

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

1 Stone Road West
4th Floor
Guelph, Ontario N1G 4Y2
Tel.: 519 826-4255
Fax: 519 826-4286

Ministère de l'Environnement de la
Protection de la nature et des Parcs
Division de la conformité en matière
d'eau potable et d'environnement
Direction régionale du Centre-Ouest
Bureau de district de Guelph

1, chemin Stone ouest
4^e étage
Guelph (Ontario) N1G 4Y2
Tél.: 519 826-4255
Télé.: 519 826-4286



September 23rd, 2024.

Ms. Brooke Lambert
Director of Public Works
The Township of Wellington North
PO Box 125
7490 Sideroad 7W
Kenilworth, Ontario
N0G 2E0

Dear Ms. Lambert,

SUBJECT : 2024 MECP Inspection Report – Mt. Forest Well Supply (DWS # 220000068)

Please find enclosed the Ministry of the Environment, Conservation and Parks ('MECP' or the 'Ministry') Inspection Report for the inspection of the Mt. Forest WS, which was recently conducted.

Enclosed is a copy of the inspection report prepared for the Mount Forest Well Supply system under the Ministry's focused inspection protocol to assess compliance with the Safe Drinking Water Act legislation. The report is based on conditions encountered at the time of inspection and subsequent follow-up.

Any items under the heading "Non-Compliance with Regulatory Requirements and Actions Required" are linked to incidents of non-compliance with regulatory requirements contained within the Act, a Regulation, or site-specific Approvals, Licences, Permits, Orders or instructions.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates several obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "Taking Care of Your Drinking Water: A guide for members of municipal council" found under "Resources" on the Drinking Water Ontario website at ;

<http://www.ontario.ca/environment-and-energy/taking-care-your-drinking-water-guide-members-municipal-councils>.

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.

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2024 Mt. Forest Inspection Report
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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 regarding any other aspects of this report, please feel free to contact myself or the Drinking Water Supervisor (Lisa Williamson) at this office at (519) 826-4255.

Thankyou.

Yours truly,

A handwritten signature in black ink, appearing to read 'Rick Neubrand', written in a cursive style.

Rick Neubrand
Senior Environmental Officer / Inspector
Ministry of the Environment, Conservation and Parks
Drinking Water and Environmental Compliance Division
Guelph District Office

Encl: Reports (1)

CC : Shari Dahmer - GRCA
: Paul.Medeiros – WDGHU
: Corey Schmidt - TWN
: Sara McDougal – TWN
: Lisa Williamson - MECP



MOUNT FOREST DRINKING WATER SYSTEM
Physical Address: 393 PARKSIDE DR, ,
WELLINGTON NORTH, ON N0G
2L3

INSPECTION REPORT

System Number: 220000068
Entity: THE CORPORATION OF THE
TOWNSHIP OF WELLINGTON
NORTH
Inspection Start Date: August 14, 2024
Site Inspection Date: August 21, 2024
Inspection End Date: September 09, 2024
Inspected By: Rick Neubrand
Badge #: 773



(signature)

INTRODUCTION

Purpose

This unannounced 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

This drinking water system (DWS) is owned and operated by; The Township of Wellington North.

The system serves an estimated population of 5040 people and is categorized as a Large Municipal Residential (LMR) drinking water system (DWS). Information reviewed for this inspection covered the time period of August 24th, 2023 to August 21st, 2024.

Systems/Components

All locations associated with primary disinfection were visited as part of this inspection, as well as some distribution system components. These included the following locations;

- Pumphouse # 3 with Well 3
- Pumphouse # 4 with Well 4
- Pumphouse # 5 with Well 5
- Pumphouse # 6 with Well 6
- Booster Station at Well 3 pumphouse
- Standpipe at Well 3 pumphouse

Permissions/Approvals

This drinking water system is classified as a 'water distribution and supply subsystem class 2'. It 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 (DWL) # 113-102, Issue #3
- Municipal Drinking Water Works Permit (DWWP) #113-202, Issue # 3
- Permit To Take Water (PTTW) # 4453-ANMHPC

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.

There were no items of non-compliance identified during this inspection.

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.

No other recommendations.

