

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

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



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February 25, 2022

City of Richmond Hill
225 East Beaver Creek Road East
Richmond Hill, ON
L4P 3B4

Attention: Ms. Tracey Steele, Acting Commissioner of Community Services

**RE: Richmond Hill Distribution System # 260001968
Drinking Water Inspection Report # 1-1MY33G**

Enclosed is a copy of the inspection report prepared for the Richmond Hill Distribution System under the Ministry's detailed inspection protocol to assess compliance with Safe Drinking Water Act legislation. The report is based on conditions encountered at the time of inspection, and subsequent follow-up.

"Actions Required" are linked to incidents of non-compliance with regulatory requirements contained within the Act, a regulation, or site-specific approvals, licenses, permits, orders or instructions. Such violations could result in the issuance of mandatory abatement instruments including Orders, tickets, penalties, or referrals to the ministry's Investigations and Enforcement Branch.

"Recommended Actions" convey information that the owner or operating authority should consider implementing in order to advance efforts already in place to address such issues as emergency preparedness, the availability of information to consumers, and conformance with existing and emerging industrial standards. Please note that items which appear as recommended actions do not, in themselves, constitute violations.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates several 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 council" 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/external risk experts.

The Inspection Summary Rating Record (IRR) provides the Ministry, the system owner and the local Public Health Unit 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 Inspectors' Annual Report.

Please note that due to a change in IT systems, the IRR cannot be generated at the same time as the inspection report. The IRR will be sent separately and prior to any public release (typically within 1-2 month of the completion of the inspection).

I would like to thank the City of Richmond Hill staff for the assistance afforded to me during this compliance assessment. If you have any questions or concerns please contact me or Demetra Koros, Water Compliance Supervisor, Central Region at 905-409-0496.

Yours truly,



Theresa Ip
Water Inspector | Provincial Officer Badge # 1546
Drinking Water and Environmental Compliance Division
Ministry of the Environment Conservation and Parks
Phone: (905) 449-9562

ec:

Safe Water, York Region Health Services Department Health Protection Division
Julie De Santis, Drinking Water Quality Management System Program Coordinator, City of Richmond Hill
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Don Ford, Senior Manager, Hydrogeology, Toronto and Region Conservation Authority
Demetra Koros, Water Supervisor, Ministry of the Environment Conservation and Parks
Samantha Anderson, Water Inspector, Ministry of the Environment Conservation and Parks



RICHMOND HILL DISTRIBUTION SYSTEM
1200 ELGIN MILLS RD E, RICHMOND HILL, ON, L4S 1M5

Inspection Report

System Number: 260001968
Inspection Start Date: 01/19/2022
Inspection End Date: 02/25/2022
Inspected By: Theresa Ip
Badge #: 1546

A handwritten signature in black ink that reads "Theresa Ip".

(signature)



Ministry of the Environment, Conservation and Parks
Drinking Water Inspection

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Appendix:

A. Stakeholders Appendix

B. Drinking Water System Components

NON-COMPLIANCE/NON-CONFORMANCE ITEMS

This should not be construed as a confirmation of full compliance with all potential applicable legal requirement and BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: Regulated Activity: DRINKING WATER : DW Municipal Residential

Question ID	MRDW1001000	
Question	Question Type	Legislative Requirement
What was the scope of this inspection?	Information	Not Applicable
Observation		
<p>The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.</p> <p>This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O.Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.</p> <p>This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements. A remote announced inspection was conducted for the Richmond Hill Distribution System (the system). The inspection was conducted by the Ministry of Environment, Conservation and Parks (MECP) by Provincial Officer, Theresa Ip, and Water Inspector, Sam Anderson.</p> <p>The City of Richmond Hill (the City) owns and operates this drinking water system. The City receives treated water from the City of Toronto and the Region of Peel. York Region provides water storage and pressure boosting to the system and acts as a wholesaler of the water to the system. The City of Toronto, Region of Peel, and York Region treatment and distribution systems are inspected separately from the Richmond Hill Distribution System. The system does not have any treatment equipment, re-chlorination, continuous monitoring, or storage facilities.</p> <p>The inspection review period is from February 23, 2021 to January 19, 2022.</p> <p>The inspection included compliance assessment with all applicable MECP legislation, an inspection of the procedures used within the system, and a review of records. Documents reviewed in association with this report include, but were not limited to:</p> <ol style="list-style-type: none"> 1) MECP Municipal Drinking Water Licence (MDWL) Number 022-101, Issue Number 8, dated December 13, 2019; 2) MECP Drinking Water Works Permit (DWWP) Number 022-201, Issue Number 4, dated July 22, 2019; 		

