

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

Central Region

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

**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*

Région du Centre

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



February 1, 2023
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 November 15, 2022.

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
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
Entity: ONTARIO CLEAN WATER
AGENCY
CORPORATION OF THE TOWN
OF WASAGA BEACH
Inspection Start Date: 11/15/2022
Inspection End Date: 01/09/2023
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: DRINKING WATER | **Regulated Activity:**

| Question ID | MRDW1001001 | Question Type | Information |
|--|----------------|---------------|-------------|
| Question: What was the scope of this inspection? | | | |
| Legislative Requirement | 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 November 15, 2022, 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 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. 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> | | | |

Both the Powerline Road pump house and the Jenetta Street pump house were visited by the Ministry as part of this inspection.

The inspection review period for this report is from September 8, 2021 to November 15, 2022.

During this review period, the Owner operated under Municipal Drinking Water Licence 131-101 and Drinking Water Works 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.

This report includes a compliance review of both the Licence and Permit for the Wasaga Beach DWS.

| Question ID | MRDW1000001 | Question Type | Information |
|--|----------------|---------------|-------------|
| Question: Does this drinking water system provide primary disinfection? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation This Drinking Water System provides for both primary and secondary disinfection and distribution of water. | | | |

| Question ID | MRDW1007001 | Question Type | Legislative |
|--|------------------------------------|---------------|-------------|
| 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? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 1-2 (1); | | |
| Observation | | | |
| <p>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 Wells#1, Well #2 and Well #3 are all contained within the Jenetta pump house.</p> <p>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.</p> | | | |

| Question ID | MRDW1008001 | Question Type | Legislative |
|------------------|-------------|---------------|-------------|
| Question: | | | |

If there are municipal wells not being used as a raw water supply, is the owner maintaining the wells in a manner to prevent the entry of surface water and other foreign materials?

Legislative Requirement

OWRA | R.R.O. 1990, Reg. 903 | 21 | (3);

Observation

The owner was maintaining the municipal wells not being used as a raw water supply in a manner to prevent the entry of surface water and other foreign materials.

Question ID

MRDW1009001

Question Type

Legislative

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?

Legislative Requirement

SDWA | 31 | (1);

Observation

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

MRDW1010001

Question Type

BMP

Question:

Are trends in source water quality being monitored?

Legislative Requirement

Not Applicable

Observation

Trends in source water quality were being monitored.

Question ID

MRDW1014001

Question Type

Legislative

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|---|------------------|
| Question: | |
| Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA? | |
| Legislative Requirement | 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's SCADA system. All flow data was provided to the Ministry as part of this inspection.</p> | |

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|--|------------------|---------------|-------------|
| Question ID | MRDW1015001 | Question Type | Legislative |
| Question: Are the flow measuring devices calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SDWA? | | | |
| Legislative Requirement | SDWA 31 (1); | | |
| Observation The flow measuring devices were calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SWDA. The Operating Authority retained the services of an external contractor in July 2022 to calibrate/verify all of the flow meters on the Wasaga Beach DWS. | | | |

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| Question ID | MRDW1016001 | Question Type | Legislative |
| 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? | | | |
| Legislative Requirement | SDWA 31 (1); | | |
| Observation | | | |
| The owner was in compliance with the conditions associated with maximum flow rate or the | | | |

rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA. 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 six raw water wells (Powerline road and Jenetta pump houses).

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 | MRDW1013001 | Question Type | Legislative |
|---|------------------|---------------|-------------|
| Question: | | | |
| Is the owner in compliance with all conditions of the PTTW? | | | |
| Legislative Requirement | OWRA 34 (3); | | |
| Observation | | | |
| <p>The owner was in compliance with all conditions of the PTTW. 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>Special conditions listed within this PTTW are in regards to monitoring and documenting daily water takings via a flow meter from each production well, installing dataloggers and recording water levels in monitoring wells.</p> <p>After reviewing documents provided to the Ministry by the Owner/Operating Authority, it was found that all conditions of this PTTW were being complied with during the review period.</p> <p>Note: There was one occasion in December 2022 whereby the Operating Authority notified the Ministry that they had temporarily lost water level monitoring data at one of the monitoring wells adjacent to the Jenetta pumphouse.. This event was of relatively short duration and was due to equipment failure. The issue was rectified immediately by the Operating Authority by installing new monitoring equipment. All of the other monitoring data from the other monitoring wells was not affected.</p> | | | |

| Question ID | MRDW1018001 | Question Type | Legislative |
|--|-------------|---------------|-------------|
| Question: | | | |
| Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit? | | | |