INSPECTION DETAILS

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

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

Question ID	DWMR1007001	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (1)1;</p>			
<p>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?</p>			
<p>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.</p> <p>All wells are located within pumphouses having concrete floors surrounding the wellheads, so are protected from external elements.</p> <p>The original water well records (WWR) for Well 3 (WWR #A001055 (formerly #6701749), Well 4 (WWR #6701750), Well 5 (WWR #6703148), and Well 6 (WWR #6706988), did not include information on annular seals. Records for modifications made to Well 3 in 2005 show that the bottom of the well was sealed with `benseal' and cement from 73.8 m to 123 m. WWR #2515102 shows partial abandonment of Well 5, with pea stones and hole plug from 140 ft to 394 ft. Raw water sample results do not indicate the influence of surface water for any of the production wells.</p> <p>Sections 16.2.8 - 16.2.9 of Schedule B in the MDWL requires that an inspection schedule for all wells (associated with the drinking water system) be included in the operations and maintenance manual. There must be inspection and maintenance procedures for the entire well structure of each well including all above and below grade components, and remedial action plans for situations where an inspection indicates non-compliance with respect to regulatory requirements and/or risk to raw well water quality.</p> <p>The Township of Wellington North has established a well inspection program that includes inspections of the production wells on an annual basis. A detailed assessment of the wells, including below grade components, is to be scheduled approximately every 10 years, if feasible.</p> <p>Below grade (video) inspections were last completed as follows:</p> <ul style="list-style-type: none"> - Well 3 was last completed in 2022 (next inspection will be scheduled by 2032). - Well 4 was last completed in 2024 (next inspection will be scheduled by 2034). - Well 5 was last completed in 2018 (next inspection will be scheduled by 2028). - Well 6 was last completed in 2023 (next inspection will be scheduled by 2033). 			

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.			

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. Each well is equipped with one flow meter, which serves to measure both the raw and treated water volumes, since the treatment system is simple and water basically flows directly from the wells through to the contact mains, after being injected with sodium hypochlorite for disinfection.			

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. Schedule C, Section 1.0 of the MDWL lists the following rated capacities for the wells in the Mount Forest DWS: Wellhouse 3 - 1,637 m ³ /day Wellhouse 4 - 1,964 m ³ /day Wellhouse 5 - 3,928 m ³ /day Wellhouse 6 - 3,928 m ³ /day Records provided indicate these rated capacities were not exceeded during the inspection			

review period, except during momentary periods of routine maintenance, water main flushing or water main repairs / breaks.

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. A comparison of equipment on site to that what is listed in the DWWP did match.			

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. For this inspection period, the following changes occurred in the distribution system; - upsized existing 100mm cast iron watermain on Fergus Street between Wellington Street & Birmingham Street to 150mm diameter DR-18 PVC watermain. The distribution system map will be updated in late 2024 / early 2025 to reflect this change.			

Question ID	DWMR1021001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were Form 2 documents prepared as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Form 2 documents were prepared as required. One Form 2 was prepared for the replacement of the Well 4 pump motor.			

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. The Mount Forest DWS obtains water from ground water sources. The treatment system consists of disinfection using chlorine (sodium hypochlorite) and is capable of achieving an overall performance that provides, at a minimum, 2-log (99%) removal or inactivation of viruses prior to the first consumer. An examination of records indicated that proper treatment appeared to have occurred during the inspection period.			

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.			

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. Distribution system FCRs were measured on a daily basis (grab samples) during the inspection review period. Sampling locations varied within the distribution system.			

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 conducted as required. All chlorination injection points are in the main piping header before water gets directed to the contact chambers outside the pumphouses. Free chlorine residuals are monitored at each of the pumphouses by two continuous analyzers. The first being at the inlet of the contact main (pre-chlorination continuous analyzer) and the second at the outlet of the contact main (post-chlorination continuous analyzer). The post chlorine analyzers are considered as the ones for regulatory assessment purposes.			

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 check the Supervisory Control and Data Acquisition (SCADA) system daily and write notes in the site logbooks of their reviews. As well, the SCADA system creates a daily printout (at main office) which the operators check and sign off as well. If issues arise, the			

operators print out the trending of the data and label such trending according to logbook notes.

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. Data is recorded at both 1 minute and 5 minute intervals. In reviewing Supervisory Control and Data Acquisition (SCADA) system data, the owner provided backup data from on-site historians for any omissions from broadcast channel data as well.			

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 Low chlorine residual alarms are programmed for both pre-contact piping and post-chlorine contact piping to alert the operator if the chlorine residual level drops. If the pre or post-contact piping FCR levels drop below 0.65 mg/L, a remote alarm will occur and the well pumps are programmed to lock out. An operator will respond to the DWS as well. Based on data and information required, the chlorination pumps appeared to have been working as required. If they fail, the free chlorine residual (FCR) continuous analyzers will detect low chlorine values and shut down well pumps if such values drop below their pre-programmed limits. These well pump responses were verified through alarm testing on site during the inspection.			

