Ministry of the Environment, Conservation and Parks

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Ontario

March 13, 2025

The Corporation of the Municipality of Thames Centre
4305 Hamilton Road
Dorchester, ON
N0L 1G5

Attention: Kevin Willson, Environmental Services Superintendent

Re: Dorchester Drinking Water System (WW #220002146) Inspection Report
Inspection conducted on January 27, 2025

Dear Mr. Willson,

Enclosed is the 2024-25 inspection report for the Dorchester Drinking Water System, corresponding Inspection Rating Report (IRR) and Risk Methodology document.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates 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 system(s) 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.

If you have any questions or concerns regarding the rating, please contact Mark Smith, Water Compliance Supervisor, at Mark.Smith@ontario.ca or (226)873-5020.

I would be pleased to answer any questions or provide additional clarification regarding the report.

Yours truly,

[redacted]

Andrew Winkler
Provincial Officer
London District Office

cc. Middlesex London Health Unit
Upper Thames River Conservation Area
MECP London District File

Ontario

DORCHESTER DRINKING WATER SYSTEM
Physical Address: 2620 DORCHESTER RD, ,
THAMES CENTRE, ON N0L 1G3

INSPECTION REPORT

Entity:	MUNICIPALITY OF THAMES CENTRE
Inspection Start Date:	January 27, 2025
Site Inspection Date:	January 27, 2025
Inspection End Date:	February 28, 2025
Inspected By:	Andrew Winkler
Badge #:	1908

[redacted]

(signature)

INTRODUCTION

Purpose

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

Scope

The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management and the operation of the system.

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

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

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

Facility Contacts and Dates

The drinking water system is owned and operated by the Municipality of Thames Centre. The system serves an estimated population of 5,678 and is categorized as a Large Municipal Residential System. Information reviewed for this inspection covered the time period of December 15, 2023 to January 27, 2024.

The ministry's Water Compliance Officer met with municipal staff as part of the inspection process.

Systems/Components

All locations associated with primary disinfection were visited as part of this inspection. The following sites were visited as part of the inspection of the drinking water system:
- Dorchester Drinking Water Treatment, and

- Dorchester elevated storage tank.

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:
- Municipal Drinking Water Licence (MDWL) #059-102, Issue #5, Dated: November 23, 2020,
- Drinking Water Works Permit (DWWP) #059-202, Issue #5, Dated: November 23, 2020, and
- Permit To Take Water (PTTW) # 4306-C4NL8N, Dated: July 14, 2021.

NON-COMPLIANCE

The following item(s) have been identified as non-compliance, based on a "No" response captured for a legislative question(s). For additional information on each question see the Inspection Details section of the report.

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

Item	Question	Compliance Response/Corrective Action(s)
NC-1	**Question ID:** DWMR1026001 If primary disinfection equipment did not use chlorination or chloramination, was the equipment equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 1-6 of O. Reg. 170/03?	Primary disinfection equipment was not equipped with alarms or shutoff mechanisms that satisfied the standards described in Schedule 1-6 of O. Reg. 170/03. Corrective Actions The system owner corrected the issue before the issuance of this report. No further actions required.
NC-2	**Question ID:** DWMR1030001 Was primary disinfection chlorine monitoring being conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit or at/near a location where the intended CT had just been achieved?	Primary disinfection chlorine monitoring was not conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit, or at/near a location where the intended CT had just been achieved. Corrective Actions The system owner shall ensure that primary disinfection chlorine is monitored at the location included or referenced within the procedures of the O&M Manual, as required by condition 16.4 of Schedule B of the MDWL. By April 30, 2025, provide written notification that chlorine residual for CT is being monitored at the location identified in the Dorchester Water Treatment Facility O&M Manual.
NC-3	**Question ID:** DWMR1039001 If primary disinfection equipment that does not use chlorination or	The owner and operating authority did not ensure that the primary disinfection equipment had a recording device that continuously recorded the performance of the disinfection equipment.

	chloramination was used, did the owner and operating authority ensure the equipment had a recording device that continuously recorded the performance of the disinfection equipment?	Corrective Actions The system owner shall ensure that UVT tests are performed, utilized, and recorded by the UV system in accordance with the frequency identified in condition 1.6.2 of Schedule C of the MDWL. It is understood that the current ageing UV system includes proprietary software without the option to remove a default UVT value and has been due for replacement for several years. Replacing aging equipment may help to prevent future compliance concerns, and escalated compliance measures.

