

Ministry of the Environment, Conservation
and Parks
Drinking Water and Environmental
Compliance Division
West Central Region
Niagara District Office

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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
Direction régionale du Centre-Ouest Bureau
de district de Niagara

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St. Catharines, ON,
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June 11, 2025

Town of Niagara-on-the-Lake,
1593 Four Mile Creek Road,
Virgil, Ontario, L0S 1T0

Attention: Darrin Wills, (A) Manager of Public Works

Re: Niagara-on-the-Lake Distribution System, DWS# 260001380

Dear Mr. Wills,

Please find the enclosed copy of the inspection report for the Niagara-on-the-Lake Distribution System under the Ministry's detailed inspection protocol to assess compliance with Safe Drinking Water legislation. The report is based on conditions encountered at the time of inspection, and subsequent follow-up.

The items found within the section entitled "Non-Compliance" which have sections under legislative requirements outline non-compliance with regulatory requirements contained within an Act, a Regulation, or site-specific approvals, licenses, permits, orders, or guidelines. Please ensure that the required actions are completed within the prescribed time frame if applicable.

The items with "Not Applicable" legislative requirements provide information to the owner or operating authority outlining practices or standards established through existing and emerging industry standards that should be considered in order to advance current efforts. These items do not, in themselves, constitute violations. More recommendations are also provided within the body of the report.

Section 19 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" on the Drinking Water Ontario website at <https://www.ontario.ca/environment-and-energy/taking-care-your-drinking-water-guide-members-municipal-councils>.

The IRR is a summarized quantitative measure of the drinking water system's annual inspection and is published in the Ministry's Chief Drinking Water Inspector's Annual Report. The Risk Methodology document describes the risk rating methodology which has been applied to the findings of the Ministry's municipal residential drinking water system inspection results.

Thank you for the assistance during the inspection. If you have any questions or concerns regarding the inspection report or rating, please contact Elizabeth Chee Sing, Water Compliance Supervisor, at 519-400-6731.

Sincerely,

Connie Height

Connie Height

Ministry of the Environment, Conservation and Parks
Drinking Water and Environmental Compliance Division
Water Compliance Officer, Provincial Officer #2068
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A

Cc: Darren Mackenzie- Manager Of Public Works, Town of Niagara-on-the-Lake
Colin Horne, Niagara Region Public Health Unit
Jason Wolf, Niagara Region Public Health Unit
Leilani Lee-Yates, Niagara Peninsula Conservation Authority
Thomas Proks, Niagara Peninsula Conservation Authority
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NIAGARA-ON-THE-LAKE DISTRIBUTION SYSTEM

Physical Address: 1593 FOUR MILE CREEK RD.,
VIRGIL, ON, L0S 1T0

INSPECTION REPORT

System Number: 260001380
Entity: CORPORATION OF THE TOWN
OF NIAGARA-ON-THE-LAKE
Inspection Start Date: April 29, 2025
Site Inspection Date: April 29, 2025
Inspection End Date: May 28, 2025
Inspected By: Connie Height
Badge #: 2068

Connie Height

(signature)

INTRODUCTION

Purpose

This announced, detailed 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

Niagara-on-the-Lake Distribution System (NOTLDS) is owned by the Town of Niagara-on-the-Lake and operated by the Town of Niagara-on-the-Lake. The system serves an estimated population of 20,000 and is categorized as a Large Municipal Residential System.

Information reviewed for this inspection covered the time period of June 16, 2024, to April 24, 2025. On April 29, 2025, Water Compliance Officer, Connie Height, met with the Manager of Public Works, Darrin Wills and Senior Operator, Brad Morkem, as part of the inspection process.

Systems/Components

The Town of Niagara-on-the-Lake is the Owner and Operator of the Town's two separate

drinking water distribution systems:

- The Niagara-on-the-Lake Distribution System, DWS # 260001380, which receives treated water from the St. Catharines (DeCew) Water Treatment Plant and the Niagara Falls Water Treatment Plant; and,
- The Bevan Heights Distribution System, DWS # 260062452, which receives treated water from the Niagara Falls Water Treatment Plant.