3) Other documents provided by and maintained by the owner/ operating authority for the purpose of completing the inspection.

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

Question ID	MRDW1036000	
Question	Question Type	Legislative Requirement
Where continuous monitoring equipment is not used for chlorine residual analysis, are samples tested using an acceptable portable device?	Legislative	SDWA O. Reg. 170/03 6-7 (1)
Observation		
Samples for chlorine residual analysis were tested using an acceptable portable device. Electronic direct read-out colorimetric chlorine analyzers are used for chlorine residual analysis. Calibration records for the analyzers were supplied for the inspection, analyzers are calibrated on a monthly basis which exceeds manufacturer recommendation.		

Question ID	MRDW1033000	
Question	Question Type	Legislative Requirement
Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?	Legislative	SDWA O. Reg. 170/03 7-2 (3), SDWA O. Reg. 170/03 7-2 (4)
Observation		
The secondary disinfectant residual was measured as required for the distribution system. The System serves a population of approximately 209, 538, according to the current drinking water system profile. At least seven distribution samples are taken each week and are tested immediately for free and total chlorine residual. This was verified by reviewing daily chlorine residual documentation which was supplied by the system for review.		

Question ID	MRDW1018000	
Question	Question Type	Legislative Requirement
Has the owner ensured that all equipment is installed in	Legislative	SDWA 31 (1)

accordance with Schedule A and Schedule C of the Drinking Water Works Permit?		
Observation		
The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.		

Question ID	MRDW1020000	
Question	Question Type	Legislative Requirement
Is the owner/operating authority able to demonstrate that, when required during the inspection period, Form 1 documents were prepared in accordance with their Drinking Water Works Permit?	Legislative	SDWA 31 (1)
Observation		
The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water Works Permit during the inspection period. During the inspection review period 4 "Form 1 - Record of Watermains Authorized as a Future Alteration" forms were prepared and provided for review as part of the inspection.		

Question ID	MRDW1025000	
Question	Question Type	Legislative Requirement
Were all parts of the drinking water system that came in contact with drinking water (added, modified, replaced or extended) disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?	Legislative	SDWA 31 (1)
Observation		
All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit. Standard operating procedure (SOP)-DW-4, 4.6 Commissioning New Watermains was provided for assessment, this procedure contains instructions to City staff, Project Engineers, and contractors regarding the cleaning, disinfection, hydrostatic testing and sampling of new watermains. Twelve Watermain Work Order Records, which detail watermain repairs, and records from seven new watermain construction projects were also provided for review. The records provided indicate that all parts of the drinking water system were disinfected in accordance with Schedule B of the DWWP.		

Question ID	MRDW1027000	
Question	Question Type	Legislative Requirement
Does the owner have evidence indicating that all chemicals and materials which come in contact with water within the drinking water system have met all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)

Observation
The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA. Policy EP-DW-4: Essential Supplies and Services was provided for review. This document outlined approved manufacturers and products to ensure all chemicals and products used in the system meet all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA. Additionally, the form EP-DW-4: QMS Essential Supplies List was provided for inspection. This form is filled out when new products are ordered/ received, it details the product, and required accreditation.

Question ID	MRDW1045000		
Question	Question Type	Legislative Requirement	
Has the owner updated the document describing the distribution components within 12 months of completion of alterations to the system?	Legislative	SDWA 31 (1)	
Observation			
The owner had up-to-date documents describing the distribution components as required.			