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| Legislative Requirement | SDWA 31 (1); |
| Observation | |
| The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit. | |

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| Question ID | MRDW1028001 | Question Type | Legislative |
| Question: Are up-to-date plans for the drinking water system kept in place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA? | | | |
| Legislative Requirement | SDWA 31 (1); | | |
| Observation Up-to-date plans for the drinking water system were kept in a place, or made available in such a manner, that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA. Up to date plans of the Wasaga Beach DWS are kept in each pumphouse (Jenetta and Powerline Road) as well as at the main OCWA office at 30 Woodland Drive. | | | |

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| Question ID | MRDW1021001 | Question Type | Legislative |
| Question: | | | |
| 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 Requirement | SDWA 31 (1); | | |
| Observation | | | |
| 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 completed two Form 2 reports for the Wasaga Beach DWS during the review period. The Form 2 reports were for the decommissioning of Well 1 at the Powerline Road pump house and a the replacement of the chemical feed pumps at the Jenetta pump house. | | | |

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| Question ID | MRDW1025001 | Question Type | Legislative |
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| 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? | |
| Legislative Requirement | 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. Both the Owner, who maintains the distribution system for the Wasaga Beach DWS and the Operating Authority who operates the treatment portion and source water wells 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 and equipment during the review period. | |

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| Question ID | MRDW1023001 | Question Type | Legislative |
| 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? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 1-2 (2); | | |
| Observation 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 | MRDW1027000 | Question Type | Legislative |
|--|------------------|---------------|-------------|
| Question: Does the owner have evidence indicating that all chemicals and materials which come in contact with water within the drinking water system have met all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA? | | | |
| Legislative Requirement | SDWA 31 (1); | | |
| Observation The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA. | | | |

| Question ID | MRDW1024001 | Question Type | Legislative |
|---|------------------------------------|---------------|-------------|
| Question: Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated as required? | | | |
| Legislative Requirement | 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 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 | MRDW1033001 | Question Type | Legislative |
|--|-------------|---|-------------|
| Question: Is the secondary disinfectant residual measured as required for the large municipal residential distribution system? | | | |
| Legislative Requirement | | SDWA O. Reg. 170/03 7-2 (3); SDWA O. Reg. 170/03 7-2 (4); | |

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| Observation |
| 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. |

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| Question ID | MRDW1036001 | Question Type | Legislative |
| Question: | | | |
| Where continuous monitoring equipment is not used for chlorine residual analysis, are samples tested using an acceptable portable device? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 6-7 (1); | | |
| Observation | | | |
| Samples for chlorine residual analysis were tested using an acceptable portable device. Owner and Operating Authority staff utilizes handheld colourimeters to perform tests within the distribution system and perform comparisons for calibration of the on-line analyzers several times each week. | | | |

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| Question ID | MRDW1049001 | Question Type | BMP |
| Question: Do records confirm that disinfectant residuals are routinely checked at the extremities and dead ends of the distribution system? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation Records confirmed that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system. During the review of records provided by the Owner, it was found that during the inspection review period, free chlorine residuals were obtained by operators during the flushing of extremities and dead ends within the Wasaga Beach distribution system. Chlorine residuals are documented on flushing sheets. Flushing activities are typically performed once in the spring and once in the fall in the Wasaga Beach distribution system. | | | |

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| Question ID | MRDW1030000 | Question Type | Legislative |
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| 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? | |
| Legislative Requirement | SDWA O. Reg. 170/03 7-2 (1); SDWA O. Reg. 170/03 7-2 (2); |
| Observation | |
| Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved. 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. | |