Both Niagara-on-the- Lake Distribution Systems utilize the same management system (i.e. same operations and maintenance manual, procedures, and staff) and much of the information is similar, however, this report focuses solely on the NOTLDS.

The NOTLDS is a Class 1 water distribution system and consists of approximately 201 km of NOTL owned watermains and 48 km of Regionally owned watermains which range in size from 100 mm to 300 mm. The system consists primarily of asbestos cement, ductile iron, PVC, and PE watermains. There are approximately 1,410 fire hydrants and approximately 1,383 valves located throughout the system.

Permissions/Approvals

This drinking water system was subject to specific conditions contained within the following permissions and/or approvals (please note this list is not exhaustive) at the time of the inspection in addition to the requirements of the SDWA and its regulations:

- Drinking Water Works Permit (DWWP), 069-202, issued February 24, 2025; and,
- Municipal Drinking Water Licence (MDWL), 069-102, issued February 24, 2025.

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	DWMR1020001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were Form 1 documents prepared as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Form 1 documents were prepared as required. During the inspection review period, one (1) form one was received: - The Installation of 22.6 metres of 150mm diameter PVC watermain and the installation of one (1) fire hydrant on Princess Street, north of Walnut Street (Permit # 069-102).			

Question ID	DWMR1028001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were up-to-date plans for the drinking water system 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 Drinking Water Works Permit and Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Plans for the drinking water system were kept up-to-date and made available as required. A detailed map of the distribution system including valves and hydrants was provided to the ministry. The map was last updated on April 30, 2025.			

Question ID	DWMR1025001	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 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 as required.

During the inspection one (1) watermain break was reported. The records provided to the ministry indicate all mandatory requirements under the MECP Watermain Disinfection Procedure were followed and documented.

Question ID	DWMR1033001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (3); SDWA O. Reg. 170/03 7-2 (4);			
Question: Was secondary disinfectant residual tested as required for the large municipal residential distribution system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Secondary disinfectant residual was tested as required. Subsection 7-2(3) of Schedule 7 of O. Reg. 170/03 prescribes that at least seven free chlorine residuals (FCR) must be collected each week from the distribution system of a Large Municipal Residential drinking water system such as the NOTLDS. Subsection 7-2(4) includes two options available to satisfy this requirement: <ul style="list-style-type: none"> - at least one free chlorine residual must be taken in the distribution system each day of the week; or, - at least four free chlorine residual tests must be conducted from four different locations on one day of the week, at least 48 hours after the last sample was taken the previous week; and at least three more chlorine residual tests must be conducted at three different locations on another day during the week, at least 48 hours after the first day that week (4/3 option). Records show that the NOTLDS has opted to use the 4/3 option and has measured the secondary disinfection residual chlorine within the distribution as required. During the physical inspection, 3 FCR measurements were taken by the Water Compliance Officer: <ul style="list-style-type: none"> - Bevan Heights fire station with a FCR measurement of 0.78 mg/L; - 84 Concession 6 with a FCR measurement of 0.75 mg/L; and, - 50 Melville St. with a FCR measurement of 0.62 mg/L. 			

Question ID	DWMR1049001	Question Type	BMP
Legislative Requirement(s): Not Applicable			

Question:

Did records confirm that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system?

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

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

NOTLDS uses a variety of sample points throughout the distribution system to take FCR measurements and many of those are at the extremities of the the system.

Question ID	DWMR1036001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-7 (1);			
Question: Where continuous monitoring equipment was not used for chlorine residual analysis, were samples tested using an acceptable portable device?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Samples for chlorine residual analysis were tested using an acceptable portable device. Distribution chlorine residuals are taken using a handheld direct readout Hach colourimeter. Operational staff perform a quarterly 3-point calibration verification on all the units. Additionally, each device that is being used for weekly chlorine residual measurements are also checked prior to every use. If a unit does not meet specifications, it is removed from service.			

Question ID	DWMR1099001	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Do records show that water provided by the drinking water system met the Ontario Drinking Water Quality Standards?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records showed that not all water sample results met the Ontario Drinking Water Quality Standards. On July 9, 2024, a total coliform sample result of 1 CFU/100ml from a distribution sample was reported. See question DWMR1100001 for more details.			

