



Ministry of the Environment, Conservation and Parks Drinking Water and  
Environmental Compliance Division West Central Region  
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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 Hamilton  
119 rue King Ouest, 9e étage Hamilton (Ontario)  
L8P 4Y7  
Tél.: 905 521-7650  
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October 25, 2023

Cassandra Banting  
Environmental Compliance Manager  
City of Port Colborne  
1 Killaly St W.  
Port Colborne, ON  
Cassandra.Banting@portcolborne.ca

**Re: MECP Inspection - Port Colborne Distribution System (DWS# 220001643)**

Dear Mrs. Banting,

Please find the enclosed copy of the inspection report #1-3DJ700 for the Port Colborne Distribution System completed under the Ministry's focused 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.

If applicable, any items with found within the section entitled "Non-Compliance/Non-Conformance Items" 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 timeframe, 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 may also be provided within the body of the report.

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), included as an Appendix of the inspection report, provides the Ministry, the system owner and the local Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspectors' Annual Report. Please note, the IRR will be sent separately and prior to any public release (typically within 1-2 month of the completion of the inspection).

Thank you for your time and assistance during the inspection process. If you have any questions or concerns, do not hesitate to contact me or Elizabeth Chee Sing, Water Compliance Supervisor, West Central Region at 519-400-6731 or [Elizabeth.cheesing@ontario.ca](mailto:Elizabeth.cheesing@ontario.ca).

Sincerely,

*Connie Height*

Provincial Officer #2068, Water Inspector  
MECP Hamilton District Office  
West Central Region  
[connie.height@ontario.ca](mailto:connie.height@ontario.ca)

Cc:

Steve Shypowskyj, Director of Public Works, City of Port Colborne  
Curtis Dray, Manager of Operations, City of Port Colborne  
Tommy Peazel, Superintendent of Water/Wastewater, City of Port Colborne  
Colin Horne, Manager, Niagara Region Public Health Unit  
Leilani Lee-Yates, Niagara Peninsula Conservation Authority  
Thomas Proks, Niagara Peninsula Conservation Authority  
Elizabeth Chee Sing, Water Compliance Supervisor, MECP

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PORT COLBORNE DISTRIBUTION SYSTEM  
1 KILLALY ST W, PORT COLBORNE, ON, L3K 6H1  
**INSPECTION REPORT**

System Number: 260001643  
Entity: CORPORATION OF THE CITY OF  
PORT COLBORNE  
Inspection Start Date: October 06, 2023  
Inspection End Date: October 19, 2023  
Inspected By: Connie Height  
Badge #: 2068

  
(signature)



### **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	DWMR1001000	Question Type	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> What was the scope of this inspection?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> <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.</p> <p>On October 6, 2023, Provincial Officer Connie Height began an unannounced, focused inspection of the Port Colborne Distribution System (hereafter referred to as the Distribution System (DS)). The inspection included a physical visit to the system components, compliance assessment of applicable Ministry of the Environment Conservation and Parks (MECP) legislation, an inspection of the procedures used within the distribution system, and a review of records. The inspection review period covered by this report is from December 1, 2022 to October 6, 2023 (hereafter referred to as the inspection review period).</p> <p>During the inspection period, the System operated under the following documents: Municipal Drinking Water License (MDWL) # 073-101, Issue #4 dated October 11, 2019; and, Drinking Water Works Permit (DWWP) # 073-201, Issue #5 dated October 11, 2019.</p>			

Question ID	DWMR1000000	Question Type	Information
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Does this drinking water system provide primary disinfection?			

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

This drinking water system provides for only monitoring 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.

The Port Colborne DS is a stand-alone, Class 1 Distribution system and obtains water from the Regional Municipality of Niagara's Port Colborne Drinking Water System, DWS # 220002075. The City of Port Colborne does not perform any secondary disinfection, as the treatment plant and outstations sufficiently chlorinate the water to meet the minimum requirements of free chlorine residual.

Question ID	DWMR1020000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> 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?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> 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, there was one (1) form 1 submitted: - The replacement of a 60.0 meter length of 100mm diameter cast iron watermain piping and the installation of a 60.0 metre length 150mm diameter PVC watermain and one proposed fire hydrant in order to adequately service the proposed development at 1 Neff Street, Port Colborne, ON.  This document was assessed and the content contained all the elements prescribed in Schedule B, Condition 3.0 of the current DWWP issued to the system.			