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. Portable colourimeters are used to calibrate the FCR continuous analyzers. Portable colourimeters are professionally calibrated annually and were last calibrated on March 7, 2024. The FCR online analyzers were last professionally checked on February 6, 2024. All were found to be operating within acceptable standards.			

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.			

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. An AWQI occurred in which a drinking water sample had elevated total coliform (TC) bacteria count (TC=2) on August 2, 2023. A resample of this sampling location found it to be at 0 TC.			

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 of Reg 170 requires this site to be taking four treated water samples per week (one from each pumphouse). The owner was performing this sampling. Several weeks occurred where samples were not taken from a single pumphouse, but these were offline due to maintenance and repair activities.			

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. Schedule 10 of Reg 170 requires this site to be taking at least 12 distribution samples per month. The owner was averaging 16 - 20 samples per month.			

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.			

Question ID	DWMR1084001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-2;			

<p>Question: Were inorganic parameter sampling requirements prescribed by Schedule 13-2 of O. Reg. 170/03 met?</p>
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Inorganic parameter sampling requirements were met.</p> <p>Inorganic parameters were previously sampled for on January 11, 2016 and January 14, 2019 at all 4 pumphouses. The latest sampling occurred on January 24, 2022. No exceedances were noted. Inorganic parameters are required to be tested once every 36 months.</p>

Question ID	DWMMR1085001	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.			
Organic parameters were previously sampled for on January 11, 2016 and January 14, 2019 at all 4 pumphouses. The latest sampling occurred on January 24, 2022. No exceedances were noted. Organic parameters are required to be tested once every 36 months.			

Question ID	DWMMR1086001	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.			
HAAs were sampled last in the distribution system on the following dates:			
<ul style="list-style-type: none"> - May 8, 2023 - August 14, 2023 - November 6, 2023 - February 12, 2024, 			

and
- May 13, 2024.
All samples were found to be at 5.3 ug/L, same as the last two inspections.

HAAs are required to be sampled every calendar quarter.

Question ID	DWMR1087001	Question Type	Legislative
<p>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);</p>			
<p>Question: Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Trihalomethane sampling requirements were met. THMs were sampled last in the distribution system on the following dates: - May 8, 2023, - August 14, 2023, - November 6, 2023, - February 12, 2024, and - May 13, 2024. The Annual Running Average (ARA) was found to be 19.25 ug/L. This sample parameter is required to be sampled every 3 months.</p>			

Question ID	DWMR1088001	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 13-7;</p>			
<p>Question: Were nitrate/nitrite sampling requirements prescribed by Schedule 13-7 of O. Reg. 170/03 met?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Nitrate/nitrite sampling requirements were met. Nitrates / Nitrites were sampled last at the treated water entry points of both pumphouses on the following dates:</p>			

- May 8, 2023,
- August 14, 2023,
- November 6, 2023,
- February 12, 2024,
- and
- May 13, 2024.

The nitrate levels ranged from 0.006 mg/L to 2.61 mg/L. Well 5 had the highest levels of nitrates at 2.61 mg/L. The limit is 10 mg/L.

This parameter is required to be sampled for every three months.

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. Sodium was last sampled at all pumphouses on September 10, 2018, and again on September 11, 2023. The latest results exceeded the 20 mg/L reportable limit at well 5 (68.8 mg/L) and well 3 (21.9 mg/L). An adverse water quality incident (AWQI) was reported for Well 3 (# 163464) and Well 5 (#163465), with resampling conducted on September 18, 2023. Resample results confirmed the levels were greater than 20 mg/L (70.9 and 23.6 mg/L) at wellhouses 5 and 3 respectively. Sodium levels at Well 4 and Well 6 were within acceptable limits at 12.3 mg/L and 10.4 mg/L respectively. Sodium levels are required to be tested once every 5 years.			

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. Sampling for fluoride was last conducted at all pumphouses in September 2018 and again on September 11, 2023. No exceedances were noted. The maximum level noted was 0.98 mg/L at Well 3. The limit is 1.5 mg/L. Fluoride is required to be tested once every 5 years.			