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	DWMR1006001	**Question Type**	Information

Legislative Requirement(s):
Not Applicable

Question:
Is the owner planning to add a new drinking water source or to make changes to their current source(s)?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner is planning to add a new drinking water source or to make changes to their current source(s).

The system owner drilled exploratory wells in search of additional source water. One well contained viable flow and raw water quality. It is understood that the system owner may add this new well to the Permit to Take Water renewal application. The current Permit to Take Water expires in 2026.

Question ID	DWMR1007001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (1)1;

Question:
Was the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner was maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials.

Wells were equipped with locked commercially available well caps with screened air vents, and secured electrical conduit attached to well caps. Adequately sloped grading was noted in proximity to the wells.

Note: Well 4A was under rehabilitation / regular maintenance during the inspection. This well was equipped with a temporary cover and the ground had settled around the well casing. It is understood that a commercially available well cap would be replaced and grading around the casing filled in before the well is placed back in service.

Question ID	DWMR1009001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were measures in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Measures were in place to protect the groundwater and/or GUDI source.

Schedule B of the MDWL requires:
7.4.3 - a person certified under the Technical Standards and Safety Authority (TSSA) to inspect the standby generator's diesel fuel system at least every 12 months.
16.2.8 An inspection schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells;
16.2.9 Well inspection and maintenance procedures that consider the entire well structure of each well including all above and below grade well components; and
16.2.10 Remedial action plans for situations where an inspection indicates noncompliance with respect to regulatory requirements and/or risk to raw well water quality.

Section 7.2.1 of the Dorchester Drinking Water System's Operations and Maintenance Manual and corresponding Well Inspection and Maintenance Plan memo (dated: December 17, 2018) addressed condition 16.2.8 – 16.2.10 in Schedule B of the MDWL.

Records provided for this inspection demonstrated that appropriate actions were performed during this inspection period.

Question ID	DWMR1014001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Was flow monitoring performed as required by the Municipal Drinking Water Licence or Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Flow monitoring was performed as required.

In accordance with the DWWP, each of the nine (9) production wells were equipped with a flow meter to monitor water taking from the environment. Flow through UV equipment was monitored by the flow meter installed after the clearwells and before the pressure filters. Treated water sent to the distribution system was monitored by a flow meter on the common high lift discharge header. Additional flow meters were installed on the filter back wash line and waste backwash supernatant recovery line.

Question ID	DWMR1016001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Was the owner in compliance with the conditions associated with maximum flow rate or the rated/operational capacity in the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner was in compliance with the conditions associated with maximum flow rate and/or the rated/operational capacity conditions.

Condition 1.1 of the Schedule C in the MDWL stipulated that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the rated capacity of 7,776 m3/day. Condition 2.1.1 of Schedule C in the MDWL requires the flow rate and daily flows from the treatment subsystem to the distribution system recorded in L/s and M3/day, respectively.

Flow is monitored from the treatment subsystem to the distribution system with flow monitoring equipment installed on the high lift pump discharge header prior to water entering the distribution system.

Records demonstrated that flow rates and daily flows from the treatment subsystem to the distribution system were recorded in L/s and M3/day, respectively. The maximum daily volume pumped from the treatment subsystem to the distribution system was approximately 2,596 m3 on August 13, 2025.

Question ID	DWMR1018001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the owner ensure that equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner ensured that equipment was installed as required.