Question ID	DWMR1081001	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:

Were distribution microbiological sampling requirements prescribed by Schedule 10-2 of O. Reg. 170/03 for large municipal residential systems met?

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

Distribution microbiological sampling requirements were met.

With a population of approximately 20,000, NOTLDS is required to take a minimum of 28 microbiological samples per month, testing for total coliform (TC) and E.coli (EC). Also, at least three samples are required each week and at least 25% of samples are required to be tested for heterotrophic plate count (HPC). A review of sample records indicated that NOTLDS has exceeded the monthly microbiological samples required each month during the inspection period.

Question ID	DWMR1096001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-3 (1);			
Question: Did records confirm that chlorine residual tests were conducted at the same time and location as microbiological samples?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records confirmed that chlorine residual tests were conducted as required. A review of the sample submission forms and operational logs that were provided to the ministry confirm that free chlorine residual measurements were taken at the same time and location as that of the microbiological sampling.			

Question ID	DWMR1086001	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: Were haloacetic acid sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Haloacetic acid sampling requirements were met. NOTLDS is required to test for haloacetic acids within the distribution system every calendar quarter. The last date samples were taken was February 12, 2025.			

Question ID	DWMR1087001	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: Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Trihalomethane sampling requirements were met. NOTLDS is required to test for trihalomethanes within the distribution system every calendar quarter. The last date samples were taken was February 12, 2025.			

Question ID	DWMR1092001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-2;			
Question: Were water samples taken at the prescribed location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Water samples were taken at the prescribed location. A review of the sample analyses indicates that the appropriate sample locations have been used for the various sample parameters.			

Question ID	DWMR1095001	Question Type	Legislative
Legislative Requirement(s): 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 (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);			
Question: Were lead sampling requirements prescribed by Schedule 15.1 of O. Reg. 170/03 met?			

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

Lead sampling requirements were met.

The NOTLDS was exempt from lead testing under Subsection 15.1-5 (9) of Schedule 15.1 of O. Reg. 170/03 on January 13, 2010.

NOTLDS is only required to measure pH and alkalinity at four points in the DS during the winter and summer sampling sessions. NOTLDS is also required to sample for lead every third 12-month period.

Sample data for lead was reviewed and sample requirements for parameters and frequency was completed as required.

Question ID	DWMR1104001	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 immediate verbal notification requirements for adverse water quality incidents met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Immediate verbal notification requirements for adverse water quality incidents were met.			

Question ID	DWMR1105001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-7 (1); SDWA O. Reg. 170/03 16-7 (2); SDWA O. Reg. 170/03 16-7 (3); SDWA O. Reg. 170/03 16-7 (4); SDWA O. Reg. 170/03 16-7 (5);			
Question: Were written notice requirements for adverse water quality incidents met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Written notice requirements for adverse water quality incidents were met.			

Question ID	DWMR1106001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-9 (1); SDWA O. Reg. 170/03 16-9 (2);			
Question: Were issue resolution notice requirements for adverse water quality incidents met?			

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

Requirements for written notices of issue resolution for adverse water quality incidents were met.

Question ID	DWMR1101001	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 large municipal residential systems, were corrective actions, including any steps directed by the Medical Officer of Health, taken to address adverse conditions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Corrective actions were taken to address adverse conditions. The corrective actions for the AWQI were to flush, resample and restore disinfection. All corrective actions were confirmed as completed.			

Question ID	DWMR1110001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 11 (6);			
Question: Was the annual report prepared by February 28th of the following year and did it contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The annual report requirements were met. It was verified that the 2024 Annual Report was available online on the NOTL website for public view and contained the required information. The report was published before February 28, 2025.			

Question ID	DWMR1056001	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Did the donor provide an annual report to the owner of this receiver drinking water system?			

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

The donor provided an annual report to the owner of the receiver drinking water system.

The Region of Niagara provided copies of the Niagara Falls WTP and the DeCew WTP Annual Reports to the NOTLDS.

Question ID	DWMR1111001	Question Type	Legislative
Legislative Requirement(s): 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);			
Question: Did the summary report contain the required information and was it completed and distributed as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The summary report requirements were met. The 2024 Summary Report required by Schedule 22, O.Reg.170/03 was prepared on March 18, 2025, and provided to the members of the NOTL Council and the Mayor. The report appears to contain the required content.			