Question ID	MRDW1046000		
Question	Question Type	Legislative Requirement	
Is there a backflow prevention program, policy and/or bylaw in place that addresses cross connections and connections to high hazard facilities?	BMP	Not Applicable	
Observation			
There is a backflow prevention program, policy and/or bylaw in place. The City has in place By-Law 125-14 to regulate Backflow Prevention and Cross Connection Control. Property's to which the by-law applies are required to undertake and submit to the City a Cross Connection Control Survey every 5 years, hazard identification is a component of the survey. Additionally, the by-law requires all backflow preventers to be verified/calibrated by a qualified person annually.			

Question ID	MRDW1048000		
Question	Question Type	Legislative Requirement	
Has the owner implemented a program for the flushing of watermains as per industry standards?	BMP	Not Applicable	
Observation			
The owner had implemented a program for the flushing of watermains as per industry standards. WI-DW-3.7 on Dead End Flushing, last revised October 21, 2019, was provided during the inspection for review. The document details the City's dead end flushing program to maintain water quality standards. Work order reports were provided for review confirming program implementation.			

Question ID	MRDW1049000		
Question	Question Type	Legislative Requirement	
Do records confirm that disinfectant residuals are routinely checked at the extremities and dead ends of the distribution system?	BMP	Not Applicable	
Observation			
Records confirmed that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system.			

Question ID	MRDW1050000		
Question	Question Type	Legislative Requirement	
Is there a program in place for inspecting and exercising valves?	BMP	Not Applicable	
Observation			
A program was in place for inspecting and exercising valves. WI-DW-2.1 Valve Exercising & Inspection, WI-DW-2.5 Valve Inspection PRV, and WI-DW-2.6 Valve Inspection - Air Valves were provided for review during the inspection. The documents detail the City's valve exercising and inspection programs. Work order reports were provided for review confirming that the program has been implemented and is conducted March to July of each year.			

Question ID	MRDW1051000		
Question	Question Type	Legislative Requirement	
Is there a program in place for inspecting and operating hydrants?	BMP	Not Applicable	
Observation			
There was a program in place for inspecting and operating hydrants. WI-DW-2.3 Annual Inspection of Hydrants, last revised October 24, 2019, was provided for review. Hydrant inspections are conducted annually, in addition to preventative maintenance to insure operating condition. Work order reports were provided for review confirming that maintenance/inspection of hydrants is conducted annually, as well as in the winter.			

Question ID	MRDW1052000		
Question	Question Type	Legislative Requirement	
Is there a by-law or policy in place limiting access to hydrants?	BMP	Not Applicable	
Observation			
There was a by-law or policy in place limiting access to hydrants. By-law 2-06, Chapter 1190, Water-Wastewater, Article 8, Article 17, Article 20, and Article 33			

were reviewed as part of the inspection. Components within this by-law prohibit the unauthorized operation or interference with waterworks, including tampering and interfering with hydrants. Use of water from a hydrant, other than for fire extinction, is subject to approval by the City.

Question ID	MRDW1053000		
Question	Question Type	Legislative Requirement	
Is the Owner able to maintain proper pressures in the distribution system and is pressure monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate?	BMP	Not Applicable	
Observation			
<p>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. Watermain break records, work orders, daily activity sheets, and water pressure/ flow inquiries were reviewed. At the time of the inspection, it was noted that the City is made aware of pressure fluctuations by complaints or inquires from business owners and the public. During regular business hours an operator is dispatched to respond. During the afterhours, an on-call operator is dispatched directly.</p> <p>The City also works with the upper tier municipality of York Region (the Region) to identify pressure issues as the Region monitors pressure at the reservoir. The Region will notify the City of any issues with pressure that they become aware of.</p>			

Question ID	MRDW1056000		
Question	Question Type	Legislative Requirement	
Has the donor provided an Annual Report to the receiver drinking water system?	Information	Not Applicable	
Observation			
The donor had provided an Annual Report to the receiver drinking water system.			