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.

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.

Question ID	DWMR1023001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Did records indicate that the treatment equipment was operated in a manner that achieved the design capabilities prescribed by O. Reg. 170/03, Drinking Water Works Permit and/or Municipal Drinking Water Licence at all times that water was being supplied to consumers?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities prescribed.

Generally stated, source water is available from nine (9) wells. Three (3) of the wells are categorized as groundwater and six (6) are categorized as groundwater under the direct influence (GUDI) of surface water with effective in-situ filtration. Sodium hypochlorite (liquid chlorine) is added to raw water entering the water treatment facility for primary disinfection and oxidation. Oxidation assists with iron and manganese removal in the pressure filters. Water then travels through Ultraviolet (UV) equipment for enhanced disinfection before entering two (2) reservoirs used for storage and contact time associated with primary disinfection. Chlorine residual is continuously monitored prior to treated water entering the distribution system.

Primary disinfection
The Dorchester Drinking Water System uses UV and chlorination for primary disinfection.

UV disinfection requirements
- UV dose > 40 mj/cm2.

- UV transmittance > 80%.
- Maximum flow rate = 90 L/s.

SCADA records demonstrated that UV dose was maintained at a concentration greater than 40 mj/cm2, UV Transmittance greater than 80%, and flow was less than 90 L/s, while UV equipment was treating water. Operations staff advised that the proprietary software for the UV system automatically transmits a default UV Transmittance reading during UV equipment start-up (approximately 8 minutes). While the actual reading is typically 86% – 88%. This default UVT reading was changed from 70% to 85.5% in September 2023, and from 85.5% to 80.5% in February 2025. It is understood that the UV equipment is equipped with a default UVT value included in the current proprietary UV software that unable to be removed. The UV equipment and corresponding software are due for replacement in near future.

Chlorination Requirements
The operations manual and corresponding CT calculation documents described two operational scenarios:
1) Two (2) reservoirs in operation – Normal Operation (minimum CT required = 4 mg/L*min)
- Minimum chlorine residual after the reservoirs = 0.5 mg/L.
- Minimum reservoir depth = 1.0 m.
- Maximum water taken from each of the two (2) reservoirs = 45 L/s (2.7 m3/min).

Calculations provided by the system owner / operating authority demonstrate that a CT of 11.9 mg/L*min is achieved while operating under these parameters with two (2) reservoirs in operation.

2) One (1) reservoir in operation – Abnormal Operation (minimum CT required = 4 mg/L*min)
- Minimum chlorine residual after the reservoirs = 0.5 mg/L.
- Minimum reservoir depth = 1.0 m.
- Maximum water taken from one (1) reservoir = 90 L/s (5.4 m3/min).

Calculations provided by the system owner / operating authority demonstrated that a CT of 6.0 mg/L*min is achieved while operating under these parameters with one (1) reservoir in operation.

SCADA records demonstrated that CT was achieved for the duration of this inspection period.

Question ID	DWMR1026001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-6 | (2);

Question:
If primary disinfection equipment did not use chlorination or chloramination, was the equipment equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 1-6 of O. Reg. 170/03?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Primary disinfection equipment was not equipped with alarms or shutoff mechanisms that satisfied the standards described in Schedule 1-6 of O. Reg. 170/03.

Corrective Actions
The system owner corrected the issue before the issuance of this report. No further actions required.

Requirements
Section 1-6 of O. Reg. 170/03 and Schedule E of the MDWL require that UV disinfection equipment have a feature that ensures no water is directed to users or that causes an alarm to sound in the event that the equipment malfunctions.

Observations
The Dorchester Drinking Water System is equipped with Ultraviolet (UV) treatment equipment as part of the primary disinfection water treatment process. The UV system includes but is not limited to an Ultraviolet Transmittance (UVT) monitoring subsystem that tests water quality and relays results to a central computer for automatic adjustments to UV dosage. Condition 1.6 of the MDWL requires UV Dose, Flow Rate, UV Transmittance & UV Lamp Status to be tested at least every five (5) minutes.