Question ID	DWMR1113001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10.1 (3);			
Question: Were changes to the system registration information provided to the ministry within ten (10) days of the change?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Changes to the system registration information were provided as required.			

Question ID	DWMR1114001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the owner have evidence that, when required, all legal owners associated with the drinking water system were notified of the requirements of the Municipal Drinking Water Licence and Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had evidence that the required notifications were made.			

The ministry was provided a document titled "Compliance Information for Contractors (PW-DW-MIS-009-001)", which outlines the obligations of developers and referenced documents (MDWL, DWWP, Watermain Disinfection Procedure ,etc.) that need to be followed before any portion of the system can be added or modified.

Question ID	DWMR1098001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13 (1); SDWA O. Reg. 170/03 13 (2); SDWA O. Reg. 170/03 13 (3);			
Question: Were the required records kept for the periods prescribed by section 13 of O. Reg. 170/03?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The required records were kept for the prescribed periods.			

Question ID	DWMR1045001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the owner update the document describing the distribution components within 12 months of completion of alterations to the system in accordance with the Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had up-to-date documents describing the distribution components. The map that was provided to the ministry was reviewed and it contained the new addition of watermain within the last 12 months.			

Question ID	DWMR1046001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was there a backflow prevention program, policy and/or bylaw in place that addressed cross connections and connections to high hazard facilities?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a backflow prevention program, policy and/or bylaw in place. NOTL has 2 backflow preventors at the following locations: - 627 Concession 5, water filling station; and, - 11 Walker Rd., water filling station.			

Both backflow preventors are tested by a certified plumber on an annual basis. Both indicate a passed status.

Question ID	DWMR1053001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was the owner able to maintain proper pressures in the distribution system and was pressure monitored to alert the operator of conditions of loss of pressure below the value under which the system was designed to operate?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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. 20 pounds per square inch (psi) is the typically accepted minimum distribution system pressure required to ensure system integrity. Pressure monitoring for the NOTLDS is completed during hydrant inspection. Records were reviewed and no record was below 20 psi. The lowest record was 40 psi and the highest record was 100 psi.			

Question ID	DWMR1048001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Had the owner implemented a program for the flushing of watermain as per industry standards?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had implemented a program for the flushing of watermain. According to the Standard Operating Procedure (SOP) titled "Watermain Flushing (PW-DW-SOP-011-003)", there is no frequency indicated. However, it is still common practice to flush annually and typically do one area of town in the spring and another area of town in the fall. Additionally, specific areas have been identified for dead-end flushing to ensure adequate chlorine residuals all the time. BHDS flushing program is combined with the NOTLDS flushing program.			

Question ID	DWMR1050001	Question Type	BMP
Legislative Requirement(s): Not Applicable			

Question:

Was there a program in place for inspecting and exercising valves?

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

There was a program in place for inspecting and exercising valves.

According to the SOP titled "Water Valve Inspection and Maintenance (PW-DW-SOP-011-004)", the main distribution valves (approximately 20% of the system) shall be inspected and exercised on an annual basis. Records provided to the ministry indicate that the valves were addressed in 2024.

BHDS valve exercising program is combined with the NOTLDS valve exercising program.

Question ID	DWMR1051001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was there a program in place for inspecting and operating hydrants?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a program in place for inspecting and operating hydrants.			
According to the SOP titled "Hydrant Inspection & Maintenance (PW-DW-SOP-011-005)", a portion of hydrants shall be inspected on an annual basis. Records provided to the ministry indicate that approximately 13% of the valves were addressed in 2024.			
BHDS hydrant inspection & maintenance program is combined with the NOTLDS hydrant inspection & maintenance program.			

Question ID	DWMR1052001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was there a bylaw or policy in place limiting access to hydrants?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a bylaw or policy in place limiting access to hydrants.			
NOTL does have a bylaw (814-77) which outlines the use and restrictions of town-owned hydrants.			

Question ID	DWMR1058001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			

Question:

Did operators and maintenance personnel have ready access to operations and maintenance manuals?

