

**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

Région du Centre

Barrie District Office
1201-54 Cedar Pointe Drive
Barrie ON L4N 5R7
Tel: (705) 739-6441
Toll Free: 1-800-890-8511
Fax: (705) 739-6440

Bureau du district de Barrie
1201-54 chemin Cedar Pointe
Barrie ON L4N 5R7
Téléphone: (705) 739-6441
Sans frais: 1-800-890-8511
Télec: (705) 739-6440

February 23, 2024
Town of Wasaga Beach
30 Lewis Street
Wasaga Beach, Ontario
L9Z 1A1

Attention: Mr. Andrew McNeill - 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 January 10, 2024.

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.

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 'DL' followed by a long horizontal stroke.

Darren Haines
Drinking Water Inspector/ Provincial Officer
Ministry of the Environment, Conservation and Parks
Barrie District Office
(705) 733-4513 (cell)
(705) 739-6350 (Fax)
darren.haines@ontario.ca

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
Angela Pauze, 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
Entity: ONTARIO CLEAN WATER
AGENCY
CORPORATION OF THE TOWN
OF WASAGA BEACH
Inspection Start Date: January 10, 2024
Inspection End Date: February 23, 2024
Inspected By: Darren Haines
Badge #: 759

(signature)

INTRODUCTION

Purpose

This unannounced, focused inspection was conducted to confirm compliance with Ministry of the Environment, Conservation and Parks' (MECP) legislation and conformance with ministry drinking water policies and guidelines.

Scope

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 and the operation of the system. The inspection of the drinking water system included both the physical inspection of the component parts of the system listed in section 4 "Systems Components" of the report and the review of data and documents associated with the operation of the drinking water system during the review period.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements

Facility Contacts and Dates

The drinking water system is owned by the Town of Wasaga Beach. OCWA operates the treatment system portion of the Wasaga Beach DWS and obtains all regulatory samples within the distribution system. The Town of Wasaga Beach performs all other operational activities within the distribution system.

The system serves an estimated population of approximately 20,000 people and is categorized as a Large Municipal Residential System.

The inspection review period for this report is from November 15, 2022 to January 10, 2024.

The Ministry met with OCWA staff members Angela Pauze and Colin Kasperavicius as well as Town of Wasaga Beach staff members Kevin Lalonde, Dave Guarasci and Gerald Reu for this inspection.

Systems/Components

The following sites and systems were assessed as part of the inspection of the drinking water system:

Source

Wells 2,3 and 4 are located within a separate building at the powerline road pumphouse property. They rotate duty/standby on a weekly basis.

Jenetta Wells 1, 2 and 3 are located within the Jenetta pumphouse. They rotate duty/standby on a weekly basis.

Pumphouses

Powerline Road - The Powerline Road 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. An in-ground 3405 m³ reservoir and a back-up diesel generator are also provided at this facility.

Jenetta pumphouses - 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.

Water Towers - There is one elevated tower located on River Road West (Highway 92) approximately 980 meters North-East of Zoo Park Road. It is a steel spheroid tank, has an approximate height of 38.1 meters, 19.8 meters in width, and an approximate capacity of 2,812 cubic meters. There is another elevated tower located on Sunnidale Road which has a storage capacity of approximately 3000 cubic meters.

Permissions/Approvals

This drinking water system was subject to specific conditions contained within the following permissions and/or approvals at the time of the inspection in addition to the requirements of the SDWA and its regulations:

Drinking Water Works Permit: Permit Number 131-201

Municipal Drinking Water Licence: Licence Number 131-101

Permit to Take Water: 8041-BFHJV2, issued September 20, 2019 restricts water taking to 31,415,040L/per day from the combined six raw water wells (Powerline road and Jenetta pump houses).

NON-COMPLIANCE

This should not be construed as a confirmation of full compliance with all potential applicable legal requirements. 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.