SCADA records for this inspection period showed that the UVT subsystem was intermittently unable to utilize UVT test results at least every five minutes on October 23, 2024 (68 minutes), November 3 to November 4, 2024 (837 minutes), and November 5, 2024 (91 minutes). The system owner entered a default value of 85.5% into the UV system. For use when the UVT subsystem malfunctions and during UV equipment start-up, in place of live (5-minute) UVT test results. An alarm did not trigger when the UVT subsystem stopped providing live 5-minute test results to the central computer for the aforementioned events. Rather, operators identified the issue through manual record review over the flowing day(s). The UVT default value of 85.5% was subsequently changed to 80.5%. To coincide with the low UVT alarm value of 80.5%. The low UVT alarm will now also be triggered by the default UVT value. Providing immediate notification to operators.

Question ID	DWMR1024001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Did records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required.

Chlorine added to water at the drinking water treatment plant is used for both primary and secondary disinfection. Chlorine residual test results obtained from the distribution system

demonstrated that chlorination equipment was operated as required.

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.

Free chlorine residuals were collected from the distribution system daily. Operators recorded test results on a "Dorchester Water Treatment Facility" daily log sheet and chain of custodies submitted to the lab along with microbiological samples.

Question ID	DWMR1030001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (1); SDWA | O. Reg. 170/03 | 7-2 | (2);

Question:
Was primary disinfection chlorine monitoring being conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit or at/near a location where the intended CT had just been achieved?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Primary disinfection chlorine monitoring was not conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit, or at/near a location where the intended CT had just been achieved.

Corrective Actions
The system owner shall ensure that primary disinfection chlorine is monitored at the location included or referenced within the procedures of the O&M Manual, as required by condition 16.4 of Schedule B of the MDWL.

By April 30, 2025, provide written notification that chlorine residual for CT is being monitored at the location identified in the Dorchester Water Treatment Facility O&M Manual.

Requirements
Condition 16.2.3a) of Schedule B of the MDWL requires the owner to maintain an up-to-date operations and maintenance manual that includes a description of the processes used to achieve primary and secondary disinfection. Further, to include a copy of the CT calculations used for primary disinfection under worst case operating conditions and other operating conditions.

Condition 16.4 of Schedule B of the MDWL required that all procedures included or

referenced within the operations and maintenance manual be implemented.

The Dorchester Water Treatment Facility Operation and Maintenance Manual ("O&M Manual") described normal and abnormal operational procedures that utilized above ground storage tank reservoirs to achieve CT with respect to primary disinfection (References - O&M Manual: Section 8, Table 9.1, and CT calculation worksheets).

"Table 9.1 – Required Parameters for the CT Calculation Using Free Chlorine" of the O&M Manual stipulated that chlorine residual concentration readings be taken from chlorine analyzers immediately downstream from the reservoirs. Namely: CLA-3 for Reservoir 1, and analyzer CLA-4 for Reservoir 2.

"Section 9.4 Secondary Disinfection" of the O&M Manual described a post treatment chlorination system, with chlorine injection immediately downstream of the high lift pumps. Post chlorination provides the option to top up chlorine concentration if needed to ensure adequate secondary disinfection within the distribution system.

Section 8 of the O&M Manual stipulated that following the post treatment secondary dosing point, an on-line analyzer identified as CLA-5, monitors chlorine residual readings prior to water entering the distribution system.

Observations
During the site inspection, it was noted that all equipment described in the O&M Manual was installed. However, the system owner advised that the on-line chlorine analyzer (CLA-5) was used to monitor chlorine residuals with respect to CT for primary disinfection. Contrary to the O&M Manual and condition 16.4 of Schedule B of the MDWL.