Question ID	MRDW1058000		
Question	Question Type	Legislative Requirement	
Do operators and maintenance personnel have ready access to operations and maintenance manuals?	Legislative	SDWA O. Reg. 128/04 28	
Observation			
<p>Operators and maintenance personnel had ready access to operations and maintenance manuals. Operations and maintenance personnel are able to access operations and maintenance manuals on the City's intranet site. All personnel have mobile tablets which allow them to access operations and maintenance manuals at anytime.</p>			

Question ID	MRDW1063000		
Question	Question Type	Legislative Requirement	
For every required operational test and for every required sample, is a record made of the date, time, location, name of the person conducting the test and result of the test?	Legislative	SDWA O. Reg. 170/03 6-10 (1)	
Observation			
For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.			

Question ID	MRDW1064000		
Question	Question Type	Legislative Requirement	
Did the operator-in-charge ensure that records were maintained of all adjustments made to the processes within his or her responsibility?	Legislative	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.			

Question ID	MRDW1065000		
Question	Question Type	Legislative Requirement	
Are logs and other record keeping mechanisms available for at least five (5) years?	Legislative	SDWA O. Reg. 128/04 27 (6)	
Observation			
Logs or other record keeping mechanisms were available for at least five (5) years. SOP WI-DW-4.1 Record Keeping was provided as part of the inspection, which details the location of required records and the length they are required to be kept. Logs and other record keeping mechanisms are available for 10 years on the City's maintenance management system Maximo.			

Question ID	MRDW1059000		
Question	Question Type	Legislative Requirement	
Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?	Legislative	SDWA O. Reg. 128/04 28	
Observation			
The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system. Maps depicting the Richmond Hill Distribution System and the Water Sampling Stations, including valve and hydrant locations, were provided for review as part of the inspection. Additionally, the Drinking Water Quality			

Management System Operational Plan and SOP-DW-3 Drinking Water— Water Quality documents contained detailed descriptions of the system.

Question ID	MRDW1060000	
Question	Question Type	Legislative Requirement
Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA. Review of the operations and maintenance manuals revealed that the requirements outlined in section 16.0 of the MDWL were met. Operators are notified of updates and locations of operations and maintenance manuals via e-mail from the Drinking Water Quality Management System Program Coordinator. Only the most current versions are available on the City's intranet site.		

Question ID	MRDW1061000	
Question	Question Type	Legislative Requirement
Are logbooks properly maintained and contain the required information?	Legislative	SDWA O. Reg. 128/04 27 (1), SDWA O. Reg. 128/04 27 (2), SDWA O. Reg. 128/04 27 (3), SDWA O. Reg. 128/04 27 (4), SDWA O. Reg. 128/04 27 (5), SDWA O. Reg. 128/04 27 (6), SDWA O. Reg. 128/04 27 (7)
Observation		
Logbooks were properly maintained and contained the required information.		

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

Reg. 170/03 7-5?		
Observation		
Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.		

Question ID	MRDW1071000	
Question	Question Type	Legislative Requirement
Has the owner provided security measures to protect components of the drinking water system?	BMP	Not Applicable
Observation		
The owner had provided security measures to protect components of the drinking water system. During the inspection it was relayed that the main office building, and locations where materials and parts are stored are all equipped with security cameras and required FOB access. Furthermore, anti-tamper devices are installed on all new hydrants as well as places where water theft has been reported. Additionally, the City has cyber security measures in place.		

Question ID	MRDW1072000	
Question	Question Type	Legislative Requirement
Has the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in their system?	BMP	Not Applicable
Observation		
The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system. During the inspection it was noted that the City had several educational and outreach programs dedicated to promoting water conservation.		
The City conducts water use/loss audits to determine the percentage of water loss in the system. Water use in the system is fully metered where possible. Where water use/loss is unable to be measured, such as in the event of a watermain break, the total amount lost is estimated.		

