

Ministry of the Environment,  
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Ministère de l'Environnement, de la  
Protection de la nature et des Parcs

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June 19, 2023

File no. SI-MI-MC-GW-540

The Municipality of Middlesex Centre  
R.R. #2, 10227 Ilderton Road  
Ilderton, ON N0M 2A0

Attention: Eric Joudrey, Manager of Water and Wastewater Operations

Re: Birr Drinking Water System Inspection Report (WW #260005492)  
Inspection conducted on May 4, 2023

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Dear Mr. Joudrey,

The enclosed Drinking Water Inspection Report outlines non-compliance, if any, with Ministry legislation, and policies for the above noted water system. Violations noted in this report, if any, have been evaluated based on community risk. These violations will be monitored for compliance with the minimum standards for drinking water in Ontario as set forth under the *Safe Drinking Water Act* and associated regulations. Where risk is deemed to be high and/or compliance is an ongoing concern, violations will be forwarded to this Ministry's Investigation and Enforcement Branch.

In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Summary Rating Record (IRR) provides the Ministry, the system owner and the local Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance.

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 council*" found under "Resources" on the Drinking Water Ontario website at [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater).

**The Inspection Rating Report (IRR) methodology memo describes how the risk rating model has improved to better reflect the health related and administrative non-compliance found in an inspection report. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspector's Annual Report. Please note that due to a change in IT systems, the IRR cannot be generated at the same time as the inspection report. The IRR will be sent separately and prior to any public release (typically within 1-2 month of the completion of the inspection).**

If you have any questions regarding the report, please feel free to call me at (519) 281-1508.

Yours truly,

A handwritten signature in black ink that reads "Andrew Winkler".

Andrew Winkler  
Provincial Officer  
London District Office

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



BIRR DRINKING WATER SYSTEM  
15 GWENDOLYN ST, MIDDLESEX CENTRE, ON, N0M 1P0  
**INSPECTION REPORT**

Entity: THE CORPORATION OF THE  
TOWNSHIP OF MIDDLESEX  
CENTRE  
Inspection Start Date: May 04, 2023  
Inspection End Date: May 26, 2023  
Inspected By: Andrew Winkler  
Badge #: 1908



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(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>Provincial Officer Andrew Winkler conducted a site inspection of the Birr Drinking Water System on May 4, 2023. Documents and records reviewed in relation to this inspection included but may not have been limited to:</p> <ul style="list-style-type: none"> <li>- Municipal Drinking Water Licence (MDWL) #052-104, Issue #8, February 4, 2022,</li> <li>- Drinking Water Works Permit (DWWP) # 052-204, Issue #4, Issue date: February 4, 2022,</li> <li>- Permit to Take Water (PTTW) number 3415-A3JHTY, issued on October 30, 2015,</li> <li>- operator certification,</li> <li>- operational/maintenance logs, and</li> <li>- microbiological and chemical test results.</li> </ul> <p>Unless otherwise stated, the inspection review period included April 1, 2022 to April 30, 2023.</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 both primary and secondary disinfection and distribution of water.

<b>Question ID</b>	DWMR1007000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   1-2   (1);			
<b>Question:</b> Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> 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.  During the site inspection, it was noted that a commercially manufactured well cap with padlock was fastened to the well casings. Complete with seals, screened vents, and electrical conduit. The area in proximity to the well appeared to have sufficient grading to prevent standing water or soil erosion. Cement blocks have been installed to prevent vehicles from damaging the well casing. No concerns were noted with respect to sources of contamination.			

<b>Question ID</b>	DWMR1009000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Measures were in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.  As required by Section 16 Schedule B of the Municipal Drinking Water Licence, the system owner developed an inspection schedule for all wells associated with the drinking water system. Further, well inspection and maintenance procedures consider the entire well structure of each well including all above and below grade well components, and remedial action plans for situations where an inspection indicates noncompliance with respect to regulatory requirements and/or risk to raw well water quality.  Operations staff performed above surface inspections monthly and a third-party inspects subsurface components annually. Records show that the last subsurface inspection occurred on September 2, 2022.			

<b>Question ID</b>	DWMMR1014000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> There was sufficient monitoring of flow as required by the Municipal Drinking Water Licence or Drinking Water Works Permit issued under Part V of the SDWA.  In accordance with the Drinking Water Licence, a flowmeter was installed on the groundwater water pipe entering the treatment plant and a second flowmeter installed on the treated water pipe that discharged potable water to the distribution system. Daily flows were recorded on a paperless chart recorder.			

<b>Question ID</b>	DWMMR1016000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA.  The Municipal Drinking Water Licence identifies the rated capacity for this facility as 88.4 m3/day. Records demonstrated that the greatest daily flow to the distribution system was 25.18 m3 on June 19, 2022.			

<b>Question ID</b>	DWMMR1018000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.			

