p>The THM running annual average was below the THM standard of 100ug/L as set out in the ODWQS.</p>		

Question ID	MRDW1088000	
Question	Question Type	Legislative Requirement
Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?	Legislative	SDWA O. Reg. 170/03 13-7
Observation		
<p>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 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system, such as the Wasaga Beach drinking water system, to ensure that at least one distribution sample is taken every 3 months and no more than 120 days from the date of the last sample for Nitrates/Nitrites.</p> <p>The Operating Authority conducted this required monitoring on October 14, 2020, January 28, 2021, April 27, 2021 and July 21, 2021. All of the Nitrate/Nitrite results provided to the Ministry by the Operating Authority were below the standard of 10 mg/L as set out in the ODWQS.</p>		

Question ID	MRDW1089000	
Question	Question Type	Legislative Requirement
Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	SDWA O. Reg. 170/03 13-8
Observation		
<p>All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Sections 13-8 of Schedule 13 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system, such as the Wasaga Beach drinking water system, to ensure that at least one water sample is taken every 60 months and tested for Sodium. The Owner/Operating Authority last conducted Sodium</p>		

sampling on July 3, 2018. The result of the Sodium sample was within the prescribed limits for Sodium. The Owner is not required to conduct Sodium sampling again until July 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
Observation		
All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Section 13-9 of Schedule 13 Ontario Regulation 170/03 requires the Owner and the operating authority of a large municipal residential drinking water system, such as the Wasaga Beach drinking water system to ensure that at least one water sample is taken every 60 months and tested for Fluoride. The Owner last conducted Fluoride sampling on July 3, 2018. The result of the Fluoride sample was within the prescribed limits for Fluoride. The Owner is not required to obtain a Fluoride sample again until July 2023.		

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. The Owner/Operating Authority did not report any AWQI's for the Wasaga Beach DWS during the review period.		

Question ID	MRDW1117000	
Question	Question Type	Legislative Requirement
Are there any other DWS related items that should be recognized in this report?	Information	Not Applicable
Observation		
The following items are noted as being relevant to the Drinking Water System: The Operating Authority advised the Ministry of two notifications of non compliance for the Wasaga Beach DWS during the inspection review period. The first notification of non compliance was for the temporary loss of post chlorine monitoring at the Jenetta pump house. On August 18, 2021 at approximately 940hrs the Jenetta post-Cl2 Analyzer was undergoing calibrations and had been placed in "Calibration Mode". Operations staff did not complete the calibration process, which locked in the current reading until it was discovered on August 19th at 1155hrs. The reading before the calibration was 1.36 mg/L and 1.66 mg/L once restored; during this period no chlorine related alarms were triggered. The pre-chlorine		

analyzer remained active during this time and did not lower past 2.53 mg/L. As well, the 24/7 distribution Cl2 monitoring at the Wasaga Beach WWTP maintained an adequate chlorine residual throughout the incident.

Corrective actions taken by the Operating Authority included; Normal functions were immediately restored upon discovery; OCWA is exploring the option to have "Calibration Mode" have a timeout such that it is restored to normal functions after a set period and refreshers have been given to Operations staff on calibration procedures.

The second notification of non compliance was that upon the Operator reviewing their monthly data checks, that both Turbidity and Raw Water Well levels were taken outside of the monthly requirement of 20 to 40 days at both the Powerline Road and Jenetta pump house locations. These readings were obtained 41 and 42 days respectively.

Corrective actions taken by the Operating Authority includes; the Work Order being altered to provide additional information on timelines of completion.

- The Work Order will now generate on a timeline of 20 days after the previous was completed instead of generated on the 1st of the month to be more "up front" about reminding the Operator that the time sensitive aspect has begun.

- The Work Order has been altered to include a descriptor "Must be completed in 20d"

- The Work Order will be marked in red to highlight it needs to be completed in a timely manner

- A new "portlet" is being made, currently in testing, that will summarize all time-sensitive Work Orders for the Operations staff.

No further actions were recommended by the Ministry and no further notifications of non compliance in regards to these issues have been reported by the Operating Authority.

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 efficient operation of the system?	Legislative	SDWA O. Reg. 128/04 28
Observation		
The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system. The Operating Authority's Operations & Maintenance manuals for the Wasaga Beach DWS that were reviewed as part of this inspection, appear to provide sufficient information/guidance for the safe and efficient operation of the Wasaga Beach DWS. Operations and Maintenance Manuals are updated on a regular basis as required.		

Question ID	MRDW1061000	
Question	Question Type	Legislative Requirement

<p>Are logbooks properly maintained and contain the required information?</p>	<p>Legislative</p>	<p>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)</p>
<p>Observation</p>		
<p>Logbooks were properly maintained and contained the required information.</p>		

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

DWS Name: WASAGA BEACH DRINKING WATER SYSTEM
DWS Number: 220002137
DWS Owner: CORPORATION OF THE TOWN OF WASAGA BEACH
Municipal Location: WASAGA BEACH

Regulation: O.REG. 170/03
DWS Category: DW Municipal Residential
Type of Inspection: Focused
Inspection Date: Sep-14-2021
Ministry Office: Barrie District Office

Maximum Risk Rating: 458

Inspection Module	Non Compliance Rating
Source	0 / 14
Capacity Assessment	0 / 30
Treatment Processes	0 / 193
Operations Manuals	0 / 28
Logbooks	0 / 18
Certification and Training	0 / 42
Water Quality Monitoring	0 / 112
Reporting & Corrective Actions	0 / 21
Overall - Calculated	0 / 458

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: WASAGA BEACH DRINKING WATER SYSTEM
DWS Number: 220002137
DWS Owner Name: CORPORATION OF THE TOWN OF WASAGA BEACH
Municipal Location: WASAGA BEACH

Regulation: O.REG. 170/03
DWS Category: DW Municipal Residential
Type of Inspection: Focused
Inspection Date: Sep-14-2021
Ministry Office: Barrie District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 458

Inspection Risk Rating: 0.00%

FINAL INSPECTION RATING: 100.00%