Question ID	DWMR1104001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 16-6 (1); SDWA O. Reg. 170/03 16-6 (2); SDWA O. Reg. 170/03 16-6 (3); SDWA O. Reg. 170/03 16-6 (3.1); SDWA O. Reg. 170/03 16-6 (3.2); SDWA O. Reg. 170/03 16-6 (4); SDWA O. Reg. 170/03 16-6 (5); SDWA O. Reg. 170/03 16-6 (6);			
Question: Were immediate verbal notification requirements for adverse water quality incidents met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Immediate verbal notification requirements for adverse water quality incidents were met.			

Question ID	DWMR1101001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 17-1; SDWA O. Reg. 170/03 17-10 (1); SDWA O. Reg. 170/03 17-11; SDWA O. Reg. 170/03 17-12; SDWA O. Reg. 170/03 17-13; SDWA O. Reg. 170/03 17-14; SDWA O. Reg. 170/03 17-2; SDWA O. Reg. 170/03 17-3; SDWA O. Reg. 170/03 17-4; SDWA O. Reg. 170/03 17-5; SDWA O. Reg. 170/03 17-6; SDWA O. Reg. 170/03 17-9;			
Question: For large municipal residential systems, were corrective actions, including any steps directed by the Medical Officer of Health, taken to address adverse conditions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Corrective actions were taken to address adverse conditions.			

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

Question ID	DWMR1114001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the owner have evidence that, when required, all legal owners associated with the drinking water system were notified of the requirements of the Municipal Drinking Water Licence and Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had evidence that the required notifications were made. The owner has advised that all engineers/developers must comply with the Township's Municipal Servicing Standards, which states the following under section E2: "Developer's Engineer must comply with the requirements of the Ontario Safe Drinking Water Act (SDWA) and all applicable regulations made in accordance to the act, including but not limited to the Drinking Water Works Permit (DWWP) and the Municipal Drinking Water Licence (MWDL). DWWP and MWDL are available from the Township's Environmental Services Department and it is the responsibility of the developer's engineer to obtain copies as necessary." All developers/ developer's engineers are informed of the Township's Municipal Servicing Standards (MSS) and must abide by it. The MSS can be found on the Township's website. The MSS encompasses the requirements set out in the MDWL, DWWP, AWWA and NSF Standards and the Ontario Watermain Disinfection Procedure. The developer is required to acknowledge that they will abide by the Township's MSS by stating so on the drawings they submit to the Township. The developer's engineers for the three new subdivisions have signed off on the Form 1 as required in the DWWP. Please see link to Township of Wellington North Municipal Servicing Standards on the township website. Microsoft Word - WN Municipal Standards-2023 Update-Final (wellington-north.com) Since the last inspection, there have been no new subdivisions in Mount Forest that have not been assumed by the Municipality.			

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.			

Respecting the Form 1s of the last inspection, the Cork Street reconstruction & the Jack's Way Development changes were found on the current distribution map.

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. These manuals were checked in detail in a previous inspection. The owner reported no new changes to the DWS or the Operations Manuals during this inspection period.			

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. Pumphouses are well illuminated and have remote-notification security systems in place. Some pumphouses are protected within fenced-in compounds. All pumphouses also have			

updated SCADA systems in place which also provide remote notifications of any process upsets. Operators also keep vigilant for security concerns and possible changes when visiting sites.

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.

DWS – Stakeholder Guidance Material Reference Sheet

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

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

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

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



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

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

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



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

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

DWS – DWS Inspection Rating Report and Risk Methodology statement

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2024-25)

DWS Name: MOUNT FOREST DRINKING WATER SYSTEM
DWS Number: 220000068
DWS Owner: THE CORPORATION OF THE TOWNSHIP OF WELLINGTON NORTH
Municipal Location: WELLINGTON NORTH

Regulation: O.REG. 170/03
DWS Category: DW Municipal Residential
Type of Inspection: Focused
Compliance Assessment Start Date: Aug-14-2024
Ministry Office: Guelph District Office

Maximum Risk Rating: 501

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	0/74
Source	0/14
Treatment Processes	0/197
Water Quality Monitoring	0/112
Overall - Calculated	0/501

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2024-25)

DWS Name:	MOUNT FOREST DRINKING WATER SYSTEM
DWS Number:	220000068
DWS Owner Name:	THE CORPORATION OF THE TOWNSHIP OF WELLINGTON NORTH
Municipal Location:	WELLINGTON NORTH
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Aug-14-2024
Ministry Office:	Guelph District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 501

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



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

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

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

MOE reviews the risk rating methodology every three years.

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

ontario.ca/drinkingwater

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

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

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

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

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

Determining Potential to Compromise the Delivery of Safe Water

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

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

$$\text{RISK} = \text{LIKELIHOOD} \times \text{CONSEQUENCE}$$

(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).