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| Question ID | MRDW1031001 | Question Type | BMP |
| Question: | | | |
| Are operators aware of the operational criteria necessary to achieve primary disinfection within the drinking water system? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation | | | |
| Operators were aware of the operational criteria necessary to achieve primary disinfection within the drinking water system. During the course of the physical inspection of the Powerline road pump house, it was observed that the minimum chlorine residual required in order to achieve primary disinfection was documented on a large note board adjacent to the SCADA computer. One of the Operators also intentionally put the system into alarm (below the alarm set point) to show that the high lift pumps are locked out and are not able to pump water out into the distribution system so that the system is always capable of maintaining primary disinfection. | | | |

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| Question ID | MRDW1035001 | Question Type | Legislative |
| Question: | | | |
| Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test? | | | |

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| Legislative Requirement | SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; |
| Observation | |
| <p>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.</p> <p>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.</p> | |

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| Question ID | MRDW1038001 | Question Type | Legislative |
| 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? | | | |
| Legislative Requirement | 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. | | | |

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| Question ID | MRDW1037001 | Question Type | Legislative |
| 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? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1); | | |
| Observation All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in | | | |

Schedule 6. The 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 | MRDW1040000 | Question Type | Legislative |
|---|--|---------------|-------------|
| Question: Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; | | |
| Observation All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation. 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 | MRDW1108001 | Question Type | Legislative |
|--|-------------|---------------|-------------|
| 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? | | | |

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| Legislative Requirement | 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 | |
| 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 | MRDW1099001 | Question Type | Information |
|--|----------------|---------------|-------------|
| 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)? | | | |
| Legislative Requirement | 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 did not report any AWQI's for the Wasaga Beach DWS during the review period. | | | |

| Question ID | MRDW1079001 | Question Type | Legislative |
|---|---|---------------|-------------|
| Question: For LMR systems, are all microbiological water quality monitoring requirements for raw water samples prescribed by legislation being met? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 10-4 (1); SDWA O. Reg. 170/03 10-4 (2); SDWA O. Reg. 170/03 10-4 (3); | | |
| Observation All microbiological water quality monitoring requirements prescribed by legislation for raw water samples were being met. Subsection 10-4 (1) and 10-4(2) of Schedule 10 of Ontario Regulation 170/03 requires that the Owner and the operating authority of a large municipal residential drinking water system, such as the Wasaga Beach drinking water system, ensure that a raw water sample is taken at least once every week from each well that is supplying water to the drinking water system, before any treatment is applied to the source | | | |

water.

Subsection 10-4(3) further requires the Owner and operating authority ensure that each of the raw water samples collected are tested for Escherichia coli (E. Coli) and total coliform bacteria (TC).

Records provided by the Operating Authority during the course of this inspection, indicate that they typically collected raw water samples from the three Powerline road wells and the three Jenetta wells on a weekly basis.

| Question ID | MRDW1081001 | Question Type | Legislative |
|--|---|---------------|-------------|
| Question: For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met? | | | |
| Legislative Requirement | 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 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 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 | MRDW1083001 | Question Type | Legislative |
|---|-------------------------------|---------------|-------------|
| Question: For LMR systems, are all microbiological water quality monitoring requirements for treated samples being met? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 10-3; | | |
| Observation | | | |

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 | MRDW1096001 | Question Type | Legislative |
|---|------------------------------------|---------------|-------------|
| 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? | | | |
| Legislative Requirement | 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 | MRDW1084001 | Question Type | Legislative |
|--|-------------------------------|---------------|-------------|
| Question: Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 13-2; | | |
| Observation 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 | MRDW1085001 | Question Type | Legislative |
|---|---|---------------|-------------|
| Question: Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency? | | | |
| Legislative Requirement | 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 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 | MRDW1086001 | Question Type | Legislative |
|--|---|---------------|-------------|
| Question: Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 13-6.1 (1); SDWA O. Reg. 170/03 13-6.1 (2); SDWA O. Reg. 170/03 13-6.1 (3); SDWA O. Reg. 170/03 13-6.1 (4); SDWA O. Reg. 170/03 13-6.1 (5); SDWA O. Reg. 170/03 13-6.1 (6); | | |
| Observation All haloacetic acid water quality monitoring requirements prescribed by legislation were 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.