Question ID	DWMR1035001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4;

Question:
Were operators examining continuous monitoring test results and did they examine the results within 72 hours of the test?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators were examining continuous monitoring test results as required.

Operators used SCADA software to examine and interpret operational data for the previous 24 hours on a daily basis. Critical operational parameters were manually recorded on a daily log sheet.

Question ID	DWMR1038001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4;

Question:
Was continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency and recording data with the prescribed format?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency and recording data with the prescribed format.

Question ID	DWMR1037001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

Question:
Were all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, equipped with alarms or shut-off mechanisms that satisfied the standards described in Schedule 6?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All required continuous monitoring equipment utilized for sampling and testing were equipped with alarms or shut-off mechanisms that satisfied the standards

Alarms setpoints were set in SCADA for critical operational parameters (e.g. free chlorine residual, flow, reservoir level, etc). The waterworks is also equipped with additional alarms such as effluent turbidity, water tower level, power interruptions, door entry etc.

Question ID	DWMR1040001	**Question Type**	Legislative

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

Question:
Were all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All continuous analysers were calibrated, maintained, and operated as required.

Question ID	DWMR1108001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

Question:
Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, Municipal Drinking Water Licence, Drinking Water Works Permit, or order triggered an alarm or an automatic shut-off, did a qualified person respond as required and take appropriate actions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
A qualified person responded as required and took appropriate actions.

Operators summarized alarms on a Water Treatment Facility Alarm Log worksheet. Details of alarm events were recorded in the facility logbook.

Question ID	DWMR1039001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-6 | (3);

Question:
If primary disinfection equipment that does not use chlorination or chloramination was used, did the owner and operating authority ensure the equipment had a recording device that continuously recorded the performance of the disinfection equipment?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner and operating authority did not ensure that the primary disinfection equipment had a recording device that continuously recorded the performance of the disinfection equipment.

Corrective Actions
The system owner shall ensure that UVT tests are performed, utilized, and recorded by the UV system in accordance with the frequency identified in condition 1.6.2 of Schedule C of the MDWL.

It is understood that the current ageing UV system includes proprietary software without the option to remove a default UVT value and has been due for replacement for several years. Replacing aging equipment may help to prevent future compliance concerns, and escalated compliance measures.

Requirements
Condition 1.6.2 of Schedule C of the MDWL required UV Dose, Flow Rate, UV Transmittance & UV Lamp Status to be tested at least every five (5) minutes.

Observations
The Dorchester Drinking Water System was equipped with Ultraviolet (UV) treatment equipment as part of the primary disinfection water treatment process. The UV system included but was not limited to an Ultraviolet Transmittance (UVT) monitoring subsystem that tested water quality and relayed results to a central computer that automatically adjusted UV dosage.

SCADA records for this inspection period showed UVT equipment was intermittently unable to utilize UVT test results at least every five minutes on October 23 (68 minutes), November 3 to November 4 (837 minutes), and November 5 (91 minutes). The computer used a historically significant predetermined default value of 85.5 for UV dosage calculations in place of the live UVT test results.

During an internal investigation, operators determined that low water pressure in the UVT system caused the intermittent issues. The issue was resolved on November 5, 2024. The system owner subsequently created a "UVT Failure Response Procedure" for operators to follow should similar events occur in the future.

Question ID	DWMR1109001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-6 | (1); SDWA | O. Reg. 170/03 | 1-6 | (2);

Question:
If the system used equipment for primary disinfection other than chlorination or chloramination and the equipment malfunctioned, lost power, or ceased to provide the appropriate level of disinfection, causing an alarm or an automatic shut-off, did a certified operator respond as required and take appropriate actions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
A certified operator responded as required and took appropriate actions.

Question ID	DWMR1042001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
If UV disinfection was used, were duty sensors and reference UV sensors checked and calibrated as per the requirements of Schedule E of the Municipal Drinking Water Licence or at a frequency as otherwise recommended by the UV equipment manufacturer?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All UV sensors were checked and calibrated as required.