RECOMMENDATIONS

This should not be construed as a confirmation of full conformance with all potential applicable 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: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	DWMR1000000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Does this drinking water system provide primary disinfection?			
Compliance Response(s)/Corrective Action(s)/Observation(s): This drinking water system provides for both primary and secondary disinfection and distribution of water.			

Question ID	DWMR1007000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (1);			
Question: Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 Well #2, Well #3, and Well #4 are within the pumphouse. The Jenetta production Wells#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	DWMR1009000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s):			

Measures were in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

Drinking Water Works Permit #131-201 and Drinking water Works Licence #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	DWMR1014000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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. 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's SCADA system. All flow data was provided to the Ministry as part of this inspection.			

Question ID	DWMR1016000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?			

Compliance Response(s)/Corrective Action(s)/Observation(s):

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 8/30/2022 provides the rated capacity of 15,707 m3/day for the Powerline facility and 15,707 m3/day for the Jenetta facility.

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.

Question ID	DWMR1018000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.			

Question ID	DWMR1025000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: 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?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.			

Question ID	DWMR1023000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Do records indicate that the treatment equipment was operated in a manner that achieved the			

design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?

Compliance Response(s)/Corrective Action(s)/Observation(s):

Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under O. Reg. 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.

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.

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.

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.

Question ID	DWMR1024000	Question Type	Legislative
Legislative Requirement(s):			
SDWA O. Reg. 170/03 1-2 (2);			
Question:			
Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s):			
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 and Operating Authority, 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/Operating Authority 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	DWMMR1033000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (3); SDWA O. Reg. 170/03 7-2 (4);			
Question: Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The secondary disinfectant residual was measured as required for the large municipal residential 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.			

Question ID	DWMMR1030000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (1); SDWA O. Reg. 170/03 7-2 (2);			
Question: Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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.			

Question ID	DWMMR1035000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Question:			

Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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 Owner and Operating Authority for this inspection, it was shown that Operators for both parties 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	DWMR1038000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4;			
Question: Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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	DWMR1037000	Question Type	Legislative
Legislative Requirement(s): 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);			
Question: Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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, 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.

Note: At the time of inspection, the Operating Authority put the continuous monitor at the Powerline pumphouse into alarm to verify to the Ministry that an alarm was generated. The Ministry confirmed that the alarm company sent a message to the OIC advising of the alarm condition.

Question ID	DWMR1040000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Question: Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 monthly calibrations on all the online chlorine analyzers and turbidity 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.			

Question ID	DWMR1108000	Question Type	Legislative
Legislative Requirement(s): 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);			
Question: Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off,			

did a qualified person respond in a timely manner and take appropriate actions?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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.

Question ID	DWMR1099000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03)?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg. 169/03).			

Question ID	DWMR1081000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10-2 (1); SDWA O. Reg. 170/03 10-2 (2); SDWA O. Reg. 170/03 10-2 (3);			
Question: For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a large municipal residential system 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.

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 (and as many as 12) 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.

Question ID	DWMR1083000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10-3;			
Question: For LMR systems, are all microbiological water quality monitoring requirements for treated samples being met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All microbiological water quality monitoring requirements prescribed by legislation 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.			

Question ID	DWMR1096000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-3 (1);			
Question: Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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	DWMMR1084000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-2;			
Question: Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 last 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 and is not required to obtain Inorganic samples again until January 2024.			

Question ID	DWMMR1085000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-4 (1); SDWA O. Reg. 170/03 13-4 (2); SDWA O. Reg. 170/03 13-4 (3);			
Question: Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 last 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 and is not required to obtain Organic samples again until January 2024.

Question ID	DWMR1086000	Question Type	Legislative
Legislative Requirement(s): 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);			
Question: Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.			
<p>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 January 19, 2023, April 20, 2023, July 19, 2023 and October 20, 2023. The Rolling Annual Average of HAA's for the Wasaga Beach DWS is 5.3ug/L. No HAA AWQI's were reported by the Owner/Operating Authority as a result of those samples.</p>			

Question ID	DWMR1087000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-6 (1); SDWA O. Reg. 170/03 13-6 (2); SDWA O. Reg. 170/03 13-6 (3); SDWA O. Reg. 170/03 13-6 (4); SDWA O. Reg. 170/03 13-6 (5); SDWA O. Reg. 170/03 13-6 (6);			
Question: Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?			
Compliance Response(s)/Corrective Action(s)/Observation(s):			

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.