The Operating Authority conducted this required Haloacetic acid monitoring on October 20, 2021, January 19, 2022, April 20, 2022, July 19, 2022 and October 20, 2022. No HAA AWQI's were reported by the Owner/Operating Authority as a result of those samples.

| Question ID | MRDW1087001 | Question Type | Legislative |
|---|---|---------------|-------------|
| Question: | | | |
| Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location? | | | |
| Legislative Requirement | 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); | | |
| Observation | | | |
| All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. Section 13-6 of Schedule 13 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 October 20, 2021, January 19, 2022, April 20, 2022, July 19, 2022 and October 20, 2022. The THM running annual average was below the THM standard of 100ug/L as set out in the ODWQS. | | | |

| Question ID | MRDW1088000 | Question Type | Legislative |
|---|-------------------------------|---------------|-------------|
| Question: Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 13-7; | | |
| Observation All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS. Section 13~7 of Schedule 13 | | | |

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 October 20, 2021, January 19, 2022, April 20, 2022, July 19, 2022 and October 20, 2022. 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 | MRDW1089000 | Question Type | Legislative |
|---|-------------------------------|---------------|-------------|
| Question: Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 13-8; | | |
| Observation 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 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 Type | Legislative |
|---|-------------------------------|---------------|-------------|
| Question: Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency? | | | |
| Legislative Requirement | 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 | MRDW1092001 | Question Type | Legislative |
|--|------------------------------|---------------|-------------|
| Question: Has the owner ensured that water samples are taken at the prescribed location? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 6-2; | | |
| Observation The owner ensured that water samples were taken at the prescribed location. | | | |

| Question ID | MRDW1095001 | Question Type | Legislative |
|---|--|---------------|-------------|
| Question: Have all lead sampling requirements prescribed by Schedule 15.1 of O. Reg. 170/03 been met? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 15.1-10; SDWA O. Reg. 170/03 15.1-4 (1); SDWA O. Reg. 170/03 15.1-5 (1); SDWA O. Reg. 170/03 15.1-5 (10); SDWA O. Reg. 170/03 15.1-5 (11); SDWA O. Reg. 170/03 15.1-5 (12); SDWA O. Reg. 170/03 15.1-5 (2); SDWA O. Reg. 170/03 15.1-5 (3); SDWA O. Reg. 170/03 15.1-5 (4); SDWA O. Reg. 170/03 15.1-5 (5); SDWA O. Reg. 170/03 15.1-5 (6); SDWA O. Reg. 170/03 15.1-5 (7); SDWA O. Reg. 170/03 15.1-5 (8); SDWA O. Reg. 170/03 15.1-5 (9); SDWA O. Reg. 170/03 15.1-7 (1); SDWA O. Reg. 170/03 15.1-7 (2); SDWA O. Reg. 170/03 15.1-7 (3); SDWA O. Reg. 170/03 15.1-7 (4); SDWA O. Reg. 170/03 15.1-9 (1); SDWA O. Reg. 170/03 15.1-9 (2); SDWA O. Reg. 170/03 15.1-9 (3); SDWA O. Reg. 170/03 15.1-9 (4); SDWA O. Reg. 170/03 15.1-9 (5); SDWA O. Reg. 170/03 15.1-9 (6); SDWA O. Reg. 170/03 15.1-9 (7); SDWA O. Reg. 170/03 15.1-9 (8); SDWA O. Reg. 170/03 15.1-9 (9); SDWA O. Reg. 170/03 6-3 (1); | | |
| Observation All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met. The Owner was not required to obtain Lead samples during the review period (reduced Lead sampling) however they are still monitoring for pH and alkalinity in the distribution system as required. | | | |

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|---|--------------------------------------|---------------|-------------|
| Question ID | MRDW1097000 | Question Type | Legislative |
| Question: If the drinking water system obtains water from a ground water source, is turbidity being tested at least once every month from each well that is supplying water to the system? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 7-3 (1.1); | | |
| Observation Turbidity was being tested at least once every month from each well that is supplying water to the system. The Operating Authority utilizes online Turbidity analyzers at both of their pump houses (Powerline Road and Jenetta). | | | |