Records demonstrated that a third-party technician checked the UV sensors against a reference UV sensor every six (6) months (May & October 2024). Operators performed UV sensor checks monthly, for the remaining 10 months of the year. A third-party was scheduled to verify the accuracy of reference sensors against a master reference assembly at least every three (3) years. A recent test occurred in November 2022.

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 all water sample results met the Ontario Drinking Water Quality Standards.

Question ID	DWMR1083001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-3;

Question:
Were treated microbiological sampling requirements prescribed by Schedule 10-3 of O. Reg. 170/03 for large municipal residential systems met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Treated microbiological sampling requirements were met.

Schedule 10-3 of regulation 170/03 required at least one treated water sample taken and tested for E.coli, total coliforms & general bacteria expressed as Heterotrophic Plate Count weekly.

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.

Section 10-2. of O. Reg. 170/03 required at least eight (8) distribution samples taken for a system that serves a population less than 100,000, plus an additional sample for every 1,000 people served by the system, monthly. With at least one (1) of the samples collected each week. Each sample shall be tested for E.coli and total coliforms. While 25% of required samples shall be tested for general bacteria expressed as Heterotrophic Plate Count (HPC).

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.

Operators recorded free chlorine residual test results on chain of custody paperwork submitted to the laboratory along with microbiological samples.

Question ID	DWMR1084001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-2;

Question:
Were inorganic parameter sampling requirements prescribed by Schedule 13-2 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Inorganic parameter sampling requirements were met.

Section 13-2 of O. Reg. 170/03 required at least one sample collected from the drinking water system and tested for the inorganic parameters identified in Schedule 23 every 12 months. Records demonstrated that samples collected on February 15, 2023, and February 13, 2024, were tested for the inorganic parameters.

Question ID	DWMR1085001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-4 | (1); SDWA | O. Reg. 170/03 | 13-4 | (2); SDWA | O. Reg. 170/03 | 13-4 | (3);

Question:
Were organic parameter sampling requirements prescribed by Schedule 13-4 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Organic parameter sampling requirements were met.

Section 13-4 of O. Reg. 170/03 required at least one sample collected from the drinking water system and tested for the organic parameters identified in Schedule 24 every 12 months. Records demonstrated that samples collected on February 15, 2023, and February 13, 2024, were tested for the organic parameters.

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.

Section 13-6.1 (1) & (2) of O. Reg. 170/03 required at least one distribution sample collected from a point in the distribution system or plumbing connected to the drinking water system, that is likely to have an elevated potential for the formation of haloacetic acids. Sample(s) must be collected every three months or in each calendar quarter and tested for haloacetic acids.

Records demonstrated that samples were collected at least monthly and tested for haloacetic acids.

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.

Section 13-6 (1) & (2) of O. Reg. 170/03 required at least one distribution sample collected from a point in the distribution system or plumbing connected to the drinking water system, that is likely to have an elevated potential for the formation of trihalomethanes. Sample(s) must be collected every three months or in each calendar quarter and tested for trihalomethanes. See question DWMR1094000 in this report for additional monitoring requirements.

Question ID	DWMR1088001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-7;

Question:
Were nitrate/nitrite sampling requirements prescribed by Schedule 13-7 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Nitrate/nitrite sampling requirements were met.

Section 13-7 of O. Reg. 170/03 required at least one sample taken every three (3) months and tested for nitrate and nitrite.

Records demonstrated that samples collected on November 15, 2023, February 13, 2024, May 15, 2024, August 14, 2024 and November 20, 2024, were tested for nitrate and nitrite.

Question ID	DWMR1089001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-8;

Question:
Were sodium sampling requirements prescribed by Schedule 13-8 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Sodium sampling requirements were met.

Section 13-8 of O. Reg. 170 required at least one sample taken every 60 months and tested for sodium.