The Operating Authority conducted this required monitoring on January 19, 2023, April 20, 2023, July 19, 2023 and October 20, 2023. The THM running annual average was below the THM standard of 100ug/L (25.25) as set out in the ODWQS.

Question ID	DWMR1088000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-7;			
Question: Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
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. The Operating Authority conducted this required monitoring on January 19, 2023, April 20, 2023, July 19, 2023 and October 20, 2023. 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.			

Question ID	DWMR1089000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-8;			
Question: Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 conducted Sodium sampling during the review period on July 18, 2023. 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 2028.

Question ID	DWMR1090000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-9;			
Question: Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
<p>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.</p> <p>The Owner/Operating Authority conducted Fluoride sampling during the review period on July 18, 2023. 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 2028.</p>			

Question ID	DWMR1101000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 17-1; SDWA O. Reg. 170/03 17-10 (1); SDWA O. Reg. 170/03 17-11; SDWA O. Reg. 170/03 17-12; SDWA O. Reg. 170/03 17-13; SDWA O. Reg. 170/03 17-14; SDWA O. Reg. 170/03 17-2; SDWA O. Reg. 170/03 17-3; SDWA O. Reg. 170/03 17-4; SDWA O. Reg. 170/03 17-5; SDWA O. Reg. 170/03 17-6; SDWA O. Reg. 170/03 17-9;			
Question: For LMR Systems, have corrective actions (as per Schedule 17 of O. Reg. 170/03) been taken to address adverse conditions, including any other steps as directed by the Medical Officer of Health?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Corrective actions (as per Schedule 17), including any other steps that were directed by the Medical Officer of Health, had been taken to address adverse conditions.			

All corrective actions were taken by the Operating Authority for AWQI 162173 during the review period. AWQI 162173 was a pre cautionary report for the potential for improperly treated water entering the distribution system due to the chlorine analyser for Post chlorination going down after hours for a short period of time. After the report was made, chlorine residuals were obtained as well as chlorine analysers verified within the distribution system and there were no chlorine residuals below 0.05mg/L within the distribution system.

Question ID	DWMR1104000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-6 (1); SDWA O. Reg. 170/03 16-6 (2); SDWA O. Reg. 170/03 16-6 (3); SDWA O. Reg. 170/03 16-6 (3.1); SDWA O. Reg. 170/03 16-6 (3.2); SDWA O. Reg. 170/03 16-6 (4); SDWA O. Reg. 170/03 16-6 (5); SDWA O. Reg. 170/03 16-6 (6);			
Question: Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6.			

Question ID	DWMR1059000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.			

Question ID	DWMR1060000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s):			

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	DWMR1061000	Question Type	Legislative
Legislative Requirement(s): 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);			
Question: Are logbooks properly maintained and contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logbooks were properly maintained and contained the required information.			

Question ID	DWMR1062000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-5;			
Question: Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 Owner and 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	DWMR1071000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Has the owner provided security measures to protect components of the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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 pump stations, sample stations, water towers and reservoirs 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	DWMR1073000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1);			
Question: Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The overall responsible operator had 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	DWMR1074000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 25 (1);			
Question: Have operators-in-charge been designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators-in-charge had been designated for all subsystems which comprise the drinking water system.			

Question ID	DWMR1075000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 22;			
Question: Do all operators possess the required certification?			
Compliance Response(s)/Corrective Action(s)/Observation(s):			

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	DWMR1076000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Do only certified operators make adjustments to the treatment equipment?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Only certified operators made adjustments to the treatment equipment.			