Question ID	MRDW1073000	
Question	Question Type	Legislative Requirement
Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?	Legislative	SDWA O. Reg. 128/04 23 (1)
Observation		
The overall responsible operator has been designated for each subsystem.		
SOP-DW-4.7 Training and Certification identifies the requirements of the overall responsible operators (OROs). Manger and Supervisors of the systems are designated OROs on a rotational basis.		

Question ID	MRDW1074000		
Question	Question Type	Legislative Requirement	
Have operators in charge been designated for all subsystems for which comprise the drinking water system?	Legislative	SDWA O. Reg. 128/04 25 (1)	
Observation			
Operators-in-charge had been designated for all subsystems which comprised the drinking water system.			

Question ID	MRDW1075000		
Question	Question Type	Legislative Requirement	
Do all operators possess the required certification?	Legislative	SDWA O. Reg. 128/04 22	
Observation			
All operators possessed the required certification. A review of certification records provided by the City and the Operator Listing Report on the Ontario Water Wastewater Certification Office (OWWCO) website confirm that all operators possess valid certification.			

Question ID	MRDW1078000		
Question	Question Type	Legislative Requirement	
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	SDWA O. Reg. 128/04 23 (1), SDWA O. Reg. 128/04 23 (2), SDWA O. Reg. 128/04 23 (3), SDWA O. Reg. 128/04 23 (4), SDWA O. Reg. 128/04 23 (5), 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.			

Question ID	MRDW1099000		
Question	Question	Legislative	

	Type	Requirement
Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O. Reg.. 169/03)?	Information	Not Applicable
Observation		
Records did not 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). During the inspection review period there were 18 Adverse Water Quality Incidents (AWQIs) reported to the MECP, all of these incidents were for total coliform (TC) exceedances. Records displayed that the appropriate corrective actions were taken.		

Question ID	MRDW1081000	
Question	Question Type	Legislative Requirement
Are all microbiological water quality monitoring requirements for distribution samples being met?	Legislative	SDWA O. Reg. 170/03 10-2 (1),SDWA O. Reg. 170/03 10-2 (2),SDWA O. Reg. 170/03 10-2 (3)
Observation		
All microbiological water quality monitoring requirements for distribution samples were being met. According to the current drinking water system profile the population served by the system is approximately 209, 538 people, therefore the minimum requirement for distribution samples is 121 per month with a minimum 3 samples taken each week. During the inspection period more than 3 samples per week, and more than 122 samples per month were taken and tested for E. coli (EC) and TC, additionally more than 25% of samples collected per month were tested for heterotrophic plate count (HPC).		

Question ID	MRDW1086000	
Question	Question Type	Legislative Requirement
Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?	Legislative	SDWA O. Reg. 170/03 13-6.1 (1),SDWA O. Reg. 170/03 13-6.1 (2),SDWA O. Reg. 170/03 13-6.1 (3), SDWA O. Reg. 170/03 13-6.1 (4),SDWA O. Reg. 170/03 13-

		6.1 (5),SDWA O. Reg. 170/03 13-6.1 (6)
Observation		
<p>All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location. As per Schedule 13-6.1(1) of O. Reg. 170/03 samples for haloacetic acid are required to be collected and tested quarterly. During the inspection review period the system collected haloacetic acid samples on:</p> <ul style="list-style-type: none"> • May 5, 2021 • August 10, 2021 • October 13, 2021 • November 18, 2021 		

Question ID	MRDW1087000	
Question	Question Type	Legislative Requirement
Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?	Legislative	SDWA O. Reg. 170/03 13-6 (1)
Observation		
<p>All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. As per Schedule 13-6(1) of O. Reg. 170/03 samples for trihalomethanes are required to be collected and tested quarterly. During the inspection review period the system collected trihalomethane samples on:</p> <ul style="list-style-type: none"> • May 5, 2021 • August 10, 2021 • October 13, 2021 • November 18, 2021 		

Question ID	MRDW1094000	
Question	Question Type	Legislative Requirement
Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?	Legislative	SDWA 31 (1)
Observation		
<p>All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met. The MDWL states that nitrosodimethylamine is to be sampled quarterly from the farthest point in the distribution system. Nitrosodimethylamine was sampled for on the following dates:</p> <ul style="list-style-type: none"> • February 3, 2021 • May 4, 2021 		