Records demonstrated that a water sample collected on February 21, 2020, was tested for sodium. Sodium test results are above the ministry's reportable concentration of 20 mg/L. In consultation with the Middlesex-London Health Unit, the system owner sent sodium information notices to residents.

Question ID	DWMR1090001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-9;

Question:
Where fluoridation is not practiced, were fluoride sampling requirements prescribed by Schedule 13-9 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Fluoride sampling requirements were met.

Section 13-9 of O. Reg. 170 required at least one sample taken every 60 months and tested for fluoride.

Records demonstrated that a water sample collected on February 15, 2022, was tested for fluoride.

Question ID	DWMR1094001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were water quality sampling requirements imposed by the Municipal Drinking Water Licence and Drinking Water Works Permit met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Water quality sampling requirements were met.

Table 5 in Schedule C of the Municipal Drinking Water Licence (MDWL) required at least one water sample be taken from the farthest point in the distribution system and tested for trihalomethanes monthly.

Records demonstrated that samples were collected at least monthly and tested for trihalomethanes.

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	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 Dorchester drinking water system map was updated in January 2025.

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.

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.

Mechanical and electrical security measures were noted during the inspection.

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 subsystem.

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.

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.

Question ID	DWMR1076001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Were adjustments to the treatment equipment only made by certified operators?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Adjustments to the treatment equipment were only made by certified operators.

Logbook entries demonstrated that only certified operators made adjustments to treatment equipment.

Key Reference and Guidance Material for Drinking Water Systems

February 2, 2023

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 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/page/drinking-water

Click on the publication below to access it

- Drinking Water System Profile Information Form - 012-2149E
- Laboratory Services Notification Form – 012-2148E
- Adverse Test Result Notification Form – 012-4444E
- Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils
- Procedure for Disinfection of Drinking Water in Ontario
- Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids
- Filtration Processes Technical Bulletin
- Ultraviolet Disinfection Technical Bulletin
- Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments
- Certification Guide for Operators and Water Quality Analysts
- Training Requirements for Drinking Water Operator
- Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption
- Drinking Water System Contact List – 7128E01
- Ontario's Drinking Water Quality Management Standard - Pocket Guide
- 2020 Watermain Disinfection Procedure
- List of Licensed Laboratories

Risk Methodology and Inspection Summary Rating Record

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.

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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).