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|---|---|---------------|-------------|
| Question ID | MRDW1098001 | Question Type | Legislative |
| Question: Has the owner indicated that the required records are kept and will be kept for the required time period? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 13 (1); SDWA O. Reg. 170/03 13 (2); SDWA O. Reg. 170/03 13 (3); | | |
| Observation The owner indicated that the required records are kept and will be kept for the required time period. Both the Owner and Operating Authority keep documents related to the Wasaga Beach DWS indefinitely. | | | |

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|--|-----------------------------------|---------------|-------------|
| Question ID | MRDW1110001 | Question Type | Legislative |
| Question: Was an Annual Report containing the required information prepared by February 28 of the following year? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 11 (6); | | |
| Observation The Annual Report containing the required information was prepared by February 28th of the following year. | | | |

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|--------------------|-------------|----------------------|-------------|
| Question ID | MRDW1111000 | Question Type | Legislative |
| Question: | | | |

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

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|--|-----------------------|---------------|-------------|
| Question ID | MRDW1045001 | Question Type | Legislative |
| Question: Has the owner updated the document describing the distribution components within 12 months of completion of alterations to the system? | | | |
| Legislative Requirement | EPA; SDWA 31 (1); | | |
| Observation The owner had up-to-date documents describing the distribution components as required. | | | |

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|--|----------------|---------------|-----|
| Question ID | MRDW1046001 | Question Type | BMP |
| Question: | | | |
| Is there a backflow prevention program, policy and/or bylaw in place that addresses cross connections and connections to high hazard facilities? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation | | | |
| <p>There was a backflow prevention program, policy and/or bylaw in place. The Owner of the Wasaga Beach DWS provided documents to the Ministry which shows that they have maintained a backflow prevention program within the Town's Engineering Standards dated 2021.</p> <p>Section 9.5 of the the Town's Engineering Standards stipulates the following in regards to Backflow Prevention:</p> <p>Backflow protection must be provided in accordance with the Ontario Building Code and applicable Provincial Regulations.</p> <p>When backflow prevention is required under the Ontario Building Code, a Reduced Pressure Zone Backflow Preventer per the Town approved materials list must be enclosed in a chamber in accordance with Town Std. Dwg. No. 15A or the building mechanical room at commercial, industrial or institutional services as deemed necessary by the Town Engineer.</p> <p>The owner is responsible for annual inspection and certification to verify</p> | | | |

conformance with the Building Code. The annual inspection / certification reports are to be forwarded to the Town's Building Department.

| Question ID | MRDW1053001 | Question Type | BMP |
|--|----------------|---------------|-----|
| Question: Is the Owner able to maintain proper pressures in the distribution system and is pressure monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate. The pressure in the system is monitored by the Owner at the fire hydrants regularly, typically when weekly flushing/annual inspections/deadend flushing is completed by the Owner's operators. | | | |

| Question ID | MRDW1047001 | Question Type | BMP |
|--|----------------|---------------|-----|
| Question: | | | |
| Does the owner have a program or maintain a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation | | | |
| The owner had a program or maintained a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system. The Owner/Operating Authority performs inspections, cleanouts and maintenance on all of the reservoirs for the Wasaga Beach DWS on a regular and as needed basis. In the Fall of 2021, Tower 1 had its interior refurbished as a result of an inspection. | | | |

| Question ID | MRDW1048001 | Question Type | BMP |
|---|----------------|---------------|-----|
| Question: Has the owner implemented a program for the flushing of watermains as per industry standards? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation | | | |

The owner had implemented a program for the flushing of watermain as per industry standards. The Owner's operators are responsible for operating and maintaining the distribution system for the Wasaga Beach DWS. The Owner provided documents to the Ministry as part of this inspection which showed that they typically flush all dead end watermain in the Spring and Fall of each year. All other watermain are typically flushed at least once throughout the calendar year.