- August 10, 2021
- November 15, 2021

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

		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)
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Observation

All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met. Section D of the MDWL grants regulatory relief for the System regarding lead sampling. The MDWL stipulates that 20 samples must be collected from the distribution system between December 15, 2020 to April 15, 2021 and June 15, 2021 to October 15, 2021. During the inspection period a total of 20 lead samples were collected between July 27-30, 2021, additionally 20 samples were collected in January 2021 outside of the inspection period.

Question ID	MRDW1096000	
Question	Question Type	Legislative Requirement
Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?	Legislative	SDWA O. Reg. 170/03 6-3 (1)
Observation		
Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained. A review of laboratory chain of		

custody forms confirmed that chlorine residual samples are collected alongside microbiological samples.

Question ID	MRDW1098000		
Question	Question Type	Legislative Requirement	
Has the owner indicated that the required records are kept and will be kept for the required time period?	Legislative	SDWA O. Reg. 170/03 13 (1), SDWA O. Reg. 170/03 13 (2), SDWA O. Reg. 170/03 13 (3)	
Observation			
The owner indicated that the required records are kept and will be kept for the required time period.			

Question ID	MRDW1100000		
Question	Question Type	Legislative Requirement	
Did any reportable adverse/exceedance conditions occur during the inspection period?	Information	Not Applicable	
Observation			
There were reportable adverse/exceedances during the inspection period. During the inspection review period there were 18 AWQIs reported to the MECP, all of these incidents were for TC exceedances. Records displayed that the appropriate corrective actions were taken.			

Question ID	MRDW1101000		
Question	Question Type	Legislative Requirement	
Have corrective actions (as per Schedule 17) been taken to address adverse conditions, including any other steps as directed by the Medical Officer of Health?	Legislative	SDWA O. Reg. 170/03 17-1, SDWA O. Reg. 170/03 17-10 (1),SDWA O. Reg. 170/03 17-10 (2),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
Observation		
Corrective actions (as per Schedule 17) had been taken to address adverse conditions, including any other steps that were directed by the Medical Officer of Health.		

Question ID	MRDW1113000	
Question	Question Type	Legislative Requirement
Have all changes to the system registration information been provided to the Ministry within ten (10) days of the change?	Legislative	SDWA O. Reg. 170/03 10.1 (3)
Observation		
All changes to the system registration information were provided within ten (10) days of the change. On February 8, 2022, the Water Quality Coordinator submitted an updated Drinking Water System Profile Information form to the Ministry to update primary contact information.		

Question ID	MRDW1104000	
Question	Question Type	Legislative Requirement
Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?	Legislative	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)
Observation		
All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6. A review of Section 1 - Written Notice by Licensed Laboratory and Section 2A - Written Notice by Drinking Water System forms submitted by the System and the lab to the MECP indicates that verbal notifications of AWQIs were provided as per Schedule 16-6 of O. Reg. 170/03.		

Question ID	MRDW1105000	
Question	Question Type	Legislative Requirement
Were all required written notices of adverse water quality incidents provided as per O. Reg. 170/03 16-7?	Legislative	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)
Observation		
All required written notices of adverse water quality incidents were provided as per O. Reg. 170/03 16-7. A review of all AWQIs reported by the laboratory was conducted in conjunction with a review of the Section 2A - Written Notice and Section 2B - Notice of Resolution forms submitted by the System to the MECP. This review indicated that all required written notices of AWQIs were provided to the required parties.		

Question ID	MRDW1106000	
Question	Question Type	Legislative Requirement
Were all required written notices of issue resolution provided as per O. Reg.. 170/03 16-9?	Legislative	SDWA O. Reg. 170/03 16-9 (1),SDWA O. Reg. 170/03 16-9 (2)
Observation		
In instances where written notice of issue resolution was required by regulation, the notice was provided as per O. Reg. 170/03 16-9.		