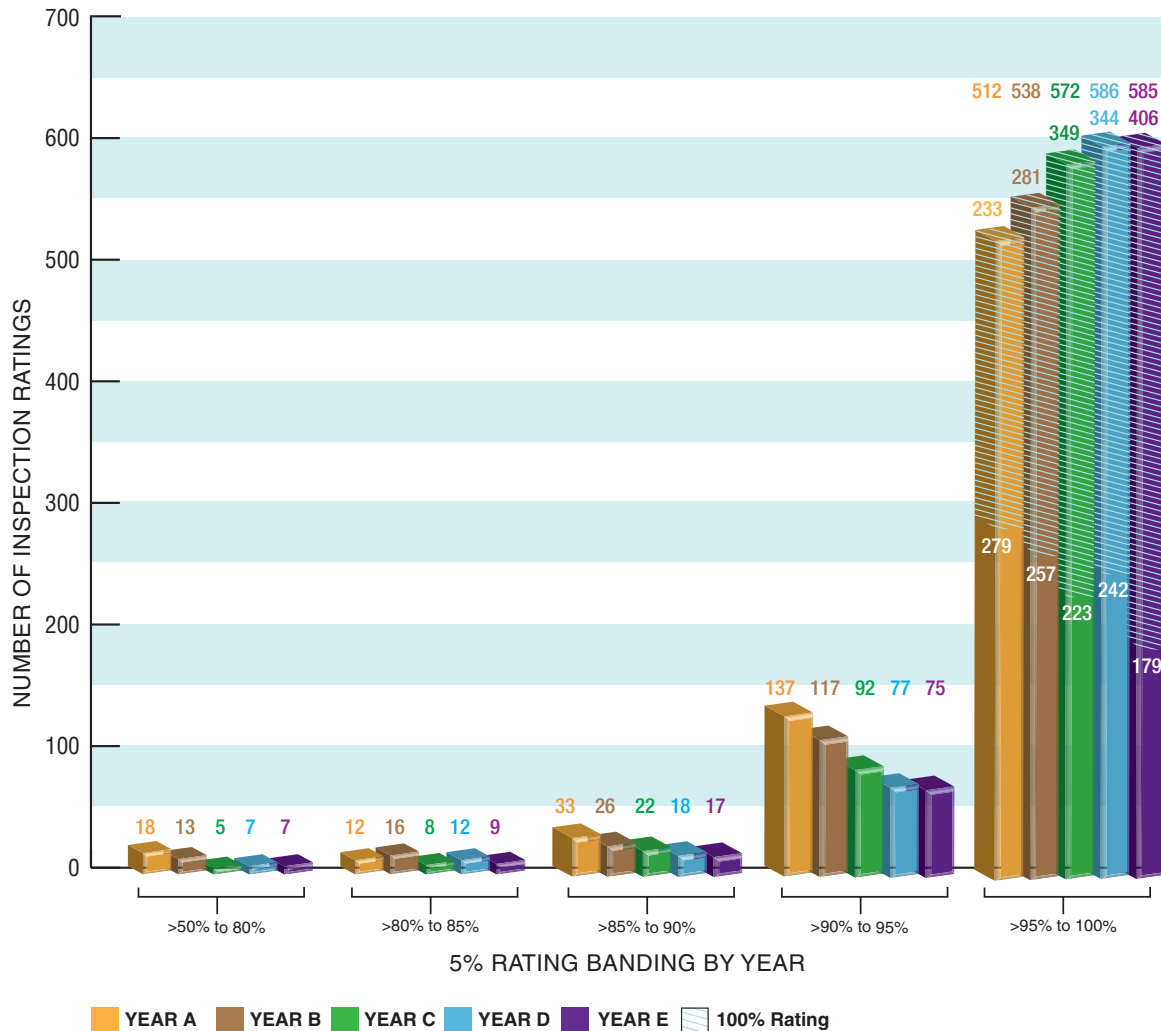
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

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 | 5. Treatment Process Monitoring | 9. Logbooks | 13. Water Quality Monitoring |
| 2. Permit to Take Water | 6. Process Wastewater | 10. Contingency and Emergency Planning | 14. Reporting, Notification and Corrective Actions |
| 3. Capacity Assessment | 7. Distribution System | 11. Consumer Relations | 15. Other Inspection Findings |
| 4. Treatment Processes | 8. Operations Manuals | 12. Certification and Training | |

For further information, please visit www.ontario.ca/drinkingwater