Question ID	DWMR1114000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Does the owner have evidence that, when required, all legal owners associated with the DWS were notified of the requirements of the Licence & Permit?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had evidence that required notifications to all legal owners associated with the Drinking Water System had been made during the inspection period.  Port Colborne DS reviews the following SOPs with contractors to ensure that they are informed of their requirements and obligations:			

- Information for Contractors performing work on the Port Colborne Distribution System; and,
- Drinking Water Quality Management System - Information and Acknowledgement for Suppliers and Contractors

Question ID	DWMR1025000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> 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?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.  All documents pertaining to watermain breaks and new watermain installations were reviewed and it was determined that the AWWA and MECP Watermain Disinfection Procedures were complied with for every instance.			

Question ID	DWMR1033000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   7-2   (3); SDWA   O. Reg. 170/03   7-2   (4);			
<b>Question:</b> Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The secondary disinfectant residual was measured as required for the large municipal residential distribution system.  Subsection 7-2(3) of Schedule 7 of O. Reg.170/03 prescribes that at least seven (7) free chlorine residual (FCR) tests must be conducted each week within the Port Colborne distribution system. Subsection 7-2(4) includes two options available to satisfy this requirement:  1) at least one FCR test must be conducted in the distribution system each day of the week; or 2) at least four FCR tests must be conducted from different locations on one day of the week, at least 48 hours after the last sample was taken the previous week. And, three more FCR tests must be conducted at three different locations on another day during the week, at least 48 hours after the first day that week.  Records show that the DWS collects grab samples for free chlorine residuals twice a week within the distribution system at least 48 hours apart. Certified operators typically collect 8 samples on Mondays and 8 samples on Thursdays. Samples are taken from hydrants and			

sampling stations across the Port Colborne Distribution System on a 6 week rotational schedule.

Additionally, records show that the Port Colborne also conducted a free chlorine residual test in conjunction with every microbiological sample collected.

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

Question ID	DWMR1081000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   10-2   (1); SDWA   O. Reg. 170/03   10-2   (2); SDWA   O. Reg. 170/03   10-2   (3);			
<b>Question:</b> For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a large municipal residential system were being met.  Based on the reported service population of approximately 16,000, subsection 10-2 Schedule 10 of O.Reg.170/03 requires that a minimum of 24 samples be collected within the distribution system on a monthly basis, with at least one of the samples collected each week. Each sample must be tested for Escherichia coli. (E.C.) and total coliform (T.C.), and at least 25% of the required 24 samples must also be tested for general bacteria populations expressed as colony counts on a heterotrophic plate count (HPC).  A review of data shows that an average of 32 distribution samples were collected each month and submitted for E.C. and T.C. testing. All of the the samples collected were tested for HPC. The sample locations are on a six (6) week rotational schedule amongst the Port Colborne DS dedicated sample stations which cover the entirety of the distribution system.			

Question ID	DWMR1096000	Question Type	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 170/03 | 6-3 | (1);

**Question:**

Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?

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

Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

Question ID	DWMR1086000	Question Type	Legislative
<b>Legislative Requirement(s):</b>			
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);			
<b>Question:</b>			
Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b>			
All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.			
Schedule 13-6.1 of O.Reg 170/03 requires that Total Haloacetic Acids are sampled quarterly for the distribution system where it is likely to have an elevated potential for the formation of Haloacetic Acids. Port Colborne DS collected and tested on a quarterly basis with an annual running average of 7.90 ug/L.			

Question ID	DWMR1087000	Question Type	Legislative
<b>Legislative Requirement(s):</b>			
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);			
<b>Question:</b>			
Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b>			
All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.			
Schedule 13-6 of O.Reg 170/03 requires that Trihalomethanes are sampled quarterly for the distribution system where it is likely to have an elevated potential for the formation of Trihalomethanes. Port Colborne DS tests two separate distribution samples on a quarterly			



frequency. The running annual average is currently 20 ug/L.

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

Question ID	DWMR1060000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.			

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

Question ID	DWMR1062000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   7-5;			
<b>Question:</b> Do records or other record keeping mechanisms confirm that operational testing not performed			



by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?

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

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

Port Colborne DS provided the Ministry with a list of all the chlorine residual grab samples taken over the inspection review period and who took them. This list was assessed in conjunction with the list of the certified operators and it was found that all samples taken were that of a certified operator.

Question ID	DWMR1071000	Question Type	BMP
<b>Legislative Requirement(s):</b> Not Applicable			
<b>Question:</b> Has the owner provided security measures to protect components of the drinking water system?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had provided security measures to protect components of the drinking water system.  During the physical inspection, it was noted that all the sample stations had heavy duty padlocks that secure the station. The two (2) bulk filling stations were secured with a code entry system that only allows approved water haulers to access the station and the equipment (valves, flowmeter, etc.) is locked in a secure building.			