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

Operators and maintenance personnel had ready access to operations and maintenance manuals.

Copies of the operations and maintenance (O&M) manual are kept in the Public Works office and in each operator's vehicle. Additionally, the NOTLDS operators have tablets in their trucks with the O&M manual electronically available.

Question ID	DWMR1059001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Did 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. The Operations Manual for the NOTLDS appears to contain the required elements prescribed by Ontario Regulation 128/04 and Municipal Drinking Water Licence 069-102. A hard copy of the O&M manual is available in the Public Works office and there is also an electronic version available to all operators.			

Question ID	DWMR1060001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the operations and maintenance manual(s) meet the requirements of the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operations and maintenance manual(s) met the requirements of the Municipal Drinking Water Licence.			

Question ID	DWMR1062001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-5;			

Question:

Did records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment was done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03?

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 done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03.

Logbook entries made by persons taking operational testing were reviewed and compared to OWWCO records and all persons had the required certification.

Question ID	DWMR1063001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-10 (1);			
Question: For every required operational test and sample, was a record made of the date, time, location, results, and name of the person conducting the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): For every required operational test and sample, a record was made as required. Operational logbooks were reviewed and do contain the required content.			

Question ID	DWMR1061001	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: Were logbooks properly maintained and did they contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logbooks were properly maintained and contained the required information. Ontario Regulation 128/04 s. 27, (4) stipulate that a person who makes an entry in a log or other record-keeping mechanism shall do so in a manner that permits the person to be unambiguously identified as the maker of the entry. Operational logbooks were reviewed and the majority of all entries conformed to the requirements. However, a portion of the entries, specifically the portion which identifies the names of on-duty operators, the Overall Responsible Operator (ORO) and the Operator in Charge (OIC), does not indicate who made the entry. Effective immediately, all entries in operational logbooks shall identify the author.			

Question ID	DWMR1065001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 27 (6);			
Question: Were logs and other record keeping mechanisms available for at least five (5) years?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logs or other record keeping mechanisms were available for at least five (5) years. NOTLDS keeps previous logbooks in the Public Works building. In addition, the Town keep scanned copies of the logs for easier availability.			

Question ID	DWMR1071001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Did the owner provide security measures to protect components of the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner provided security measures to protect components of the drinking water system. During the physical inspection, it was observed that all sample stations are equipped with locks.			

Question ID	DWMR1072001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Had the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.			

Question ID	DWMR1073001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1);			

Question:

Was an overall responsible operator designated for all subsystems which comprise the drinking water system?

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

An overall responsible operator was designated for all subsystems.

Question ID	DWMR1078001	Question Type	Legislative
Legislative Requirement(s): 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);			
Question: When the overall responsible operator was unable to act, was a properly certified operator designated to act in their place?			
Compliance Response(s)/Corrective Action(s)/Observation(s): A properly certified operator was designated to act in place of the overall responsible operator. Both the ORO and the back-up have the appropriate certification for this Class 1 distribution system. The system received Certificate #1293 on July 13, 2005.			

Question ID	DWMR1074001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 25 (1);			
Question: Were operators-in-charge designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators-in-charge were designated for all subsystems. Each day, the OIC is indicated in the operational logbook. Typically, the OIC for the NOTLDS is the same as the Bevan Heights.			

Question ID	DWMR1075001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 22;			
Question: Were all operators certified as required?			

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

All operators were certified as required.

The document provided to the ministry titled "Operator License and Training Information" was reviewed in conjunction with operational logbooks and OWWCO records and all operators possess the required certification.

Appendix A

Inspection Rating Report

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2025-26)

DWS Name: NIAGARA-ON-THE-LAKE DISTRIBUTION SYSTEM

DWS Number: 260001380

DWS Owner: CORPORATION OF THE TOWN OF NIAGARA-ON-THE-LAKE

Municipal Location: NIAGARA-ON-THE-LAKE

Regulation: O.REG. 170/03

DWS Category: DW Municipal Residential

Type of Inspection: Detailed

Compliance Assessment Start Date: Apr-29-2025

Ministry Office: Niagara District Office

Maximum Risk Rating: 307

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/35
Distribution System	0/4
Logbooks	0/26
Operations Manuals	0/42
Reporting & Corrective Actions	0/71
Treatment Processes	0/58
Water Quality Monitoring	0/71
Overall - Calculated	0/307