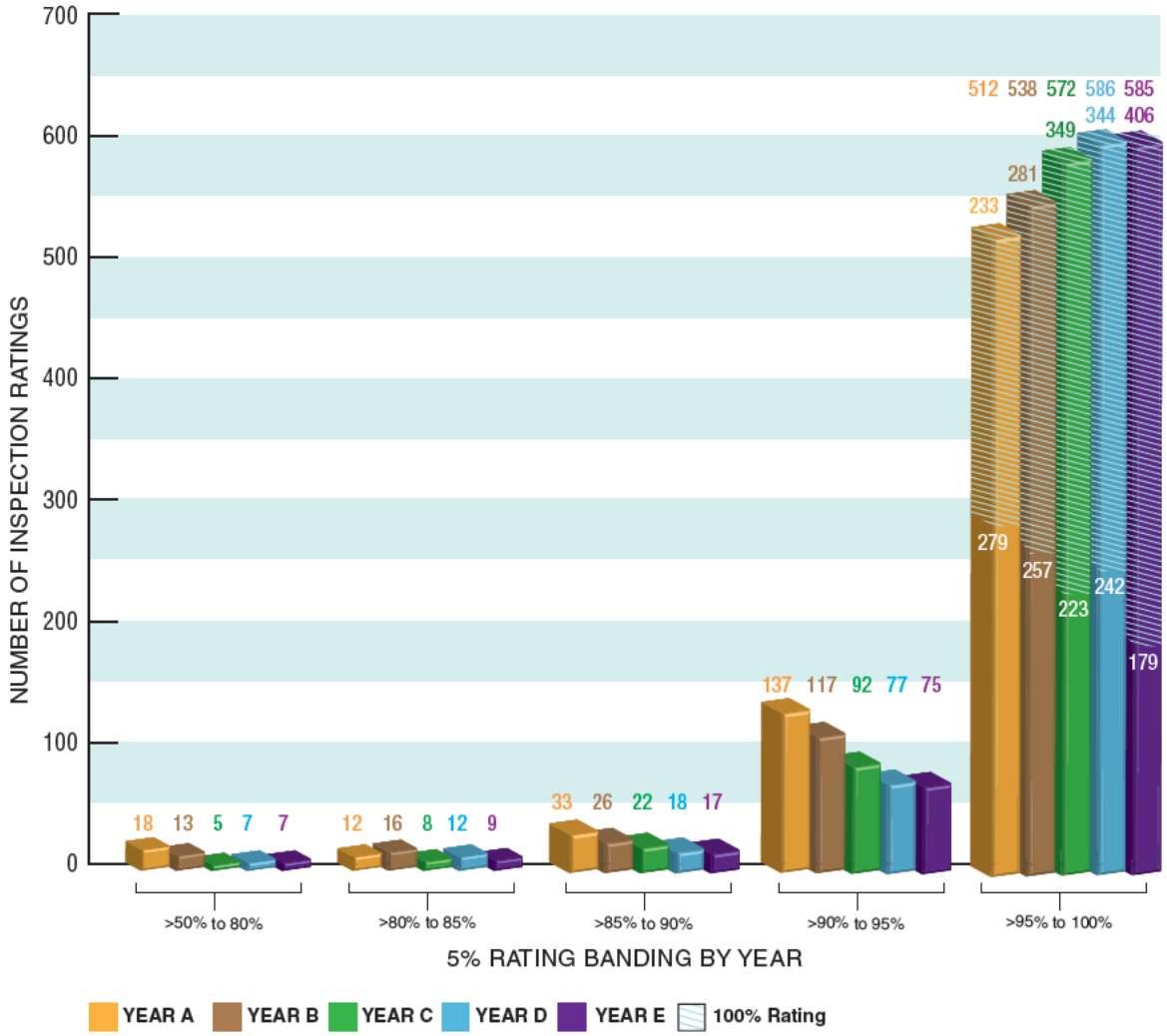
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

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**

DWS Name:	DORCHESTER DRINKING WATER SYSTEM
DWS Number:	220002146
DWS Owner:	MUNICIPALITY OF THAMES CENTRE
Municipal Location:	THAMES CENTRE
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Jan-27-2025
Ministry Office:	London District Office

Maximum Risk Rating: 508

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	0/30
Certification and Training	0/42
Distribution System	0/4
Logbooks	0/14
Operations Manuals	0/14
Reporting & Corrective Actions	0/46
Source	0/14
Treatment Processes	46/232
Water Quality Monitoring	0/112
Overall - Calculated	**46/508**

Inspection Risk Rating:	**9.06%**

Final Inspection Rating:	**90.94%**

DWS Name:	DORCHESTER DRINKING WATER SYSTEM
DWS Number:	220002146
DWS Owner Name:	MUNICIPALITY OF THAMES CENTRE
Municipal Location:	THAMES CENTRE
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Jan-27-2025
Ministry Office:	London District Office

Non-Compliance Question(s)	Non Compliance Risk
Treatment Processes	
If primary disinfection equipment that does not use chlorination or chloramination was used, did the owner and operating authority ensure the equipment had a recording device that continuously recorded the performance of the disinfection equipment?	4
If primary disinfection equipment did not use chlorination or chloramination, was the equipment equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 1-6 of O. Reg. 170/03?	21
Was primary disinfection chlorine monitoring being conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit or at/near a location where the intended CT had just been achieved?	21
Overall - Total	**46**

Maximum Question Rating: 508

Inspection Risk Rating:	**9.06%**
FINAL INSPECTION RATING:	**90.94%**