<b>Question ID</b>	DWMMR1021000	<b>Question Type</b>	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 2 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 2 documents as required by their Drinking Water Works Permit during the inspection period.  A Form 2 is used to record a minor modification(s) to the Drinking Water System. The system owner created Form 2 records for the following projects completed during this inspection review period: <ul style="list-style-type: none"> <li>- Replaced the existing chlorine injection line with schedule 80 PVC, dated March 6, 2023.</li> <li>- Replaced the existing chlorine storage tank with 60L HDPE tank, dated December 9, 2022.</li> <li>- Replaced the UPS unit, dated August 30, 2022.</li> <li>- Installed a weight to the low-level reservoir float and replaced the weight attached to the distribution pump shut-off float, dated September 2, 2022.</li> </ul>			

<b>Question ID</b>	DWMMR1025000	<b>Question Type</b>	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.  Disinfection records were provided for the following projects: <ul style="list-style-type: none"> <li>- Installation of a weight attached to the low-level reservoir float and a weight attached to the distribution pump shut-off float on August 5, 2022.</li> <li>- The services of a third-party was obtained to clean and remove sediment from the reservoir on June 20, 2022.</li> <li>- Installation of two float weights installed in the reservoir on August 5, 2023.</li> </ul>			

<b>Question ID</b>	DWMMR1023000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   1-2   (2);			



**Question:**

Do records indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?

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

Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under O. Reg. 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.

A CT Calculations document (Appendix C of the Operations Manual) for the Birr Drinking Water System included a worst-case scenario that indicate a minimum of 0.04 mg/L is required to be measured at that continuous free chlorine analyzer prior to water leaving the water treatment facility.

During the site inspection, equipment identified in the Drinking Water Works Permit was installed and operational. A review of the operational data provided for this inspection period demonstrated that primary disinfection was accomplished in accordance with applicable requirements.

<b>Question ID</b>	DWWMR1024000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 170/03 | 1-2 | (2);

**Question:**

Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes 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 purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.

The same chlorination equipment is used for both primary and secondary disinfection. Operators routinely collected and tested free chlorine residuals from a blow off valve and sample station in the distribution system. Test results were recorded on "Birr – Distribution Chlorine Residuals" logsheets.

<b>Question ID</b>	DWWMR1034000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 170/03 | 7-2 | (5); SDWA | O. Reg. 170/03 | 7-2 | (6);

**Question:**

Is the secondary disinfectant residual measured as required for the small municipal residential distribution system?

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

The secondary disinfectant residual was measured as required for the small municipal residential distribution system.

Records demonstrate that at least two water samples were collected at least 48 hours apart and tested for free chlorine residual each week. Test results were recorded on operational log sheets and chain of custody paperwork.

<b>Question ID</b>	DWMMR1030000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 170/03 | 7-2 | (1); SDWA | O. Reg. 170/03 | 7-2 | (2);

**Question:**

Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved?

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

Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved.

A continuous analyzer monitors free chlorine residuals from a location after the reservoir and prior to treated water entering the distribution system.

<b>Question ID</b>	DWMMR1035000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

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

**Question:**

Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?

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

Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.

Operators review critical operational data and add comments to a daily report.

<b>Question ID</b>	DWMMR1038000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

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

**Question:**

Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?

**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 specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.

Data from the continuous free chlorine analyzer used to monitor primary disinfection was provided in one-minute intervals for this inspection review period.

<b>Question ID</b>	DWMR1037000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

**Question:**

Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?

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

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

High and low setpoints for critical treatment parameters were programmed into the continuous analyzer on-site. Alarms and automatic shut off mechanisms were programmed to engage when the pre-determined setpoints are reached.

<b>Question ID</b>	DWMR1040000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

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

**Question:**

Are 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, in accordance with the manufacturer's instructions or the regulation.

Operators verify readings from the continuous free chlorine analyzer against test results obtained from a portable chlorine analyzer, three times per week. The continuous analyzer was calibrated as needed. Operators verified the portable chlorine analyzers using calibration standards monthly and a third-party technician performed calibrations annually.

Operators verify readings from the continuous turbidity analyzer against test results obtained from a portable turbidity analyzer weekly. Operators verified the portable turbidity analyzer using calibration standards weekly and a third-party technician performed calibrations annually.

Question ID	DWMR1108000	Question Type	Legislative
<p><b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   6-5   (1)1-4; SDWA   O. Reg. 170/03   6-5   (1)5-10; SDWA   O. Reg. 170/03   6-5   (1.1);</p>			
<p><b>Question:</b> Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?</p>			
<p><b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.</p> <p>The system owner established an alarm response procedure for staff. Operators record observations and actions in the facility's logbook.</p> <p>One event was reported to the ministry's Spills Action Centre and local Health Unit for a low chlorine event (AWQI # 160588) during this inspection review period. Records show that the continuous chlorine analyzer recorded free chlorine residual test results as low as 0.05 mg/L while water was pumped to the distribution system. Operators increased chlorine dosage and flushed the drinking water system. Records show that samples collected from the distribution system while flushing obtained test results of at least 0.06 mg/L. Two sets of samples collected for microbiological testing obtained satisfactory results. The event was caused by leaking/faulty chlorination equipment that was subsequently repaired.</p> <p>To prevent similar low chlorine events from occurring, it is recommended that the operating authority increase the scope of chlorination system inspections and/or perform more frequent preventative maintenance to chlorination equipment.</p>			

Question ID	DWMR1082000	Question Type	Legislative
<p><b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   11-2   (1); SDWA   O. Reg. 170/03   11-2   (2); SDWA   O. Reg. 170/03   11-2   (6);</p>			

**Question:**

For SMR systems, are all microbiological water quality monitoring requirements for distribution samples prescribed by legislation being met?

