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

1 Stone Road West 4<sup>th</sup> 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 Téléc: 519 826-4286



October 19th, 2021

Mr. Mathew Aston
Director of Public Works
The Township of Wellington North
PO Box 125
7490 Sideroad 7W
Kenilworth, Ontario
NOG 2E0

Dear Mr. Aston,

SUBJECT: 2021 MECP Inspection Report – Arthur Well Supply (DWS # 220000040)

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

The primary focus of this inspection was to confirm compliance with MECP legislation and control documents, as well as conformance with Ministry drinking water related policies for the inspection period. The Ministry is implementing a rigorous and comprehensive approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as water system management practices.

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 and risk experts. The Inspection Summary Rating Record (IRR) provides the Ministry, the system owner and the local Public Health Unit with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water 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 months of the completion of the inspection.

## 2021 Arthur Inspection Report Page 2.

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 on the Drinking Water Ontario website at:

https://www.ontario.ca/page/taking-care-your-drinking-water-guide-members-municipal-councils

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) 546-9301.

Thankyou.

Yours truly,

**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

: Martin Keller – GRCA

: Shawn Zentner –WDGHU

: Sara McDougall - TWN

: Corey Schmidt - TWN



# ARTHUR DRINKING WATER SYSTEM 109 WELLS ST, WELLINGTON NORTH, ON, NOG 1A0

## **Inspection Report**

System Number: 220000040
Inspection Start Date: 09/17/2021
Inspection End Date: 10/19/2021
Inspected By: Rick Neubrand

Badge #: 773

Inspected By: Lisa Williamson

Badge #: 1205

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

#### NON-COMPLIANCE/NON-CONFORMANCE ITEMS

The following item(s) have been identified as non-compliance/non-conformance, based on a "No" response captured for a legislative or best management practice (BMP) question (s), respectively.

**Question Group:** Other Inspection Findings

Question	Legislative Requirement
Type	
BMP	Not Applicable
	Type

#### **Observation/Corrective Action(s)**

The following issues were also noted during the inspection: 1.) During a previous inspection, the owner reported that an adjacent landowner had applied commercial fertilizer and treated corn seed within 100 m of wells 8A and 8B. This is within the WHPA-A groundwater protection zone for the wells and is contrary to the Nutrient Management Act. The owner also provided documentation which indicated that the local Ministry Agricultural Compliance Officer had followed up with the adjacent farmer and stopped the action. It is recommended that the owner continue to monitor agricultural activities on lands adjacent to their wells, and report any further improper land applications to the Ministry.

2.) On page 5 of the 2019 Annual Report of the PTTW, it is stated that:

"The O'Donnell domestic well responds significantly to operation of well 7B but it is located south of the Arthur well 7B wellhead protection area. We would expect the wellhead protection area to include this area. Monitoring well WN- MW1/00 (DO) responds significantly to the operation of Wells 8A and 8B but is shown in the capture area for Well 7B. Similarly we would expect that the wellhead protection area for wells 8A and 8B would include this area."

It is recommended this be considered the next time the source protection plans are revised.

#### **INSPECTION DETAILS**

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

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

Question ID MRDW1001000		
Question	Question	Legislative
	Type	Requirement
What was the scope of this inspection?	Information	Not Applicable
Observation		

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.

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. This inspection is an assessment of the Town of Arthur's drinking water system (DWS).

The Town of Arthur is a small rural community with a population of approximately 2333. It is located approximately 36 km north of the City of Guelph, and 61 km northwest of the City of Brampton.

The DWS for the Town of Arthur is comprised of three wells, two pumphouses, and two water towers. Treatment consists of chlorination for disinfection and iron sequestration.

The review period for this inspection is from August 5, 2020 to September 23, 2021.