All flushing activities are recorded on Flushing worksheets whereby the following information is recorded: Location, date, time, flushing length in minutes, pressure, chlorine residual before and after flushing activities, discharge location of water, any specific comments and the Operator who performed the flushing.

| Question ID | MRDW1050001 | Question Type | BMP |
|---|----------------|---------------|-----|
| Question: Is there a program in place for inspecting and exercising valves? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation There was a program in place for inspecting and exercising valves. The inspection and exercising of valves is typically performed by the Owner's Operators during flushing activities and work performed is documented on the flushing work sheets. | | | |

| Question ID | MRDW1051001 | Question Type | BMP |
|--|----------------|---------------|-----|
| Question: Is there a program in place for inspecting and operating hydrants? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation There was a program in place for inspecting and operating hydrants. The inspection and exercising of hydrants is typically performed by the Owner's Operators during flushing activities and work performed is documented on the flushing work sheets. | | | |

| Question ID | MRDW1052001 | Question Type | BMP |
|---|----------------|---------------|-----|
| Question: Is there a by-law or policy in place limiting access to hydrants? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation | | | |

There was a by-law or policy in place limiting access to hydrants. Town of Wasaga Beach By-law 2.4.2 states the following:
No person shall draw off or use any municipal water from any fire hydrant without the written consent of the Director. This restriction shall not apply to a municipal fire fighter where water is required for fire protection purposes.

| Question ID | MRDW1058001 | Question Type | Legislative |
|--|-----------------------------|---------------|-------------|
| Question: Do operators and maintenance personnel have ready access to operations and maintenance manuals? | | | |
| Legislative Requirement | SDWA O. Reg. 128/04 28; | | |
| Observation Operators and maintenance personnel had ready access to operations and maintenance manuals. Both Operating Authority and the Owner's Operators have ready access to Operations Manuals for the Wasaga Beach DWS. Manuals are posted electronically as well as at the Town of Wasaga Beach municipal office, at the Operating Authority office and at each of the Powerline Road and Jenetta pump houses. | | | |

| Question ID | MRDW1059000 | Question Type | Legislative |
|--|-----------------------------|---------------|-------------|
| Question: Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system? | | | |
| Legislative Requirement | 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. | | | |

| Question ID | MRDW1060000 | Question Type | Legislative |
|---|------------------|---------------|-------------|
| Question: Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA? | | | |
| Legislative Requirement | 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 | MRDW1061001 | Question Type | Legislative |
|---|---|---------------|-------------|
| Question: Are logbooks properly maintained and contain the required information? | | | |
| Legislative Requirement | SDWA O. Reg. 128/04 27 (1); SDWA O. Reg. 128/04 27 (2); SDWA O. Reg. 128/04 27 (3); SDWA O. Reg. 128/04 27 (4); SDWA O. Reg. 128/04 27 (5); SDWA O. Reg. 128/04 27 (6); SDWA O. Reg. 128/04 27 (7); | | |
| Observation Logbooks were properly maintained and contained the required information. | | | |

| Question ID | MRDW1062001 | Question Type | Legislative |
|--|------------------------------|---------------|-------------|
| 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? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 7-5; | | |
| Observation Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5. 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 | MRDW1063000 | Question Type | Legislative |
|---|-------------------------------------|---------------|-------------|
| Question: For every required operational test and for every required sample, is a record made of the date, time, location, name of the person conducting the test and result of the test? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 6-10 (1); | | |
| Observation | | | |

For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test. The Owner and Operating Authority records all operational parameters for the Wasaga Beach drinking water system in either a logbook and/or a Daily Operator Log Sheet. All certified operators that are obtaining/recording a test or test result, record the appropriate information on the lab sample submission sheet as well as a logbook. Copies of sample analysis for all test results were provided as part of this inspection.

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|--|-----------------------------------|---------------|-------------|
| Question ID | MRDW1064000 | Question Type | Legislative |
| Question: Did the operator-in-charge ensure that records were maintained of all adjustments made to the processes within his or her responsibility? | | | |
| Legislative Requirement | SDWA O. Reg. 128/04 26 (2); | | |
| Observation The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility. All adjustments that are made anywhere in the DWS (either in treatment by the Operating Authority or distribution system by the Owner) are documented in a logbook. | | | |

| Question ID | MRDW1065000 | Question Type | Legislative |
|---|-----------------------------------|---------------|-------------|
| Question: Are logs and other record keeping mechanisms available for at least five (5) years? | | | |
| Legislative Requirement | SDWA O. Reg. 128/04 27 (6); | | |
| Observation Logs or other record keeping mechanisms were available for at least five (5) years. The Owner and Operating Authority stated that all logbooks are kept indefinitely. | | | |

| Question ID | MRDW1066000 | Question Type | BMP |
|--|----------------|---------------|-----|
| Question: Is spill containment provided for process chemicals and standby power generator fuel? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation Spill containment was provided for process chemicals and/or standby power generator fuel. During the course of both pump house inspections (Powerline Road and Jenetta) on the | | | |

Wasaga Beach DWS, it was observed that all process chemicals being utilized (Sodium hypochlorite and Sodium silicate) had secondary spill containment.
All diesel fuel tanks for standby diesel generators at Powerline Road and the Jenetta pump houses also had secondary spill containment.