Question ID	DWMR1073000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 128/04   23   (1);			
<b>Question:</b> Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The overall responsible operator (ORO) had been designated for each subsystem.  The Port Colborne Distribution System is classified as a Class 1 Distribution Subsystem. The designated ORO is Tommy Peazel (Supervisor), who holds a valid Class 2 license, expiring July 31, 2025. His back-up is Nathan Lewis (Crew Leader) who also holds a valid Class 1 license, expiring September 30, 2026. The ORO is on call twenty-four (24) hours a day, seven (7) days a week unless unavailable by phone for reasons such as vacation, training, sick leave etc. and unable to respond to emergencies. When the Water/Wastewater Supervisor is not available, the Water/Wastewater Crew Leader shall be appointed as the Acting ORO by the Supervisor, Manager, or the Director of Public Works.			

Question ID	DWMR1074000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 128/04   25   (1);			
<b>Question:</b> Have operators-in-charge been designated for all subsystems which comprise the drinking water system?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Operators-in-charge (OIC) had been designated for all subsystems which comprise the drinking water system.  The Water/Wastewater Crew Leader is designated as the primary OIC during their normal shift, and for the 24 hour period for each day they participate in the on-call rotation. The Water/Wastewater Supervisor is the acting primary OIC if the primary is not available. All fully certified operators are designated as supplemental OIC during their normal shift and will be designated as a supplemental OIC for a 24 hour period for each day they participate in the on-call rotation.			

Question ID	DWMR1075000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 128/04   22;			
<b>Question:</b> Do all operators possess the required certification?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All operators possessed the required certification.  The DWS provided the Ministry with a list of active operators which was compared to the conspicuously posted physical licences on the board in the control room at the DWS. The operators licences were also verified as being valid on the OWWCO website.			

## Appendix A

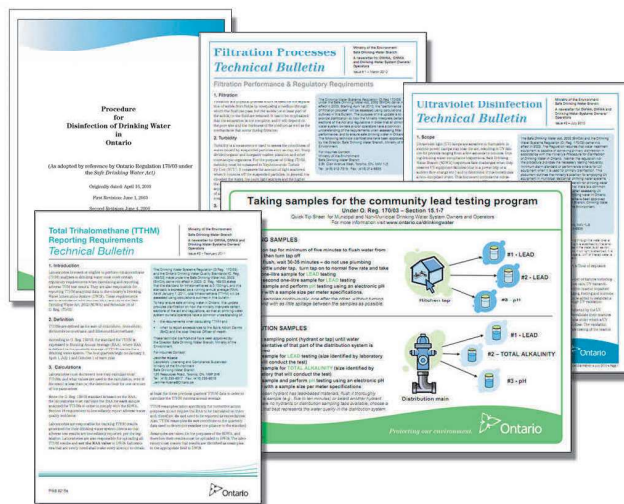
### Stakeholder Appendix

# 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 Public Information Centre if you need assistance or have questions at 1-800-565-4923/416-325-4000 or [picemail.moe@ontario.ca](mailto:picemail.moe@ontario.ca).

For more information on Ontario's drinking water visit [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater) and email [drinking.water@ontario.ca](mailto:drinking.water@ontario.ca) to subscribe to drinking water news.



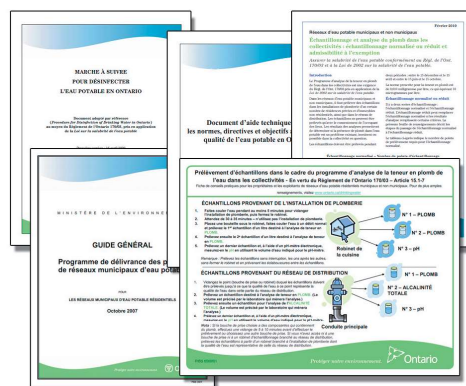
PUBLICATION TITLE	PUBLICATION NUMBER
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	7889e01
FORMS: Drinking Water System Profile Information, Laboratory Services Notification, Adverse Test Result Notification Form	7419e, 5387e, 4444e
Procedure for Disinfection of Drinking Water in Ontario	4448e01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	7152e
Total Trihalomethane (TTHM) Reporting Requirements Technical Bulletin (February 2011)	8215e
Filtration Processes Technical Bulletin	7467
Ultraviolet Disinfection Technical Bulletin	7685
Guide for Applying for Drinking Water Works Permit Amendments, Licence Amendments, Licence Renewals and New System Applications	7014e01
Certification Guide for Operators and Water Quality Analysts	
Guide to Drinking Water Operator Training Requirements	9802e
Taking Samples for the Community Lead Testing Program	6560e01
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	7423e
Guide: Requesting Regulatory Relief from Lead Sampling Requirements	6610
Drinking Water System Contact List	7128e
Technical Support Document for Ontario Drinking Water Quality Standards	4449e01