<b>Question ID</b>	MRDW1000000		
Question		Question	Legislative
		Type	Requirement
Does this drink	ing water system provide primary	Information	Not Applicable
disinfection?			
Observation			
This Drinking Water System provides for both primary and secondary disinfection and			
distribution of water. Primary disinfection is provided through the usage of chlorination. Sodium			

silicate injection is used for iron sequestration.

Question ID MRDW1007000		
Question	Question	Legislative
	Type	Requirement
Is the owner maintaining the production well(s) in a manner	Legislative	SDWA   O. Reg.
sufficient to prevent entry into the well of surface water and		170/03   1-2   (1)
other foreign materials?		

#### **Observation**

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. According to Water Well Record #6712921, the annular space for Well 7B was filled with cement grout and bentonite from ground level to a depth of 40 feet. According to Water Well Records #6714775 and 6714776, the annular spaces for Well 8A and Well 8B were each filled with cement grout from ground level to a depth of 183 feet.

Sections 16.2.7 - 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.

The Township of Wellington-North has established a well inspection program that includes inspections of the production wells on an annual basis. Also, a detailed assessment of the wells, including below grade components, is set to be scheduled approximately every 10 years, if feasible.

With respect to next below grade (video) inspections, the owner reported that:

- Well 7 was last inspected on Oct 15, 2019.
- Well 8A was last inspected November 13, 2013.
- Well 8B was last inspected on October 3, 2013.

No significant concerns were noted.

Question ID MRDW1009000		
Question	Question	Legislative
	Type	Requirement
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?	Legislative	SDWA   31   (1)

#### **Observation**

Measures were in place to protect the groundwater and/or GUDI source in accordance with any the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA. During a previous inspection, the owner reported that an adjacent landowner had applied commercial fertilizer and treated corn seed within 100 m of wells 8A and 8B. This is within the WHPA-A groundwater protection zone for the wells and is contrary to the Nutrient

Management Act. The owner also provided documentation which indicated that the local MECP Agricultural Compliance Officer had followed up with the adjacent farmer and stopped the action. It is recommended that the owner continue to monitor agricultural activities on lands adjacent to their wells, and report any further improper land applications to the Ministry.

For reporting purposes, the Township of Wellington North is subject to two Source Protection Plans (based on watershed or Conservation Authority boundaries): Grand River Plan and the Saugeen Valley, Grey Sauble, Northern Bruce Peninsula Plan (Saugeen Valley). Although the Ausable Bayfield Maitland Valley (ABMV - Maitland Valley) Plan also encompasses part of the municipality, there are no reporting requirements associated with that Plan for the Township. In 2021, all Source Protection Plans were in effect.

On page 5 of the 2019 Annual Report of the PTTW, it is stated that: "The O'Donnell domestic well responds significantly to operation of well 7B but it is located south of the Arthur well 7B wellhead protection area. We would expect the wellhead protection area to include this area. Monitoring well WN - MW1/00 (DO) responds significantly to the operation of Wells 8A and 8B but is shown in the capture area for Well 7B. Similarly we would expect that the wellhead protection area for wells 8A and 8B would include this area." It is recommended this be considered the next time the source protection plans are revised.

Question ID MRDW1014000		
Question	Question	Legislative
	Type	Requirement
Is there sufficient monitoring of flow as required by the	Legislative	SDWA   31   (1)
MDWL or DWWP issued under Part V of the SDWA?		

#### Observation

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. Section 2.1 of Schedule C in the MDWL outlines the requirements for flow measurement and recording. For this system, continuous flow measurement and recording shall be undertaken for the flow rate (L/s) and daily volume (m3/day) of treated water that flows from the treatment subsystem into the distribution system, as well as water that flows into the treatment subsystem. For this system, each well is equipped with a flow meter that in essence serves as a treated flow meter due to the treatment occurring within contact piping rather than a reservoir.

Question ID MRDW1016000		
Question	Question	Legislative
	Type	Requirement
Is the owner in compliance with the conditions associated	Legislative	SDWA   31   (1)
with maximum flow rate or the rated capacity conditions in		
the MDWL issued under Part V of the SDWA?		

#### Observation

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. Schedule C, Section 1.1 of the MDWL dictates a rated capacity of 1,961 m<sup>3</sup>/day for Well

Pumphouse 7, and 2,255 m³/day for Well Pumphouse 8. Records provided indicate these rated capacities were not exceeded during the inspection review period, except for minor periods involving maintenance of the DWS.

Question ID MRDW1030000		
Question	Question Type	Legislative Requirement
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?	Legislative	SDWA   O. Reg. 170/03   7-2   (1), SDWA   O. Reg. 170/03   7-2   (2)

#### **Observation**

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. Both pumphouses have both pre-chlorination and post chlorination pumps and continuous analyzers. The post chlorination analyzer takes water for sampling at the ends of the contact mains.

Question ID MRDW1033000		
Question	Question	Legislative
	Type	Requirement
Is the secondary disinfectant residual measured as required	Legislative	SDWA   O. Reg.
for the large municipal residential distribution system?		170/03   7-2   (3),
		SDWA   O. Reg.
		170/03   7-2   (4)

#### Observation

The secondary disinfectant residual was measured as required for the distribution system. Distribution system chlorine residuals were measured on a daily basis during the inspection review period.

Question ID MRDW1037000		
Question	Question	Legislative
	Type	Requirement
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?	Legislative	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)

#### **Observation**

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. Alarms are

set at both the pre-contact piping and post-contact piping, for optimum response ability. The well pumps are set to lock out if the free chlorine residual levels drop below the low-low setpoint level of 0.65 mg/L at the post-contact chlorine analyzers.

Question ID MRDW1038000		
Question	Question	Legislative
	Type	Requirement
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?	Legislative	SDWA   O. Reg. 170/03   6-5   (1) 1-4

#### **Observation**

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. In reviewing SCADA data, the owner provided backup data from on-site historians for any omissions from broadcast channel data as well. Backup data was provided in 5 minute intervals but when issues arose backup data was also provided in 1 minute intervals.

Question ID MRDW1035000		
Question	Question	Legislative
Are operators examining continuous monitoring test results	<b>Type</b> Legislative	Requirement SDWA   O. Reg.
and are they examining the results within 72 hours of the	Legislative	170/03   6-5   (1)
test?		1-4,SDWA   O.
		Reg. 170/03   6-5
		(1)5-10

#### **Observation**

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

Question ID MRDW1040000		
Question	Question	Legislative
	Type	Requirement
Are all continuous analysers calibrated, maintained, and	Legislative	SDWA   O. Reg.
operated, in accordance with the manufacturer's instructions		170/03   6-5   (1)
or the regulation?		1-4,SDWA   O.
		Reg. 170/03   6-5
		(1)5-10

#### **Observation**

All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation. Portable colourimeters are used to calibrate the

continuous analyzers. Portable colourimeters are professionally calibrated annually and were last calibrated on February 17, 2021. The online analyzers were last professionally checked on June 3, 2021. Certificates were provided for these assessments.

Question ID MRDW1108000		
Question	Question	Legislative
	Type	Requirement
Where continuous monitoring equipment used for the	Legislative	SDWA   O. Reg.
monitoring of free chlorine residual, total chlorine residual,		170/03   6-5   (1)
combined chlorine residual or turbidity, required by		1-4,SDWA   O.
Regulation 170, an Order, MDWL, or DWWP issued under		Reg. 170/03   6-5
Part V, SDWA, has triggered an alarm or an automatic shut-		(1)5-10,SDWA
off, did a qualified person respond in a timely manner and		O. Reg. 170/03
take appropriate actions?		6-5   (1.1)

#### **Observation**

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. Operators kept detailed notes in logbooks which explained events and anomalies in the DWS.

Question ID   MRDW1018000		
Question	Question	Legislative
	Type	Requirement
Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?	Legislative	SDWA   31   (1)

#### Observation

The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit. No significant changes in equipment have occurred since the last inspection.

Question ID MRDW1020000		
Question	Question	Legislative
	Type	Requirement
Is the owner/operating authority able to demonstrate that,	Legislative	SDWA   31   (1)
when required during the inspection period, Form 1		
documents were prepared in accordance with their Drinking		
Water Works Permit?		

#### **Observation**

The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water Works Permit during the inspection period. One form 1 was prepared since last inspection.

Question	Legislative
Type	Requirement
Legislative	SDWA   31   (1)
_	
	Type

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. Two form 2s were prepared since last inspection.

Question ID MRDW1023000		
Question	Question	Legislative
	Type	Requirement
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?	Legislative	SDWA   O. Reg. 170/03   1-2   (2)

#### **Observation**

Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 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. The Arthur Drinking Water System obtains water from ground water sources. The treatment system consists of disinfection using 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. The minimum required CT value for this system has been determined to be 4 mg/L·min, and a free chlorine residual of 0.50 mg/L has been deemed to be the minimum level required to achieve the required CT at both the 7B and 8A/8B pumphouses.

Records provided for the inspection period indicate that proper disinfection was achieved at all times water was being supplied to consumers.

Question ID MRDW1024000		
Question	Question	Legislative
	Type	Requirement
Do records confirm that the water treatment equipment	Legislative	SDWA   O. Reg.
which provides chlorination or chloramination for secondary		170/03   1-2   (2)
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?		
Observation		
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.

Question ID MRDW1025000		
Question	Question Type	Legislative Requirement
Were all parts of the drinking water system that came in contact with drinking water (added, modified, replaced or extended) disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?	Legislative	SDWA   31   (1)

#### **Observation**

All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.

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

#### **Observation**

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

Question ID MRDW1060000		
Question	Question	Legislative
	Type	Requirement
Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA   31   (1)

#### Observation

The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.

Question ID MRDW1071000		
Question	Question	Legislative
	Type	Requirement
Has the owner provided security measures to protect	BMP	Not Applicable
components of the drinking water system?		

The owner had provided security measures to protect components of the drinking water system. Pumphouses are well lit and have remote notification security systems in place.

Question ID MRDW1073000		
Question	Question	Legislative
	Type	Requirement
Has the overall responsible operator been designated for all	Legislative	SDWA   O. Reg.
subsystems which comprise the drinking water system?		128/04   23   (1)
	Legislative	, ,

#### **Observation**

The overall responsible operator has been designated for each subsystem.

The Manager, Environmental & Development Services is permanently designated as the ORO for the Township's Drinking Water Systems. Other Operators may be required to act in the absence of the Manager and a memo will be sent out to notify staff.

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

#### **Observation**

Operators-in-charge had been designated for all subsystems which comprised the drinking water system. The operator that completes the daily well check is designated the OIC for that facility during regular working hours. The on-call operator is designated the OIC after regular working hours and on weekends. Operators are on-call for one week on a rotational basis.

Question ID MRDW1075000		
Question	Question Type	Legislative Requirement
Do all operators possess the required certification?	Legislative	SDWA   O. Reg. 128/04   22
Observation		
All operators possessed the required certification.		

Question ID MRDW1076000		
Question	Question	Legislative
	Type	Requirement
Do only certified operators make adjustments to the	Legislative	SDWA   O. Reg.
treatment equipment?	_	170/03   1-2   (2)
Observation		
Only certified operators made adjustments to the treatmen	t equipment.	

Question ID MRDW1099000		
Question	Question	Legislative
	Type	Requirement
Do records show that all water sample results taken during	Information	Not Applicable
the inspection review period did not exceed the values of		
tables 1, 2 and 3 of the Ontario Drinking Water Quality		
Standards (O. Reg., 169/03)?		
Observed the second	•	<u> </u>

Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03).

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

same location that microbiological samples were obtained.

Question	Question Type	Legislative Requirement
Are all microbiological water quality monitoring requirements for distribution samples being met?	Legislative	SDWA   O. Reg. 170/03   10-2   (1),SDWA   O. Reg. 170/03   10- 2   (2),SDWA   O. Reg. 170/03   10- 2   (3)

#### Observation

All microbiological water quality monitoring requirements for distribution samples were being met.

Question ID MRDW1083000		
Question	Question	Legislative
	Type	Requirement
Are all microbiological water quality monitoring	Legislative	SDWA   O. Reg.
requirements for treated samples being met?		170/03   10-3
Observation		
All microbiological water quality monitoring requirements for treated samples were being met.		

Question ID MRDW1084000		
Question	Question	Legislative
	Type	Requirement
Are all inorganic water quality monitoring requirements	Legislative	SDWA   O. Reg.
prescribed by legislation conducted within the required		170/03   13-2
frequency?		

All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Inorganics were last sampled for on August 8, 2018 for Pumphouse 7, and November 16, 2020 for Pumphouse 8. Sampling for these parameters were undertaken again at both pumphouses on Aug 23, 2021 to get a common sampling date for both pumphouses. These sample parameters are required to be sampled every 36 months.

Question ID MRDW108500	0		
Question		Question	Legislative
		Type	Requirement
Are all organic water quality no prescribed by legislation conductive frequency?		Legislative	SDWA   O. Reg. 170/03   13-4   (1),SDWA   O. Reg. 170/03   13- 4   (2),SDWA   O. Reg. 170/03   13-
			4   (3)

#### **Observation**

All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Organics were last sampled for on August 8, 2018 for Pumphouse 7, and November 16, 2020 for Pumphouse 8. Sampling for these parameters were undertaken again at both pumphouses on Aug 23, 2021 to get a common sampling date for both pumphouses. These sample parameters are required to be sampled every 36 months.

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

All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location. HAAs were sampled last in the distribution system on the following dates:

- Nov 9, 2020
- Feb 8, 2021
- May 10, 2021

and

- August 16, 2021

This sample parameter is required to be sampled quarterly.

Question ID MRDW1087000		
Question	Question	Legislative
	Type	Requirement
Have all trihalomethane water quality monitoring	Legislative	SDWA   O. Reg.
requirements prescribed by legislation been conducted		170/03   13-6   (1)
within the required frequency and at the required location?		

#### **Observation**

All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. THMs were sampled last in the distribution system on the following dates:

- Nov 9, 2020
- Feb 8, 2021
- May 10, 2021

and

- August 16, 2021

The latest annual running average was 19.5 ug/L.

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

<b>Question ID</b>	MRDW1088000		
Question		Question	Legislative
		Type	Requirement
	nitrite water quality monitoring requirements egislation conducted within the required he DWS?	Legislative	SDWA   O. Reg. 170/03   13-7

#### **Observation**

All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS. Nitrates / nitrites were sampled last on the following dates:

- Nov 9, 2020
- Feb 8, 2021
- May 10, 2021

and

- August 16, 2021

This sample parameter is required to be sampled quarterly.

Question ID MRDW1089000		
Question	Question	Legislative
	Type	Requirement
Are all sodium water quality monitoring requirements	Legislative	SDWA   O. Reg.
prescribed by legislation conducted within the required		170/03   13-8
frequency?		

#### **Observation**

All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Sodium sampling was conducted for Pumphouse 7 on September 10, 2018 and results exceeded the 20 mg/L reportable limit (36.6 mg/L). An adverse water quality incident (AWQI) was reported (#114425), with resampling results of Sept 18, 2018 confirming the levels were greater than 20 mg/L (also 36.6 mg/L). Sodium sampling for Pumphouse 8 was conducted on November 9, 2015 (results slightly higher than 20 mg/L) and again on November 16, 2020 at 22.4 mg/L. This was not reported as elevated sodium for the DWS as elevated sodium levels had been already reported within the last 5 years. This sample parameter is required to be sampled every 60 months.

Question ID MRDW1090000		
Question	Question	Legislative
	Type	Requirement
Where fluoridation is not practiced, are all fluoride water	Legislative	SDWA   O. Reg.
quality monitoring requirements prescribed by legislation		170/03   13-9
conducted within the required frequency?		

#### **Observation**

All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Sampling for fluoride at Pumphouse 7 was last conducted on September 10, 2018. Test results were 1.30 mg/L. Sampling for fluoride at Pumphouse 8 was last conducted on November 9, 2015 with results of 0.32 mg/L and again on November 16, 2020 at 0.35 mg/L. The established drinking water standard for fluoride of 1.5 mg/L. This sample parameter is required to be sampled every 60 months.

<b>Question ID</b>	MRDW1100000		
Question		Question	Legislative
		Type	Requirement
Did any reporta	able adverse/exceedance conditions occur	Information	Not Applicable
during the insp	ection period?		
Observation			

#### Observation

There were no reportable adverse/exceedances during the inspection period. No AWQIs since last inspection.

Question ID MRDW1113000		
Question	Question Type	Legislative Requirement
Have all changes to the system registration information been provided to the Ministry within ten (10) days of the change?	Legislative	SDWA   O. Reg. 170/03   10.1   (3)
Observation		

All changes to the system registration information were provided within ten (10) days of the change.

Question	Legislative
Type	Requirement
Legislative	SDWA   31   (1)
	Type

#### **Observation**

The owner had evidence that all required notifications to all legal owners associated with the Drinking Water System had been made during the inspection period. The Township has advised that all engineers/developers must comply with the Township's Municipal Servicing Standards, which states the following:

"Developer's Engineer must comply with the requirements of the Ontario Safe Drinking Water Act and all applicable regulations made in accordance to the act, including but not limited to the Drinking Water Works Permits (DWWP) and the Municipal Drinking Water Licence (MDWL). DWWP and MWDL are available from the Township's Water Department and it is the responsibility of the developer's engineer to obtain copies as necessary."

Question ID MRDW1116000		
Question	Question	Legislative
	Type	Requirement
Were the inspection questions sufficient to address other	BMP	Not Applicable
identified best practice issues?		

#### **Observation**

The following issues were also noted during the inspection: 1.) During a previous inspection, the owner reported that an adjacent landowner had applied commercial fertilizer and treated corn seed within 100 m of wells 8A and 8B. This is within the WHPA-A groundwater protection zone for the wells and is contrary to the Nutrient Management Act. The owner also provided documentation which indicated that the local Ministry Agricultural Compliance Officer had followed up with the adjacent farmer and stopped the action. It is recommended that the owner continue to monitor agricultural activities on lands adjacent to their wells, and report any further improper land applications to the Ministry.

2.) On page 5 of the 2019 Annual Report of the PTTW, it is stated that:

**Event Number:** 1-29663182

"The O'Donnell domestic well responds significantly to operation of well 7B but it is located south of the Arthur well 7B wellhead protection area. We would expect the wellhead protection area to include this area. Monitoring well WN- MW1/00 (DO) responds significantly to the operation of Wells 8A and 8B but is shown in the capture area for Well 7B. Similarly we would expect that the wellhead protection area for wells 8A and 8B would include this area."

It is recommended this be considered the next time the source protection plans are revised.

Question ID MRDW1059000		
Question	Question Type	Legislative Requirement
Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?	Legislative	SDWA   O. Reg. 128/04   28
Observation		
The operations and maintenance manuals contained plans, drawings and process descriptions		

The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

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

Logbooks were properly maintained and contained the required information.

We want to hear from you. How was my service? You can provide feedback at 1-888-745-8888 or Ontario.ca/inspectionfeedback



### Ministry of the Environment Drinking Water System Inspection Report – Appendix A

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	012-2149E
Laboratory Services Notification	012-2148E
Adverse Test Result Notification	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 cidessous 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 portable 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