Question ID	MRDW1110000	
Question	Question Type	Legislative Requirement
Was an Annual Report containing the required information prepared by February 28 of the following year?	Legislative	SDWA O. Reg. 170/03 11 (6)
Observation		
The Annual Report containing the required information was prepared by February 28th of the following year.		

Question ID	MRDW1114000	
Question	Question Type	Legislative Requirement
Does the owner have evidence that, when required, all legal owners associated with the DWS were notified of the requirements of the Licence & Permit?	Legislative	SDWA 31 (1)
Observation		
The owner had evidence that all required notifications to all legal owners associated with the Drinking Water System had been made during the inspection period.		

Question ID	MRDW1117000	
Question	Question Type	Legislative Requirement
Are there any other DWS related items that should be recognized in this report?	Information	Not Applicable
Observation		
The following items are noted as being relevant to the Drinking Water System: As part of the inspection Watermain Work Order Records, which detail watermain repairs, were reviewed. Operators are reminded to ensure records relating to watermain maintenance/repair are wholesome and complete.		

Question ID	MRDW1111000	
Question	Question Type	Legislative Requirement
Have Summary Reports for municipal council been completed on time, include the required content, and distributed in accordance with the regulatory requirements?	Legislative	SDWA O. Reg. 170/03 22-2 (1),SDWA O. Reg. 170/03 22-2 (2),SDWA O. Reg. 170/03 22-2 (3),SDWA O. Reg. 170/03 22-2 (4)
Observation		
Summary Reports for municipal council were completed on time, included the required content,		

and were distributed in accordance with the regulatory requirements. Confirmation of the 2020 Annual Water Quality Report being presented to Council on February 24, 2021 was provided for review.

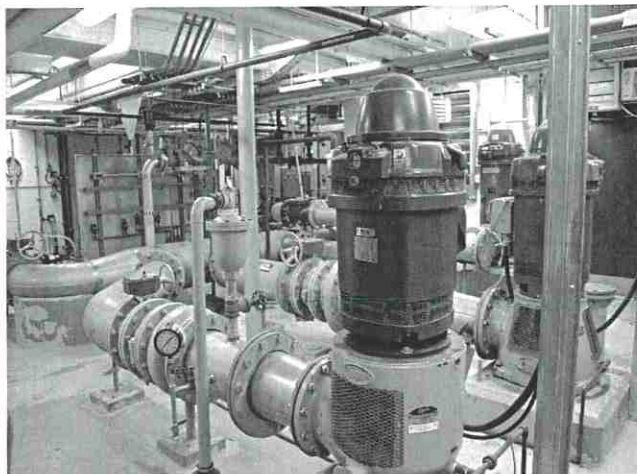
APPENDIX A
STAKEHOLDER APPENDIX

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



APPENDIX B

DRINKING WATER SYSTEM COMPONENTS

DWS Component Information Report for 260001968

as of 22-FEB-2022

Drinking Water System Profile Information

DWS # 260001968
MOE Assigned Name Richmond Hill Distribution System
Category LMRS
Regulation O.REG 170/03
DWS Type Distribution System
Source Type Distribution
Address 1200 Elgin Mills Road East, Richmond Hill, Ontario, L4S 1M4, Canada
Region Central Region
District York-Durham District
Municipality Richmond Hill
Public Health Unit York Region Health Services Department

LWIS Component Name	LWIS Component Type	LWIS Component Sub-Type	Component Address	Comments
Richmond Hill Operations Centre			1200 Elgin Mills Rd E,	The City of Richmond Hill owns and operates the Richmond Hill Distribution system consisting of 606 km of watermains serving approximately 214,100 residents. The water source is surface water that is treated by the City of Toronto and the Regional Municipality of Peel. Drinking water is transmitted from these systems to the Regional Municipality of York which sells it to local municipalities including the City of Richmond Hill. Chloramination is used by the Regional Municipality of York for the secondary disinfection. The transmission lines and storage facilities within the Richmond Hill distribution system are owned and operated by the Regional Municipality of York.