Inspection Risk Rating:	0.00%
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Final Inspection Rating:	100.00%
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Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2025-26)

DWS Name:	NIAGARA-ON-THE-LAKE DISTRIBUTION SYSTEM
DWS Number:	260001380
DWS Owner Name:	CORPORATION OF THE TOWN OF NIAGARA-ON-THE-LAKE
Municipal Location:	NIAGARA-ON-THE-LAKE
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Detailed
Compliance Assessment Start Date:	Apr-29-2025
Ministry Office:	Niagara District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 307

Inspection Risk Rating:	0.00%
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FINAL INSPECTION RATING:	100.00%
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APPLICATION OF THE RISK METHODOLOGY USED FOR MEASURING MUNICIPAL RESIDENTIAL DRINKING WATER SYSTEM INSPECTION RESULTS



The Ministry of the Environment (MOE) has a rigorous and comprehensive inspection program for municipal residential drinking water systems (MRDWS). Its objective is to determine the compliance of MRDWS with requirements under the Safe Drinking Water Act and associated regulations. It is the responsibility of the municipal residential drinking water system owner to ensure their drinking water systems are in compliance with all applicable legal requirements.

This document describes the risk rating methodology, which has been applied to the findings of the Ministry's MRDWS inspection

results since fiscal year 2008-09. The primary goals of this assessment are to encourage ongoing improvement of these systems and to establish a way to measure this progress.

MOE reviews the risk rating methodology every three years.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains 15 inspection modules consisting of approximately 100 regulatory questions. Those protocol questions are also linked to definitive guidance that ministry inspectors use when conducting MRDWS inspections.

ontario.ca/drinkingwater

The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring. The inspection protocol also contains a number of non-regulatory questions.

A team of drinking water specialists in the ministry assessed each of the inspection protocol regulatory questions to determine the risk (not complying with the regulation) to the delivery of safe drinking water. This assessment was based on established provincial risk assessment principles, with each question receiving a risk rating referred to as the Question Risk Rating. Based on the number of areas where a system is deemed to be non-compliant during the inspection, and the significance of these areas to administrative, environmental, and health consequences, a risk-based inspection rating is calculated by the ministry for each drinking water system.

It is important to be aware that an inspection rating less than 100 per cent does not mean the drinking water from the system is unsafe. It shows areas where a system’s operation can improve. The ministry works with owners and operators of systems to make sure they know what they need to do to achieve full compliance.

The inspection rating reflects the inspection results of the specific drinking water system for the reporting year. Since the methodology is applied consistently over a period of years, it serves as a comparative measure both provincially and in relation to the individual system. Both the drinking water system and the public are able to track the performance over time, which encourages continuous improvement and allows systems to identify specific areas requiring attention.

The ministry’s annual inspection program is an important aspect of our drinking water safety net. The ministry and its partners share a common commitment to excellence and we continue to work toward the goal of 100 per cent regulatory compliance.

Determining Potential to Compromise the Delivery of Safe Water

The risk management approach used for MRDWS is aligned with the Government of Ontario’s Risk Management Framework. Risk management is a systematic approach to identifying potential hazards, understanding the likelihood and consequences of the hazards, and taking steps to reduce their risk if necessary and as appropriate.

The Risk Management Framework provides a formula to be used in the determination of risk:

RISK = LIKELIHOOD × CONSEQUENCE
(of the consequence)

Every regulatory question in the inspection protocol possesses a likelihood value (L) for an assigned consequence value (C) as described in **Table 1** and **Table 2**.

TABLE 1:	
Likelihood of Consequence Occurring	Likelihood Value
0% - 0.99% (Possible but Highly Unlikely)	L = 0
1 – 10% (Unlikely)	L = 1
11 – 49% (Possible)	L = 2
50 – 89% (Likely)	L = 3
90 – 100% (Almost Certain)	L = 4

TABLE 2:	
Consequence	Consequence Value
Medium Administrative Consequence	C = 1
Major Administrative Consequence	C = 2
Minor Environmental Consequence	C = 3
Minor Health Consequence	C = 4
Medium Environmental Consequence	C = 5
Major Environmental Consequence	C = 6
Medium Health Consequence	C = 7
Major Health Consequence	C = 8

The consequence values (0 through 8) are selected to align with other risk-based programs and projects currently under development or in use within the ministry as outlined in **Table 2**.