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

| Question ID | MRDW1068000 | Question Type | BMP |
|---|----------------|---------------|-----|
| Question: If available, are standby power generators tested under normal load conditions? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation Standby power generators were tested under normal load conditions. All standby diesel generators are tested and run on a monthly basis and run times documented in a Diesel generator logbook by system operators. These logbooks were reviewed as part of this inspection. | | | |

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|--|----------------|---------------|-----|
| Question ID | MRDW1069000 | Question Type | BMP |
| Question: Are all storage facilities completely covered and secure? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation All storage facilities were completely covered and secure. | | | |

| Question ID | MRDW1070000 | Question Type | BMP |
|--|-------------|---------------|-----|
| Question: Are air vents and overflows associated with reservoirs and elevated storage structures | | | |

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|--|----------------|
| equipped with screens? | |
| Legislative Requirement | Not Applicable |
| Observation | |
| Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens. | |

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|--|----------------|---------------|-----|
| Question ID | MRDW1071000 | Question Type | BMP |
| Question: Has the owner provided security measures to protect components of the drinking water system? | | | |
| Legislative Requirement | 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 pump stations, sample stations 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. | | | |

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|--|----------------|---------------|-----|
| Question ID | MRDW1072001 | Question Type | BMP |
| Question: Has the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in their system? | | | |
| Legislative Requirement | Not Applicable | | |
| Observation The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system. The Town of Wasaga Beach does have a low-flush toilet rebate program. In the summer months the Town also has an even/odd water usage on even/odd calendar days, bylaw in place. In addition, the Town of Wasaga Beach has recently conducted leak detection in the distribution system in order to identify any areas of water loss. | | | |

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|--------------------|-------------|----------------------|-------------|
| Question ID | MRDW1073001 | Question Type | Legislative |
| Question: | | | |

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|---|-----------------------------------|
| Has the overall responsible operator been designated for all subsystems which comprise the drinking water system? | |
| Legislative Requirement | SDWA O. Reg. 128/04 23 (1); |
| Observation | |
| <p>The overall responsible operator had been designated for each subsystem.</p> <p>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.</p> | |

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| Question ID | MRDW1078001 | Question Type | Legislative |
| Question: | | | |
| In instances where the overall responsible operator was unable to act, was an adequately certified operator designated to act in place of the overall responsible operator? | | | |
| Legislative Requirement | SDWA O. Reg. 128/04 23 (1); SDWA O. Reg. 128/04 23 (2); SDWA O. Reg. 128/04 23 (4); SDWA O. Reg. 128/04 23 (6); SDWA O. Reg. 128/04 23 (7); | | |
| Observation | | | |
| An adequately licenced operator was designated to act in place of the overall responsible operator when the overall responsible operator was unable to act. | | | |

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| Question ID | MRDW1074001 | Question Type | Legislative |
| Question: Have operators-in-charge been designated for all subsystems for which comprise the drinking water system? | | | |
| Legislative Requirement | SDWA O. Reg. 128/04 25 (1); | | |
| Observation Operators-in-charge had been designated for all subsystems which comprise the drinking water system. | | | |

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| Question ID | MRDW1075001 | Question Type | Legislative |
| Question: | | | |

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| Do all operators possess the required certification? | |
| Legislative Requirement | 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. | |

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| Question ID | MRDW1076001 | Question Type | Legislative |
| Question: Do only certified operators make adjustments to the treatment equipment? | | | |
| Legislative Requirement | SDWA O. Reg. 170/03 1-2 (2); | | |
| Observation Only certified operators made adjustments to the treatment equipment. | | | |