[ontario.ca/drinkingwater](http://ontario.ca/drinkingwater)

# 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 Centre d'information au public au 1 800 565-4923 ou au 416 325-4000, ou encore à [picemail.moe@ontario.ca](mailto:picemail.moe@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](http://www.ontario.ca/eaupotable) ou envoyez un courriel à [drinking.water@ontario.ca](mailto:drinking.water@ontario.ca) pour suivre l'information sur l'eau potable.

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Prendre soin de votre eau potable – Un guide destiné aux membres des conseils municipaux	7889f01
Renseignements sur le profil du réseau d'eau potable, Avis de demande de services de laboratoire, Formulaire de communication de résultats d'analyse insatisfaisants et du règlement des problèmes	7419f, 5387f, 4444f
Marche à suivre pour désinfecter l'eau potable en Ontario	4448f01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids (en anglais seulement)	7152e
Total Trihalomethane (TTHM) Reporting Requirements: Technical Bulletin (février 2011) (en anglais seulement)	8215e
Filtration Processes Technical Bulletin (en anglais seulement)	7467
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	7685
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable, de modification du permis de réseau municipal d'eau potable, de renouvellement du permis de réseau municipal d'eau potable et de permis pour un nouveau réseau	7014f01
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	
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802f
Prélèvement d'échantillons dans le cadre du programme d'analyse de la teneur en plomb de l'eau dans les collectivités	6560f01
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	7423f
Guide: Requesting Regulatory Relief from Lead Sampling Requirements (en anglais seulement)	6610
Liste des personnes-ressources du réseau d'eau potable	7128f
Document d'aide technique pour les normes, directives et objectifs associés à la qualité de l'eau potable en Ontario	4449f01

[ontario.ca/eaupotable](http://ontario.ca/eaupotable)

**Re: Port Colborne Distribution System, DWS No. 260001643**  
**2023-24 Inspection Report 1-204129062**

Dear Cassandra Banting,

Enclosed is the Inspection Rating Report (IRR) and Risk Methodology document report for the 2023-24 inspection of the Port Colborne Distribution System.

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.

I would be pleased to answer any questions or provide additional clarification or you can also contact Elizabeth Chee Sing, Water Compliance Supervisor, at 519-400-6731.

Sincerely,

*Connie Height*

Connie Height  
Water Compliance Officer  
Hamilton District Office  
Drinking Water and Environmental Compliance Division  
Tel: 226-971-1268  
E-mail: [connie.height@ontario.ca](mailto:connie.height@ontario.ca)

**DWS Name:** PORT COLBORNE DISTRIBUTION SYSTEM  
**DWS Number:** 260001643  
**DWS Owner:** CORPORATION OF THE CITY OF PORT COLBORNE  
**Municipal Location:** PORT COLBORNE

**Regulation:** O.REG. 170/03  
**DWS Category:** DW Municipal Residential  
**Type of Inspection:** Focused  
**Inspection Date:** Oct-6-2023  
**Ministry Office:** Niagara District Office

Maximum Risk Rating: 175

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/28
Logbooks	0/18
Operations Manuals	0/28
Reporting & Corrective Actions	0/4
Treatment Processes	0/46
Water Quality Monitoring	0/51
Overall - Calculated	0/175

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 - 2023-24)

**DWS Name:** PORT COLBORNE DISTRIBUTION SYSTEM  
**DWS Number:** 260001643  
**DWS Owner Name:** CORPORATION OF THE CITY OF PORT COLBORNE  
**Municipal Location:** PORT COLBORNE

**Regulation:** O.REG. 170/03  
**DWS Category:** DW Municipal Residential  
**Type of Inspection:** Focused  
**Inspection Date:** Oct-6-2023  
**Ministry Office:** Niagara District Office

*All legislative requirements were met. No detailed rating scores.*

Maximum Question Rating: 175

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](http://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).