The Question Risk Rating for each regulatory inspection question is derived from an evaluation of every identified consequence and its corresponding likelihood of occurrence:

- All levels of consequence are evaluated for their potential to occur
- Greatest of all the combinations is selected.

The Question Risk Rating quantifies the risk of non-compliance of each question relative to the others. Questions with higher values are those with a potentially more significant impact on drinking water safety and a higher likelihood of occurrence. The highest possible value would be 32 (4×8) and the lowest would be 0 (0×1).

Table 3 presents a sample question showing the risk rating determination process.

TABLE 3:							
Does the Operator in Charge ensure that the equipment and processes are monitored, inspected and evaluated?							
Risk = Likelihood × Consequence							
C=1	C=2	C=3	C=4	C=5	C=6	C=7	C=8
Medium Administrative Consequence	Major Administrative Consequence	Minor Environmental Consequence	Minor Health Consequence	Medium Environmental Consequence	Major Environmental Consequence	Medium Health Consequence	Major Health Consequence
L=4 (Almost Certain)	L=1 (Unlikely)	L=2 (Possible)	L=3 (Likely)	L=3 (Likely)	L=1 (Unlikely)	L=3 (Likely)	L=2 (Possible)
R=4	R=2	R=6	R=12	R=15	R=6	R=21	R=16

Application of the Methodology to Inspection Results

Based on the results of a MRDWS inspection, an overall inspection risk rating is calculated. During an inspection, inspectors answer the questions related to regulatory compliance and input their “yes”, “no” or “not applicable” responses into the Ministry’s Laboratory and Waterworks Inspection System (LWIS) database. A “no” response indicates non-compliance. The maximum number of regulatory questions asked by an inspector varies by: system (i.e., distribution, stand-alone); type of inspection (i.e., focused, detailed); and source type (i.e., groundwater, surface water).

The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

Appendix B

Stakeholder Appendix

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/drinkingwater



PUBLICATION TITLE	PUBLICATION NUMBER
FORMS: Drinking Water System Profile Information Laboratory Services Notification Adverse Test Result Notification	012-2149E 012-2148E 012-4444E
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	Website
Procedure for Disinfection of Drinking Water in Ontario	Website
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	Website
Filtration Processes Technical Bulletin	Website
Ultraviolet Disinfection Technical Bulletin	Website
Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments	Website
Certification Guide for Operators and Water Quality Analysts	Website
Guide to Drinking Water Operator Training Requirements	9802E
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	Website
Drinking Water System Contact List	7128E01
Ontario's Drinking Water Quality Management Standard - Pocket Guide	Website
Watermain Disinfection Procedure	Website
List of Licensed Laboratories	Website

Principaux guides et documents de référence sur les réseaux résidentiels municipaux d'eau potable

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment. Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le ministère au 1-866-793-2588, ou encore à waterforms@ontario.ca si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site www.ontario.ca/eaupotable

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Renseignements sur le profil du réseau d'eau potable	012-2149F
Avis de demande de services de laboratoire	012-2148F
Avis de résultats d'analyse insatisfaisants et de règlement des problèmes	012-4444F
Prendre soin de votre eau potable - Un guide destiné aux membres des conseils municipaux	Site Web
Marche à suivre pour désinfecter l'eau potable en Ontario	Site Web
Stratégies pour minimiser les trihalométhanes et les acides haloacétiques de sous-produits de désinfection	Site Web
Filtration Processes Technical Bulletin (en anglais seulement)	Site Web
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	Site Web
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable	Site Web
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	Site Web
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802F
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	Site Web
Liste des personnes-ressources du réseau d'eau potable	Site Web
L'eau potable en Ontario - Norme de gestion de la qualité - Guide de poche	Site Web
Procédure de désinfection des conduites principales	Site Web
Laboratoires autorisés	Site Web