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

All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a small municipal residential system were being met.

Distribution samples were collected and tested for microbiological parameters every two week as required by section 11-2 of O. Reg. 170/03.

<b>Question ID</b>	DWMR1096000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b>			
SDWA   O. Reg. 170/03   6-3   (1);			
<b>Question:</b>			
Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b>			
Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.			
Chlorine residual test results were recorded on the sample submission chain of custody paperwork and distribution chlorine residuals logsheets.			

<b>Question ID</b>	DWMR1084000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b>			
SDWA   O. Reg. 170/03   13-2;			
<b>Question:</b>			
Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b>			
All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
Section 13-2 of O. Reg. 170/03 requires at least one sample collected and tested for the inorganic parameters identified in Schedule 23 every 60 months. Records demonstrate that the last two samples collected and tested for inorganic parameters were on January 17, 2022, and January 2, 2017.			

<b>Question ID</b>	DWMR1085000	<b>Question Type</b>	Legislative
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**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:**

Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?

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

All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

Section 13-4 of O. Reg. 170/03 requires at least one sample collected and tested for the organic parameters identified in Schedule 24 every 60 months. Records demonstrate that the last two samples collected and tested for organic parameters was on January 17, 2022, and January 2, 2017.

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.			
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.			
The last five samples collected and tested for haloacetic acids occurred on April 11, 2023, January 3, 2023, October 3, 2022, July 4, 2022, and April 4, 2022.			

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);			

**Question:**

Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?

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

All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.

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.

The last five samples collected and tested for haloacetic acids occurred on April 11, 2023, January 3, 2023, October 3, 2022, July 4, 2022, and April 4, 2022.

Question ID	DWMR1088000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   13-7;			
<b>Question:</b> Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
Section 13-7 of O. Reg. 170/03 required at least one sample collected every three months and tested for nitrate and nitrite. The last five samples collected for testing occurred on April 4, 2023, January 3, 2023, October 3, 2022, July 4, 2022, and April 4, 2022.			

Question ID	DWMR1094000	Question Type	Legislative
<b>Legislative Requirement(s):</b> SDWA   31   (1);			
<b>Question:</b> Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.			
Distribution lead samples were collected and tested in accordance with Table 2 and Table 3 of the MDWL.			

Question ID	DWMR1113000	Question Type	Legislative
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<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   10.1   (3);
<b>Question:</b> Have all changes to the system registration information been provided to the Ministry within ten (10) days of the change?
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> All changes to the system registration information were provided within ten (10) days of the change.

Question ID	DWMMR1060000	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	DWMMR1061000	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	DWMMR1062000	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.

<b>Question ID</b>	DWMMR1071000	<b>Question Type</b>	BMP
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**Legislative Requirement(s):**

Not Applicable

**Question:**

Has the owner provided security measures to protect components of the drinking water system?

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

The owner had provided security measures to protect components of the drinking water system.

In addition to mechanical security measures, the water system is equipped with electronic security measures. The municipality also has cyber security initiatives in place.

<b>Question ID</b>	DWMMR1073000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 128/04 | 23 | (1);

**Question:**

Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?

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

The overall responsible operator had been designated for each subsystem.

The Water and Wastewater Operations Supervisor was identified as the Overall Responsible Operator (ORO) for the Birr Drinking Water System and an operator was identified as the back-up ORO. The ORO and back-up ORO both held valid water operator certificates appropriate for this system.

<b>Question ID</b>	DWMMR1074000	<b>Question Type</b>	Legislative
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**Legislative Requirement(s):**

SDWA | O. Reg. 128/04 | 25 | (1);

**Question:**

Have operators-in-charge been designated for all subsystems which comprise the drinking water system?

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

Operators-in-charge had been designated for all subsystems which comprise the drinking water system.

<b>Question ID</b>	DWMR1075000	<b>Question Type</b>	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.			

<b>Question ID</b>	DWMR1076000	<b>Question Type</b>	Legislative
<b>Legislative Requirement(s):</b> SDWA   O. Reg. 170/03   1-2   (2);			
<b>Question:</b> Do only certified operators make adjustments to the treatment equipment?			
<b>Compliance Response(s)/Corrective Action(s)/Observation(s):</b> Only certified operators made adjustments to the treatment equipment.  Entries in the facility logbook demonstrate that only certified operators adjust treatment equipment.			



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**Key Reference and Guidance Material for Drinking Water Systems**

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# Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

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

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

For more information on Ontario's drinking water visit [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater)



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

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

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



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site [www.ontario.ca/eaupotable](http://www.ontario.ca/eaupotable)

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