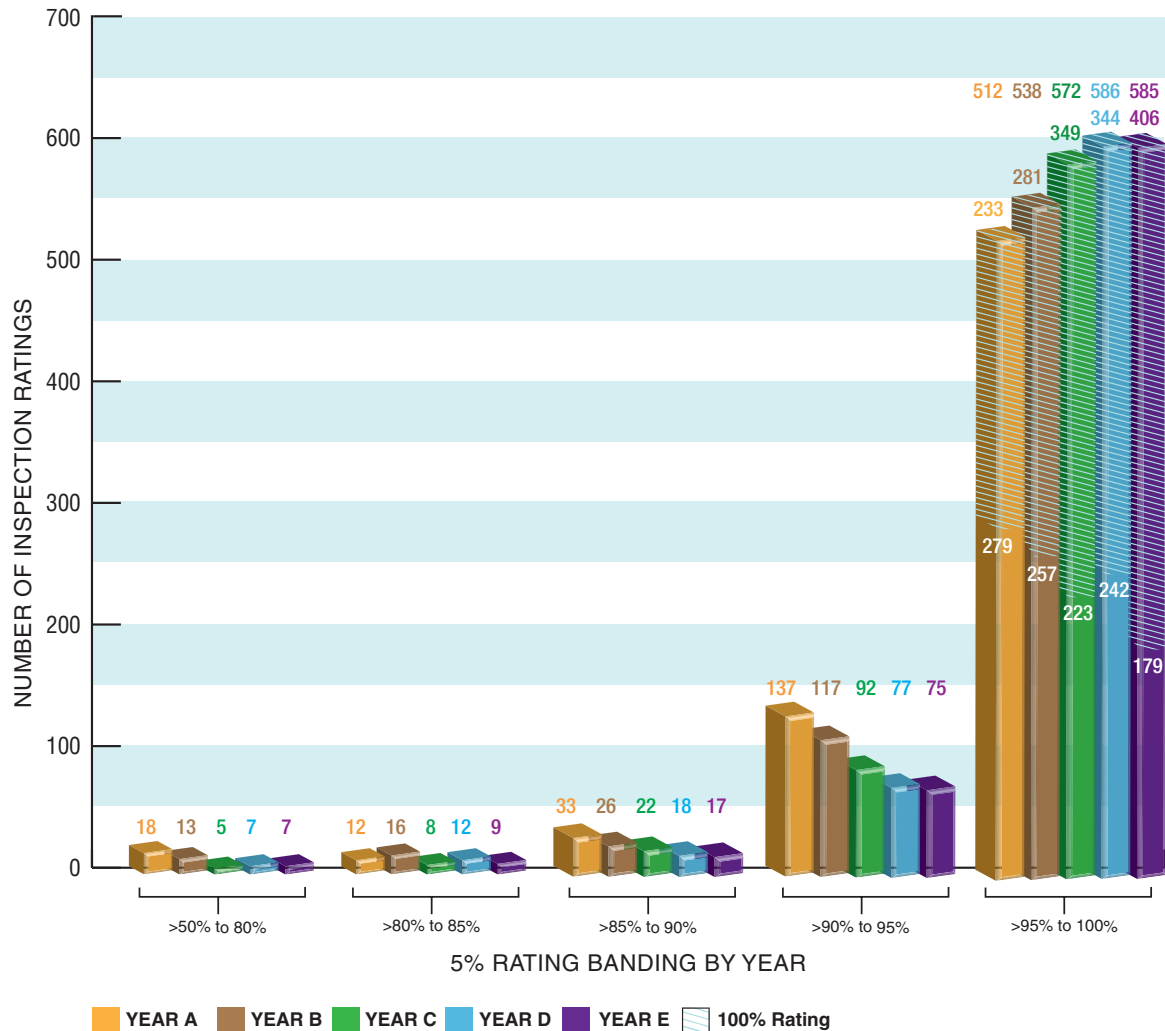
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

# Application of the Methodology for Public Reporting

The individual MRDWS Total Inspection Ratings are published with the ministry’s Chief Drinking Water Inspector’s Annual Report.

**Figure 1** presents the distribution of MRDWS ratings for a sample of annual inspections. Individual drinking water systems can compare against all the other inspected facilities over a period of inspection years.

Figure 1: Year Over Year Distribution of MRDWS Ratings



## Reporting Results to MRDWS Owners/Operators

A summary of inspection findings for each system is generated in the form of an Inspection Rating Record (IRR). The findings are grouped into the 15 possible modules of the inspection protocol,

which would provide the system owner/operator with information on the areas where they need to improve. The 15 modules are:

1. Source

2. Permit to Take Water

3. Capacity Assessment

4. Treatment Processes
5. Treatment Process Monitoring

6. Process Wastewater

7. Distribution System

8. Operations Manuals
9. Logbooks

10. Contingency and Emergency Planning

11. Consumer Relations

12. Certification and Training
13. Water Quality Monitoring

14. Reporting, Notification and Corrective Actions

15. Other Inspection Findings

For further information, please visit [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater)