

MUNICIPALITY



OF ASSIGINACK

BOX 238, MANITOWANING, ONT., P0P 1N0

(705) 859-3196 or 1-800-540-0179

www.assiginack.ca

SPECIAL VIRTUAL MEETING OF COUNCIL

Via ZOOM

Tuesday, February 15, 2022 5:00 pm

AGENDA

For Consideration:

1. OPENING

- a) Adoption of Agenda
- b) Disclosure of Pecuniary Interest and General Nature Thereof

2. ANNOUNCEMENTS

3. ADOPTION OF MINUTES

- a) Minutes of Regular Council Meeting of February 1, 2022
- b) Minutes of Special Council Meeting of February 8, 2022

4. DELEGATIONS

5. REPORTS

- a) Annual Inspection Report for Manitowaning Drinking Water System

6. ACTION REQUIRED ITEMS

- a) Accounts for Payment: General: \$ 60,087.64
Payroll: \$ 21,534.93
- b) Project Lifesaver Support
- c) DSAB Apportionment Formula Resolution Response
- d) Annual Contributions to Fixing our Felines

7. INFORMATION ITEMS

- a) Ministry of Municipal Affairs and Housing: Easing Covid Steps

b) MPAC Quarterly Report

8. BY-LAWS

9. CLOSED SESSION

10. ADJOURNMENT

THE CORPORATION OF THE TOWNSHIP OF ASSIGINACK
MINUTES OF THE REGULAR COUNCIL MEETING

The Regular Meeting of the Council of the Corporation of the Township of Assiginack was held and hosted by way of a Zoom Conference call from the Council Chambers on Tuesday, February 1, 2022 at 5:00 pm.

Present: Mayor Dave Ham
Councillor Dave McDowell
Councillor Rob Maguire
Councillor Christianna Jones
Councillor Hugh Moggy

Staff: Alton Hobbs, CAO, Deputy Clerk
Deb MacDonald, Treasurer
Freda Bond, Tax and Utilities Manager
Jackie White, PEC
Ron Cooper, Public Works Superintendent
Shelba Millette EDO 5:08 pm

Press: Tom Savari: Expositor

OPENING:

#026-03-2022 D. McDowell - H. Moggy

THAT the Regular Meeting of the Council of the Corporation of the Township of Assiginack be opened for business at 5:00 pm, with a quorum of members present virtually, with Mayor Ham presiding in the Chair.

CARRIED

AGENDA:

#027-03-2022 C. Jones - R. Maguire

THAT we confirm the attendance of the Members of Council electronically (on Zoom) and adopt the agenda as presented.

CARRIED

DISCLOSURE OF PECUNIARY INTEREST:

NONE

ANNOUNCEMENTS:

NONE

ADOPTION OF MINUTES:

#028-03-2022 C. Jones - D. McDowell

THAT the Minutes of the Regular Council Meeting of the January 18, 2022 be accepted.

CARRIED

#029-03-2022 C. Jones – D. McDowell

THAT the Minutes of the Assiginack Public Library Board Meeting of December 14, 2021 be accepted.

CARRIED

DELEGATIONS:

NONE

REPORTS:

NONE

ACTION REQUIRED ITEMS:

#030-03-2022 D. McDowell - H. Moggy

THAT Council authorizes the following Accounts for Payment:

General: \$210,371.00;

AND THAT the Mayor and administration be authorized to complete cheques #31647 through #31687 as described in the attached cheque register report.

CARRIED

#031-03-2022 C. Jones - R. Maguire

THAT Council authorizes the following Accounts for Payment:

Payroll: \$20,934.94;

AND THAT the Mayor and administration be authorized to complete cheques #31641 through #31646 as described in the attached cheque register report.

CARRIED

#032-03-2022 R. Maguire – D. McDowell

THAT we ask Staff to confirm a price for the installation of a streetlight at the corner of Highway #6 and Sucker Lake Road and report back to the next meeting.

CARRIED

Council asked Staff to explore the option of solar lights as well.

#033-03-2022 D. McDowell - C. Jones

WHEREAS the following tenders were received for a) Parks Maintenance and Garbage Collection for a three year term: Windows Unlimited: \$ 75,312.80 exclusive of taxes

And

b) Grass Cutting Various Locations for a three year term: Windows Unlimited: \$ 37,500.00 exclusive of taxes

NOW THEREFORE THAT the tenders of Windows Unlimited be accepted.

CARRIED

#034-03-2022 R. Maguire – H. Moggy

THAT we inform the Manitoulin Minor Hockey Association that subject to further Provincial or District restrictions from Public Health, we will keep our arena facility open until the end of March to allow the completion of a hockey season.

CARRIED

INFORMATION ITEMS:

#035-03-2022 H. Moggy – C. Jones

THAT we acknowledge receipt of the following correspondence items:

- a) OPP/CPAC: Project Lifesaver
- b) Fred Dean: So You Want to Run for Council

CARRIED

BY-LAWS:

#036-03-2022 D. McDowell – C. Jones

THAT By-law # 22-04. Being a by-law to authorize an agreement with Her Majesty the Queen as represented by the Ontario Trillium Fund under the Community Building Fund be given first, second, third and final readings and enacted in Open Council.

CARRIED

#037-03-2022 H. Moggy – R. Maguire

THAT By-law # 22-05, being a by-law to provide for an interim tax levy and to provide for the payment of taxes and penalty and interest of 1.25% be given first, second, third and final readings and enacted in Open Council.

CARRIED

CLOSED SESSION:

NONE

CLOSING:

#038-03-2022 C. Jones - R. Maguire

THAT we adjourn until the next regular meeting or call of the Chair.

CARRIED

David Ham, MAYOR

Alton Hobbs, CAO/DEPUTY CLERK

5:15 pm

These Minutes have been circulated but are not considered Official until approved by Council.

THE CORPORATION OF THE TOWNSHIP OF ASSIGINACK
MINUTES OF THE REGULAR COUNCIL MEETING

The Regular Meeting of the Council of the Corporation of the Township of Assiginack was held and hosted by way of a Zoom Conference call from the Council Chambers on Tuesday, February 8, 2022 at 5:00 pm.

Present: Mayor Dave Ham
Councillor Dave McDowell
Councillor Rob Maguire
Councillor Christianna Jones
Councillor Hugh Moggy

Staff: Alton Hobbs, CAO, Deputy Clerk
Deb MacDonald, Treasurer
Freda Bond, Tax and Utilities Manager
Shelba Millette EDO
Jackie White, PEC

Press/Others: Rob Sheppard, Sheppard Custom Builders

OPENING:

#039-04-2022 D. McDowell – C. Jones

THAT this Special Meeting of the Council of the Corporation of the Township of Assiginack be opened for business at 5:00 pm, with a quorum of members present virtually, with Mayor Ham presiding in the Chair.

CARRIED

ACTION REQUIRED ITEMS:

The meeting was called by the Mayor who had concerns about the size and location of the bridge to be placed at High Falls for pedestrian use. This project is funded by the Ontario Trillium Fund and the contract has just been signed by the Township.

The Mayor has obtained quotations from other suppliers for a much longer bridge to be placed at a different location along the gorge.

Council members confirmed that they would also like to see a longer bridge but would prefer to deal with Sheppard Customer Builders who had supplied the original quotation under severe time constraints which allowed the application for funding to be submitted.

There was a long discussion among members regarding how to proceed as they wanted to take advantage of the funding, have the longer bridge and be fair to Sheppard Custom Builders. Staff clarified a few questions regarding the OTF contract and application submission. As well as the nature and contents of the full quotation submitted with the application and the limited quotation provided by the Mayor.

At the end of the discussion, it was determined that Council would ask Sheppard Custom Builders to revise their quote to include the larger bridge and we would proceed from that point.

No other matters were discussed.

CLOSING:

#040-04-2022 H. Moggy - R. Maguire

THAT we adjourn until the next regular meeting or call of the Chair.

CARRIED

David Ham, MAYOR

Alton Hobbs, CAO/DEPUTY CLERK

5:55 pm

These Minutes have been circulated but are not considered Official until approved by Council.

Ministry of the Environment,
Conservation and Parks

Ministère de l'Environnement, de la Protection de
la nature et des Parcs

Drinking Water and Environmental
Compliance Division, Northern Region
Sudbury District, Sudbury Office
199 Larch Street
Suite 1201
Sudbury ON P3E 5P9
Tel.: 705 564-3237
Toll Free: 1-800-890-8516
Fax: 705 564-4180

Division de la conformité en matière d'eau potable
et d'environnement, Direction régionale du Nord
District de Sudbury, bureau de Sudbury
199, rue Larch
Bureau 1201
Sudbury ON P3E 5P9
Tél. : 705 564-3237
Numéro sans frais: 1-800-890-8516
Télééc. : 705 564-4180



February 1, 2022

Mr. Alton Hobbs
Clerk/Treasurer
Municipality of Assiginack
Box 238, Manitowaning, Ontario
P0P 1N0

Dear Mr. Hobbs:

Attached is the annual inspection report for the Manitowaning Drinking Water System.

A new report format is in use for MECP inspections which may cause some confusion. Please note the following:

- One non-compliance situation is outlined on Pages 3. The operating authority is aware of this situation.
- "Best Practice" recommendations are outlined in Appendix F. This Summary is included not as a regulatory review but to encourage greater effectiveness in drinking water system operations.
- A description of the components of the drinking water system can be found in Appendix E.
- Of note is the Inspection Rating Record (normally attached) which will be sent under separate cover within one month.

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

of municipal council" found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater."

Your staff's cooperation during the inspection was appreciated. Please feel free to contact me at 705 929-7029, should you have questions.

Sincerely,

M. Spinney

Maureen Spinney
Water Inspector
Sudbury District Office

cc. Ms. Sarah Beaulieu, OCWA
Mr. Burgess Hawkins, PHSD



MANITOWANING DRINKING WATER SYSTEM
2 BAY ST N, ASSIGINACK, ON, P0P 1N0
Inspection Report

System Number:	210001013
Inspection Start Date:	12/01/2021
Inspection End Date:	02/01/2022
Inspected By:	Maureen Spinney
Badge #:	467
Inspected By:	Marnie Managhan
Badge #:	718

M.Spinney

Digitally signed by M.Spinney
DN: cn=M.Spinney, o, ou, email=maureen.
spinney@ontario.ca, c=CA
Date: 2022.02.01 12:07:12 -05'00'

(signature)

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: Certification and Training

Question ID	MRDW1075000	
Question	Question Type	Legislative Requirement
Do all operators possess the required certification?	Legislative	SDWA O. Reg. 128/04 22
Observation/Corrective Action(s)		
<p>All operators did not possess the required certification.</p> <p>DWI notes: An operator attending the site and acting as OIC on August 2nd, 2021, and, acting as ORO on August 3rd, 4th, and 5th, 2021, did not have the required licence.</p> <p>The operating authority notified the Ministry of this situation on August 6, 2021, indicating that operator's licence had expired on July 31, 2021, and though operator had made attempts the renewal did not occur until August 6, 2021. This situation may well have been the result of the pandemic.</p> <p>OCWA indicates new procedures are in place. As of August 2021, training and licencing will be a regular topic at all cluster meetings. Training reports are being prepared and presented quarterly to management detailing staff's current licencing and training needs. In addition, OCWA has begun providing monthly updates to Management and Compliance based on OWWCO's valid licenced operator reports. Furthermore, management will take a more direct approach when dealing with operators who have let their licences lapse. Direction will be given to staff detailing their responsibilities while an operator awaits renewal of licence.</p>		

Question Group: Distribution System

Question ID	MRDW1046000	
Question	Question Type	Legislative Requirement
Is there a backflow prevention program, policy and/or bylaw in place that addresses cross connections and connections to high hazard facilities?	BMP	Not Applicable
Observation/Corrective Action(s)		
<p>There is no backflow prevention program, policy and/or bylaw in place.</p> <p>DWI notes: Efforts should be taken to ensure that the backflow prevention device on the public tap (Municipal garage) is tested and maintained.</p>		

Question Group: Other Inspection Findings

Question ID	MRDW1116000	
Question	Question Type	Legislative Requirement
Were the inspection questions sufficient to address other identified best practice issues?	BMP	Not Applicable
Observation/Corrective Action(s)		
The following issues were also noted during the inspection: DWI notes: Please see Appendix for list of "Best Practice Recommendations".		

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 Type	Legislative Requirement
What was the scope of this inspection?	Information	Not Applicable
Observation		
<p>The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.</p> <p>This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O.Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.</p> <p>This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.</p> <p>Drinking Water Inspector, Maureen Spinney (DWI) provides the following comments: The review period for this inspection is June 1, 2020 to August 31, 2021.</p>		

Question ID	MRDW1000000	
Question	Question Type	Legislative Requirement
Does this drinking water system provide primary disinfection?	Information	Not Applicable
Observation		
This Drinking Water System provides for both primary and secondary disinfection and distribution of water.		

Question ID	MRDW1010000	
Question	Question Type	Legislative Requirement
Are trends in source water quality being monitored?	BMP	Not Applicable
Observation		
Trends in source water quality were being monitored.		

Question ID MRDW1011000		
Question	Question Type	Legislative Requirement
Does the owner have a harmful algal bloom monitoring plan in place?	BMP	Not Applicable
Observation		
The owner had a harmful algal bloom monitoring plan in place.		

Question ID MRDW1014000		
Question	Question Type	Legislative Requirement
Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
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.		
DWI notes: In accordance with the Permit and Licence, two types of flow must be monitored:		
1. The flow rates of water conveyed into treatment systems.		
2. Flow rate and daily volume of water conveyed to the distribution system from each treatment system that has a separate line feeding the distribution system. Within the plant the three filter trains feed one line.		
Raw water and treated water flow meters were calibrated on May 13, 2020 and subsequently on June 11, 2021.		

Question ID MRDW1015000		
Question	Question Type	Legislative Requirement
Are the flow measuring devices calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
The flow measuring devices were calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SWDA.		

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

DWI notes: The PTTW (# 7278-BALLLV expires April 2, 2029) provides for maximum takings of 1149.12m³/day. Maximum raw water takings during the review period amounted to 822m³/day in June 2021.

The Municipal Drinking Water Licence provides for a rated capacity of 1,045m³/day. Reports provided indicate maximum daily treated water flow rate was 698m³/day in June 2021.

Question ID	MRDW1017000	
Question	Question Type	Legislative Requirement
Were appropriate records of flows and any capacity exceedances made in accordance with the MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
Appropriate records of flows and any capacity exceedances were made in accordance with the Municipal Drinking Water Licence issued under Part V of the SDWA.		

Question ID	MRDW1013000	
Question	Question Type	Legislative Requirement
Is the owner in compliance with all conditions of the PTTW?	Legislative	OWRA 34 (3)
Observation		
The owner was in compliance with all conditions of the PTTW.		

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.		
DWI notes: Primary disinfection monitoring is required to take place at a point where intended contact time is completed. At this plant the chlorine analyzer (identified as the pre chlorine analyzer) draws a sample from a point located at the end of the contact chamber, pre clearwell.		

Note that a trim chlorine injection point is located just downstream of the high lift pump header, with the associated post chlorine analyzer located just prior to water exiting the building. There is an SOP in place for use of the trim chlorine system.

Question ID	MRDW1038000		
Question	Question Type	Legislative 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.			
DWI notes: The chlorine system is alarmed at 0.85mg/l, with a low, low alarm at 0.8mg/l with no set delay. A lockout exists which ensures filter trains are shut down when the chlorine levels drop below 0.8mg/l, as measured at the end of the contact tank.			
The operator calculates CT when levels are less than 0.8mg/l.			
Filtrate turbidity alarms are set at 0.1NTU, with no set delay. Lockout alarms are no longer set since this does not occur often. Operator logs information about any filtrate turbidity in excess of 0.1NTU.			

Question ID	MRDW1036000		
Question	Question Type	Legislative Requirement	
Where continuous monitoring equipment is not used for chlorine residual analysis, are samples tested using an acceptable portable device?	Legislative	SDWA O. Reg. 170/03 6-7 (1)	
Observation			
Samples for chlorine residual analysis were tested using an acceptable portable device.			

Question ID	MRDW1037000		
Question	Question Type	Legislative 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		
<p>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.</p> <p>DWI notes: The chlorine system is alarmed at 0.85mg/l, with a low, low alarm at 0.8mg/l with no set delay. A lockout exists, which ensures that filter trains are shut down when the chlorine levels drop below 0.8mg/l, as measured at the end of the contact tank.</p> <p>The operator calculates CT when levels are less than 0.8mg/l.</p> <p>Filtrate turbidity alarms are set at 0.1NTU, with no set delay. It is recommended that operators use a lockout for filter trains (based on turbidity >0.1NTU).</p>		

Question ID	MRDW1035000	
Question	Question Type	Legislative Requirement
Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?	Legislative	SDWA O. Reg. 170/03 6-5 (1) 1-4,SDWA O. Reg. 170/03 6-5 (1)5-10
Observation		
<p>Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.</p> <p>DWI notes: Records are kept in the e-log.</p>		

Question ID	MRDW1040000	
Question	Question Type	Legislative Requirement
Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?	Legislative	SDWA O. Reg. 170/03 6-5 (1) 1-4,SDWA O. Reg. 170/03 6-5 (1)5-10
Observation		
<p>All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.</p> <p>DWI notes: Schedule 6, Regulation 170 requires a check and calibration of continuous analyzers (chlorine and turbidity) as often as necessary, if manufacturer does not specify, to ensure the following margins of error:</p>		

Free chlorine residual +/- 0.05mg/l at concentrations of up to 1.0mg/l and proportionately higher with increased concentrations. OCWA indicates verification work is completed once per month.

Turbidity +/- 0.1NTU. OCWA indicates verification work is completed once every month.

Question ID	MRDW1108000	
Question	Question Type	Legislative Requirement
Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by Regulation 170, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?	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		
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.		
DWI notes: Response time to alarms is generally 30 to 60 minutes. There were two events where response time was approximately 90 to 120 minutes.		

Question ID	MRDW1033000	
Question	Question Type	Legislative Requirement
Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?	Legislative	SDWA O. Reg. 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. DWI notes: The operating authority typically pursues a distribution monitoring program including free chlorine residual levels in 4 bacti samples on one day and 3 chlorine residual levels on another day, at least 48 hours apart.		

Question ID	MRDW1031000	
Question	Question Type	Legislative Requirement
Are operators aware of the operational criteria necessary to achieve primary disinfection within the drinking water system?	BMP	Not Applicable
Observation		

Operators were aware of the operational criteria necessary to achieve primary disinfection within the drinking water system.

DWI notes: Operators are aware of Schedule E requirements and are able to calculate CT.

Question ID	MRDW1032000	
Question	Question Type	Legislative Requirement
If the drinking water system obtains water from a surface water source and provides filtration, is continuous monitoring of each filter effluent line being performed for turbidity?	Legislative	SDWA O. Reg. 170/03 7-3 (2)
Observation		
Continuous monitoring of each filter effluent line was being performed for turbidity.		

Question ID	MRDW1018000	
Question	Question Type	Legislative 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.		

Question ID	MRDW1021000	
Question	Question Type	Legislative Requirement
Is the owner/operating authority able to demonstrate that, when required during the inspection period, Form 2 documents were prepared in accordance with their Drinking Water Works Permit?	Legislative	SDWA 31 (1)
Observation		
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.		
DWI notes:		
- A Form #2 was completed for the July 2018, replacement of 8 inch PVC pipe (including pipes, elbows, couplings and saddles) with stainless steel, located prior to the steel pipe tee as treated water exits the plant.		
- A Form #2 was completed for the September 2018, SCADA replacement.		
- Removal of coagulant feed system and change over to ultra-filtration membranes were addressed		

in 2018 Schedule C of the DWWP.

Question ID	MRDW1023000	
Question	Question Type	Legislative 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.		
DWI notes:		
This water treatment plant uses a process that includes membrane filtration (ultrafiltration as of January 2019) followed by chemical disinfection with sodium hypochlorite to achieve the required log removal/inactivation credits.		
Schedule E of the MDWL summarizes the required log removal/inactivation and the credits assigned to each stage of the treatment process, and can be found in the Appendices.		
Log removal credits can be applied if the following criteria are met:		
Membrane Filtration Criteria		
1. Maintain effective backwash procedures. During review period there was no indication of problems. Operator indicates filters are set to run backwash cycles on pre-set intervals which can be changed as needed.		
2. Monitor the integrity of the membranes by continuous particle counting or equivalent means (i.e. pressure decay measurements). During review period operator indicates pressure decay testing occurred normally. Membrane integrity tests are set to run on pre-set schedules with pressure decay tests every 24 hours.		
3. Continuously monitor filtrate turbidity. During review period there was no indication of problems.		
4. Meet the performance criterion for filtered water turbidity of less than or equal to 0.1 NTU in 99% of the measurements each month.		
Comments:		
-It is noted that filter efficiency calculations no longer include backwash turbidity. Operators are continuing to monitor automated filter efficiency calculations to ensure they reflect actual conditions. Operators are making notes on daily reports.		
-Filter turbidity alarms are set at 0.1NTU.		
-Daily PVS data sheets provide a running calculation of monthly filter efficiency.		
Chlorination Criteria		

The chlorine disinfection component of this system must achieve a minimum of 0.5-log inactivation of Giardia and 4-log inactivation of viruses.
 Comments: The SCADA system now provides CT trending which effectively provides a history of automated calculations. The operator continues to perform a CT calculation and documents situations where the chlorine levels leaving the clearwell are 0.80 mg/L or less, as confirmed in the e-log. Further the filters are set to lockout when contact tank chlorine residual is less than 0.8 mg/l.
 CT calculations completed on paper should be photographed and attached to e-log.

Question ID	MRDW1024000	
Question	Question Type	Legislative Requirement
Do records confirm 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?	Legislative	SDWA O. Reg. 170/03 1-2 (2)
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	MRDW1027000	
Question	Question Type	Legislative Requirement
Does the owner have evidence indicating that all chemicals and materials which come in contact with water within the drinking water system have met all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
The owner had evidence indicating that all chemicals and materials that come in contact with		

water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

Question ID	MRDW1028000	
Question	Question Type	Legislative Requirement
Are up-to-date plans for the drinking water system kept in place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA?	Legislative	SDWA 31 (1)
Observation		
Up-to-date plans for the drinking water system were kept in a place, or made available in such a manner, that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA.		

Question ID	MRDW1043000	
Question	Question Type	Legislative Requirement
Are the process wastewater and residual solids/sludges being treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence?	Legislative	SDWA 31 (1)
Observation		
The process wastewater and residual solids/sludges were treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence.		
DWI notes: Table 7, Schedule C of the MDWL requires manual composite sampling of TSS at point of discharge into Manitowaning Bay when discharging wastewater effluent.		
Discharge of effluent did not occur during review period.		

Question ID	MRDW1046000	
Question	Question Type	Legislative Requirement
Is there a backflow prevention program, policy and/or bylaw in place that addresses cross connections and connections to high hazard facilities?	BMP	Not Applicable
Observation		
There is no backflow prevention program, policy and/or bylaw in place.		

DWI notes: Efforts should be taken to ensure that the backflow prevention device on the public tap (Municipal garage) is tested and maintained.

Question ID	MRDW1048000	
Question	Question Type	Legislative Requirement
Has the owner implemented a program for the flushing of watermains as per industry standards?	BMP	Not Applicable
Observation		
The owner had implemented a program for the flushing of watermains as per industry standards.		
DWI notes: Operating Authority schedules this yearly in autumn months. Logbook indicates August 31, 2020.		

Question ID	MRDW1049000	
Question	Question Type	Legislative Requirement
Do records confirm that disinfectant residuals are routinely checked at the extremities and dead ends of the distribution system?	BMP	Not Applicable
Observation		
Records confirmed that disinfectant residuals were routinely checked at the extremities and "dead ends" of the distribution system.		

Question ID	MRDW1050000	
Question	Question Type	Legislative Requirement
Is there a program in place for inspecting and exercising valves?	BMP	Not Applicable
Observation		
A program was in place for inspecting and exercising valves.		
DWI notes: Operating Authority schedules this yearly in autumn months.		

Question ID	MRDW1051000	
Question	Question Type	Legislative Requirement
Is there a program in place for inspecting and operating hydrants?	BMP	Not Applicable
Observation		
There was a program in place for inspecting and operating hydrants.		
DWI: Operating Authority schedules this yearly in autumn months. Logbook indicates August		

31, 2020.

Question ID	MRDW1052000	
Question	Question Type	Legislative Requirement
Is there a by-law or policy in place limiting access to hydrants?	BMP	Not Applicable
Observation		
<p>There was a by-law or policy in place limiting access to hydrants.</p> <p>DWI notes: In 2014, the municipal council approved a by-law that addressed backflow prevention, cross connections and hydrant use.</p> <p>During the review period unauthorized use of a fire hydrant caused excess demand at the water plant which in turn caused emergency callout of personnel. Fire hydrant access is addressed in municipal by-laws but appropriately certified hydrant locks can be used to ensure control of the municipal drinking water system. Such operational changes should be followed up with training for Fire Department personnel.</p>		

Question ID	MRDW1053000	
Question	Question Type	Legislative Requirement
Is the Owner able to maintain proper pressures in the distribution system and is pressure monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate?	BMP	Not Applicable
Observation		
<p>The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.</p> <p>DWI notes: Operator monitors pressure at plant.</p>		

Question ID	MRDW1058000	
Question	Question Type	Legislative Requirement
Do operators and maintenance personnel have ready access to operations and maintenance manuals?	Legislative	SDWA O. Reg. 128/04 28
Observation		
Operators and maintenance personnel had ready access to operations and maintenance manuals.		

Question ID	MRDW1063000	
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Question	Question Type	Legislative Requirement
For every required operational test and for every required sample, is a record made of the date, time, location, name of the person conducting the test and result of the test?	Legislative	SDWA O. Reg. 170/03 6-10 (1)
Observation		
For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.		

Question ID	MRDW1064000	Question	Question Type	Legislative Requirement
		Did the operator-in-charge ensure that records were maintained of all adjustments made to the processes within his or her responsibility?	Legislative	SDWA O. Reg. 128/04 26 (2)
Observation				
The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility.				

Question ID	MRDW1065000	Question	Question Type	Legislative Requirement
		Are logs and other record keeping mechanisms available for at least five (5) years?	Legislative	SDWA O. Reg. 128/04 27 (6)
Observation				
Logs or other record keeping mechanisms were available for at least five (5) years.				

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 sufficient for the safe and efficient operation of the system.				

Question ID	MRDW1060000	Question	Question Type	Legislative 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	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 (7)	
Observation			
Logbooks were properly maintained and contained the required information.			
DWI Notes: Operators are reminded to enter start date and end date of EOS (equipment out of service).			
Also when operator is required to complete a CT calculation, it needs to be included in the e-log. Onsite discussion indicates that attaching a picture of paper calculations would be effective.			

Question ID	MRDW1062000		
Question	Question Type	Legislative 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	MRDW1066000		
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Question	Question Type	Legislative Requirement
Is spill containment provided for process chemicals and standby power generator fuel?	BMP	Not Applicable
Observation		
Spill containment was provided for process chemicals and/or standby power generator fuel.		

Question ID	MRDW1067000		
Question	Question Type	Legislative Requirement	
Are clean-up equipment and materials in place for the clean up of spills?	BMP	Not Applicable	
Observation			
Clean-up equipment and materials were in place for the clean up of spills.			

Question ID	MRDW1068000		
Question	Question Type	Legislative Requirement	
If available, are standby power generators tested under normal load conditions?	BMP	Not Applicable	
Observation			
Standby power generators were tested under normal load conditions.			

Question ID	MRDW1069000		
Question	Question Type	Legislative Requirement	
Are all storage facilities completely covered and secure?	BMP	Not Applicable	
Observation			
All storage facilities were completely covered and secure.			

Question ID	MRDW1070000		
Question	Question Type	Legislative Requirement	
Are air vents and overflows associated with reservoirs and elevated storage structures equipped with screens?	BMP	Not Applicable	
Observation			
Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens.			

Question ID	MRDW1071000		
Question	Question	Legislative	

	Type	Requirement
Has the owner provided security measures to protect components of the drinking water system?	BMP	Not Applicable
Observation		
The owner had provided security measures to protect components of the drinking water system.		

Question ID	MRDW1072000		
Question	Question Type	Legislative Requirement	
Has the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in their system?	BMP	Not Applicable	
Observation			
The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.			

Question ID	MRDW1073000		
Question	Question Type	Legislative Requirement	
Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?	Legislative	SDWA O. Reg. 128/04 23 (1)	
Observation			
The overall responsible operator has been designated for each subsystem.			
DWI notes: The ORO is the operator on call. This is an established routine within the Espanola hub. ORO's are aware of which operator is on call and who is unavailable.			

Question ID	MRDW1074000		
Question	Question Type	Legislative Requirement	
Have operators in charge been designated for all subsystems for which comprise the drinking water system?	Legislative	SDWA O. Reg. 128/04 25 (1)	
Observation			
Operators-in-charge had been designated for all subsystems which comprised the drinking water system.			
DWI notes: The OIC is the operator on duty. This is an established routine within the Espanola hub. ORO's are aware of which operator is on duty.			

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 did not possess the required certification.		
DWI notes: An operator attending the site and acting as OIC on August 2nd, 2021, and, acting as ORO on August 3rd, 4th, and 5th, 2021, did not have the required licence.		
The operating authority notified the Ministry of this situation on August 6, 2021, indicating that operator's licence had expired on July 31, 2021, and though operator had made attempts the renewal did not occur until August 6, 2021. This situation may well have been the result of the pandemic.		
OCWA indicates new procedures are in place. As of August 2021, training and licencing will be a regular topic at all cluster meetings. Training reports are being prepared and presented quarterly to management detailing staff's current licencing and training needs. In addition, OCWA has begun providing monthly updates to Management and Compliance based on OWWCO's valid licenced operator reports. Furthermore, management will take a more direct approach when dealing with operators who have let their licences lapse. Direction will be given to staff detailing their responsibilities while an operator awaits renewal of licence.		

Question ID	MRDW1076000	
Question	Question Type	Legislative Requirement
Do only certified operators make adjustments to the treatment equipment?	Legislative	SDWA O. Reg. 170/03 1-2 (2)
Observation		
Only certified operators made adjustments to the treatment equipment.		
DWI notes: The licencing renewal process deadlines were not followed by one operator, resulting in a 5 day delay.		

Question ID	MRDW1079000	
Question	Question Type	Legislative Requirement
Are all microbiological water quality monitoring requirements for raw water samples prescribed by legislation being met?	Legislative	SDWA O. Reg. 170/03 10-4 (1),SDWA O. Reg. 170/03 10- 4 (2),SDWA O. Reg. 170/03 10- 4 (3)
Observation		
All microbiological water quality monitoring requirements for raw water samples were being met.		

DWI notes: The following microbiological tests were performed on raw water: Minimum one sample per week with testing for E. Coli, Total Coliforms.

Question ID	MRDW1081000	
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.		
DWI notes: The following microbiological tests were performed on distribution system samples: Minimum eight samples per month with at least one per week, which were tested/analyzed for Ecoli, Total Coliforms and a minimum of 25% of samples (2) tested/analyzed for general bacteria population (HPC).		

Question ID	MRDW1083000	
Question	Question Type	Legislative Requirement
Are all microbiological water quality monitoring requirements for treated samples being met?	Legislative	SDWA O. Reg. 170/03 10-3
Observation		
All microbiological water quality monitoring requirements for treated samples were being met.		
DWI notes: The following microbiological tests were performed on treated water: Minimum one sample per week with testing for E. Coli, Total Coliforms and general bacteria population expressed as Heterotrophic Plate Count.		

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

DWI notes: The owner of a large municipal residential system is required to take a sample every 12 months and test and analyze for inorganic parameters specified in Schedule 23 of Regulation 170. Accomplished on January 9, 2020 and January 19, 2021.

Question ID	MRDW1085000	
Question	Question Type	Legislative Requirement
Are all organic water quality monitoring requirements prescribed by legislation conducted within the required 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.		
DWI notes: The owner of a large municipal residential system is required to take a sample every 12 months and test and organic parameters specified in Schedule 24 of Regulation 170. Accomplished on January 9, 2020 and January 19, 2021.		

Question ID	MRDW1086000	
Question	Question Type	Legislative Requirement
Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?	Legislative	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)
Observation		
All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location.		
DWI notes that quarterly sampling is performed as follows: April 14, 2020 @ 20.4ug/l		

<p>July 13, 2020 @ 31.4ug/l October 19, 2020 @ 28.8ug/l January 19, 2021 @ 19.4ug/l April 14, 2021 @ 21.8ug/l July 12, 2021 @ 25.5ug/l</p> <p>RAA = 23.9ug/l.</p>

Question ID	MRDW1087000	
Question	Question Type	Legislative Requirement
Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?	Legislative	SDWA O. Reg. 170/03 13-6 (1)
Observation		
<p>All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.</p> <p>DWI notes that quarterly sampling is performed as follows: April 14, 2020 @ 39ug/l July 13, 2020 @ 48ug/l October 19, 2020 @ 53ug/l January 19, 2021 @ 36ug/l April 14, 2021 @ 38ug/l July 12, 2021 @ 54ug/l</p> <p>RAA = 45ug/l.</p>		

Question ID	MRDW1088000	
Question	Question Type	Legislative Requirement
Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?	Legislative	SDWA O. Reg. 170/03 13-7
Observation		
<p>All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS.</p> <p>DWI notes that quarterly sampling of treated water is performed in line with HAA's and THM's.</p>		

Question ID	MRDW1089000		
Question	Question Type	Legislative Requirement	
Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	SDWA O. Reg. 170/03 13-8	
Observation			
All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
DWI notes: Sampling last occurred on January 8, 2019, with results of 6.37mg/l.			

Question ID	MRDW1090000		
Question	Question Type	Legislative Requirement	
Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?	Legislative	SDWA O. Reg. 170/03 13-9	
Observation			
All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			
DWI notes: Sampling last occurred on January 8, 2019, with results less than method detection level.			

Question ID	MRDW1092000		
Question	Question Type	Legislative Requirement	
Has the owner ensured that water samples are taken at the prescribed location?	Legislative	SDWA O. Reg. 170/03 6-2	
Observation			
The owner ensured that water samples were taken at the prescribed location.			

Question ID	MRDW1094000		
Question	Question Type	Legislative Requirement	
Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?	Legislative	SDWA 31 (1)	
Observation			
All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.			

Question ID	MRDW1095000		
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Question	Question Type	Legislative Requirement
Have all lead sampling requirements prescribed by Schedule 15.1 of O.R. 170/03 been met?	Legislative	SDWA O. Reg. 170/03 15.1-10, SDWA O. Reg. 170/03 15.1-4 (1),SDWA O. Reg. 170/03 15.1-5 (1), SDWA O. Reg. 170/03 15.1-5 (10),SDWA O. Reg. 170/03 15.1-5 (11), SDWA O. Reg. 170/03 15.1-5 (12),SDWA O. Reg. 170/03 15.1-5 (2), SDWA O. Reg. 170/03 15.1-5 (3),SDWA O. Reg. 170/03 15.1-5 (4), SDWA O. Reg. 170/03 15.1-5 (5),SDWA O. Reg. 170/03 15.1-5 (6), SDWA O. Reg. 170/03 15.1-5 (7),SDWA O. Reg. 170/03 15.1-5 (8), SDWA O. Reg. 170/03 15.1-5 (9),SDWA O. Reg. 170/03 15.1-7 (1), SDWA O. Reg. 170/03 15.1-7 (2),SDWA O. Reg. 170/03 15.1-7 (3), SDWA O. Reg. 170/03 15.1-7 (4),SDWA O. Reg. 170/03

	<p>15.1-9 (1), SDWA O. Reg. 170/03 15.1-9 (2),SDWA O. Reg. 170/03 15.1-9 (3), SDWA O. Reg. 170/03 15.1-9 (4),SDWA O. Reg. 170/03 15.1-9 (5), SDWA O. Reg. 170/03 15.1-9 (6),SDWA O. Reg. 170/03 15.1-9 (7), SDWA O. Reg. 170/03 15.1-9 (8),SDWA O. Reg. 170/03 15.1-9 (9)</p>
<p>Observation</p>	
<p>All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.</p> <p>DWI notes: This drinking water system is in the exempt stage of testing and therefore pursues sampling for pH and alkalinity in at least two locations in the distribution system during the winter period (December 15th to April 15th) and the summer period (June 15th to October 15th). Also, every third year Lead samples are required at two locations in the distribution system during the winter and summer periods.</p> <p>Data provided indicates such sampling was performed. Maximum lead levels found in 2021 were 0.12ug/l, which is well within the maximum regulatory standard of 10.0ug/l.</p>	

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

Question ID	MRDW1098000
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Question	Question Type	Legislative Requirement
Has the owner indicated that the required records are kept and will be kept for the required time period?	Legislative	SDWA O. Reg. 170/03 13 (1), SDWA O. Reg. 170/03 13 (2), SDWA O. Reg. 170/03 13 (3)
Observation		
The owner indicated that the required records are kept and will be kept for the required time period.		

Question ID	MRDW1100000		
Question	Question Type	Legislative Requirement	
Did any reportable adverse/exceedance conditions occur during the inspection period?	Information	Not Applicable	
Observation			
There were reportable adverse/exceedances during the inspection period.			
DWI notes: On August 26, 2020, loss of pressure was reported as a hydrant had been struck by a vehicle. Pressure did not drop to zero. AWQI #151575.			

Question ID	MRDW1101000		
Question	Question Type	Legislative Requirement	
Have corrective actions (as per Schedule 17) been taken to address adverse conditions, including any other steps as directed by the Medical Officer of Health?	Legislative	SDWA O. Reg. 170/03 17-1, SDWA O. Reg. 170/03 17-10 (1), SDWA O. Reg. 170/03 17-10 (2), 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
Observation		
Corrective actions (as per Schedule 17) had been taken to address adverse conditions, including any other steps that were directed by the Medical Officer of Health.		

Question ID	MRDW1104000	
Question	Question Type	Legislative Requirement
Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?	Legislative	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)
Observation		
All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6.		

Question ID	MRDW1105000	
Question	Question Type	Legislative Requirement
Were all required written notices of adverse water quality incidents provided as per O. Reg. 170/03 16-7?	Legislative	SDWA O. Reg. 170/03 16-7 (1),SDWA O. Reg. 170/03 16-7 (2),SDWA O.

		Reg. 170/03 16-7 (3),SDWA O. Reg. 170/03 16-7 (4),SDWA O. Reg. 170/03 16-7 (5)
Observation		
All required written notices of adverse water quality incidents were provided as per O. Reg. 170/03 16-7.		

Question ID	MRDW1106000	
Question	Question Type	Legislative Requirement
Were all required written notices of issue resolution provided as per O. Reg. 170/03 16-9?	Legislative	SDWA O. Reg. 170/03 16-9 (1),SDWA O. Reg. 170/03 16-9 (2)
Observation		
In instances where written notice of issue resolution was required by regulation, the notice was provided as per O. Reg. 170/03 16-9.		

Question ID	MRDW1110000	
Question	Question Type	Legislative Requirement
Was an Annual Report containing the required information prepared by February 28 of the following year?	Legislative	SDWA O. Reg. 170/03 11 (6)
Observation		
The Annual Report containing the required information was prepared by February 28th of the following year.		

Question ID	MRDW1116000	
Question	Question Type	Legislative Requirement
Were the inspection questions sufficient to address other identified best practice issues?	BMP	Not Applicable
Observation		
The following issues were also noted during the inspection: DWI notes: Please see Appendix for list of "Best Practice Recommendations".		

Question ID	MRDW1117000	
Question	Question	Legislative

	Type	Requirement
Are there any other DWS related items that should be recognized in this report?	Information	Not Applicable
Observation		
The following items are noted as being relevant to the Drinking Water System:		
DWI notes: Please see Appendix for list of "DWIS related Items".		

Question ID	MRDW1111000	Question	Question Type	Legislative Requirement
		Have Summary Reports for municipal council been completed on time, include the required content, and distributed in accordance with the regulatory requirements?	Legislative	SDWA O. Reg. 170/03 22-2 (1),SDWA O. Reg. 170/03 22-2 (2),SDWA O. Reg. 170/03 22-2 (3),SDWA O. Reg. 170/03 22-2 (4)
Observation				
Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements.				

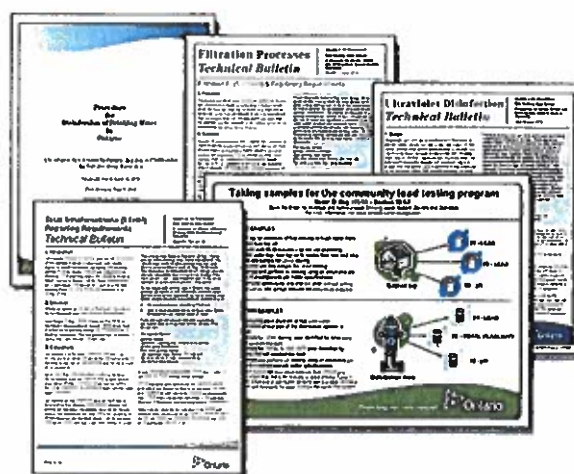
Appendix A

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

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

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Public Information Centre if you need assistance or have questions at 1-800-565-4923/416-325-4000 or picemail.moe@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/drinkingwater and email drinking.water@ontario.ca to subscribe to drinking water news.



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

ontario.ca/drinkingwater

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

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment.

Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le Centre d'information au public au 1 800 565-4923 ou au 416 325-4000, ou encore à picemail.moe@ontario.ca 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 ou envoyez un courriel à drinking.water@ontario.ca pour suivre l'information sur l'eau potable.

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

ontario.ca/eaupotable

Appendix B



MUNICIPAL DRINKING WATER LICENCE

Licence Number: 254-102

Issue Number: 3

Pursuant to the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, this municipal drinking water licence is issued under Part V of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32 to:

The Corporation of the Township of Assiginack

**25 Spragge St.
Manitowaning, ON P0P 1N0**

For the following municipal residential drinking water system:

Manitowaning Drinking Water System

This municipal drinking water licence includes the following:

Schedule	Description
Schedule A	Drinking Water System Information
Schedule B	General Conditions
Schedule C	System-Specific Conditions
Schedule D	Conditions for Relief from Regulatory Requirements
Schedule E	Pathogen Log Removal/Inactivation Credits

DATED at TORONTO this 29th day of April, 2021

Signature

A handwritten signature in black ink that reads "Aziz Ahmed". The signature is written in a cursive style and is underlined with a single horizontal line.

Aziz Ahmed, P.Eng.
Director
Part V, *Safe Drinking Water Act, 2002*

Schedule A: Drinking Water System Information

System Owner	The Corporation of the Township of Assiginack
Licence Number	254-102
Drinking Water System Name	Manitowaning Drinking Water System
Schedule A Issue Date	April 29, 2021

The following information is applicable to the above drinking water system and forms part of this licence:

Licence

Licence Issue Date	April 29, 2021
Licence Expiry Date	January 28, 2022
Application for Licence Renewal Date	November 30, 2021

Drinking Water Works Permit

Drinking Water System Name	Permit Number	Issue Date
Manitowaning Drinking Water System	254-202	August 25, 2016

Permits to Take Water

Water Taking Location	Permit Number	Issue Date
Lake Huron (Georgian Bay)	1366-7SXN4J	June 12, 2009

Financial Plans

The Financial Plan Number for the Financial Plan required to be developed for this drinking water system in accordance with O. Reg. 453/07 shall be:	254-302
Alternately, if one Financial Plan is developed for all drinking water systems owned by the owner, the Financial Plan Number shall be:	254-301A

Accredited Operating Authority

Drinking Water System or Operational Subsystems	Accredited Operating Authority	Operational Plan No.	Operating Authority No.
Manitowaning Drinking Water System	Ontario Clean Water Agency	254-402	254-OA1

Schedule B: General Conditions

System Owner	The Corporation of the Township of Assiginack
Licence Number	254-102
Drinking Water System Name	Manitowaning Drinking Water System
Schedule B Issue Date	April 29, 2021

1.0 Definitions

1.1 Words and phrases not defined in this licence and the associated drinking water works permit shall be given the same meaning as those set out in the SDWA and any regulations made in accordance with that act, unless the context requires otherwise.

1.2 In this licence and the associated drinking water works permit:

"**adverse effect**", "**contaminant**" and "**natural environment**" shall have the same meanings as in the EPA;

"**alteration**" may include the following in respect of this drinking water system:

- (a) An addition to the system,
- (b) A modification of the system,
- (c) A replacement of part of the system, and
- (d) An extension of the system;

"**compound of concern**" means a contaminant that, based on generally available information, may be emitted from a component of the drinking water system to the atmosphere in a quantity that is significant either in comparison to the relevant point of impingement limit or if a point of impingement limit is not available for the compound, then based on generally available toxicological information, the compound has the potential to cause an adverse effect as defined by the EPA at a point of impingement;

"**Director**" means a Director appointed pursuant to section 6 of the SDWA for the purposes of Part V of the SDWA;

"**drinking water works permit**" means the drinking water works permit for the drinking water system, as identified in Schedule A of this licence and as amended from time to time;

"**emission summary table**" means the table that was prepared by a Professional Engineer in accordance with O. Reg. 419/05 and the procedure document listing the appropriate point of impingement concentrations of each compound of concern emitted from a component of the drinking water system and providing comparison to the corresponding point of impingement limit;

"**EPA**" means the *Environmental Protection Act*, R.S.O. 1990, c. E.19;

"**financial plan**" means the financial plan required by O. Reg. 453/07;

"licence" means this municipal drinking water licence for the municipal drinking water system identified in Schedule A of this licence;

"operational plan" means an operational plan developed in accordance with the Director's Directions – Minimum Requirements for Operational Plans made under the authority of subsection 15(1) of the SDWA;

"owner" means the owner of the drinking water system as identified in Schedule A of this licence;

"permit to take water" means the permit to take water that is associated with the taking of water for purposes of the operation of the drinking water system, as identified in Schedule A of this licence and as amended from time to time;

"point of impingement" means any point in the natural environment that is not on the same property as the source of the contaminant and as defined by section 2 of O. Reg. 419/05;

"point of impingement limit" means the appropriate standard from Schedule 1, 2 or 3 of O. Reg. 419/05 and if a standard is not provided for a compound of concern, the appropriate criteria listed in the Ministry of the Environment and Climate Change publication titled "Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution – Local Air Quality (including Schedule 6 of O. Reg. 419 on Upper Risk Thresholds)", dated February 2008, as amended;

"procedure document" means the Ministry of the Environment and Climate Change procedure titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated July 2005, as amended;

"Professional Engineer" means a Professional Engineer who has been licenced to practice in the Province of Ontario;

"provincial officer" means a provincial officer appointed pursuant to section 8 of the SDWA;

"publication NPC-300" means the Ministry of the Environment and Climate Change publication titled "Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning" dated August 2013, as amended;

"SDWA" means the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32;

"sensitive populations" means any one or a combination of the following locations where the health effects of nitrogen oxides emissions from emergency generators shall be considered using the point of impingement limit instead of the Ministry of the Environment and Climate Change screening level for emergency generators:

- (a) health care units (e.g., hospitals and nursing homes),
- (b) primary/junior public schools,
- (c) day-care facilities, and
- (d) playgrounds;

"subsystem" has the same meaning as in Ontario Regulation 128/04 (Certification of Drinking Water System Operators and Water Quality Analysts);

"surface water" means water bodies (lakes, wetlands, ponds - including dug-outs), water courses (rivers, streams, water-filled drainage ditches), infiltration trenches, and areas of seasonal wetlands;

2.0 Applicability

- 2.1 In addition to any other requirements, the drinking water system identified above shall be established, altered and operated in accordance with the conditions of the drinking water works permit and this licence.

3.0 Licence Expiry

- 3.1 This licence expires on the date identified as the licence expiry date in Schedule A of this licence.

4.0 Licence Renewal

- 4.1 Any application to renew this licence shall be made on or before the date identified as the application for licence renewal date set out in Schedule A of this licence.

5.0 Compliance

- 5.1 The owner and operating authority shall ensure that any person authorized to carry out work on or to operate any aspect of the drinking water system has been informed of the SDWA, all applicable regulations made in accordance with that act, the drinking water works permit and this licence and shall take all reasonable measures to ensure any such person complies with the same.

6.0 Licence and Drinking Water Works Permit Availability

- 6.1 At least one copy of this licence and the drinking water works permit shall be stored in such a manner that they are readily viewable by all persons involved in the operation of the drinking water system.

7.0 Permit to Take Water and Drinking Water Works Permit

- 7.1 A permit to take water identified in Schedule A of this licence is the applicable permit on the date identified as the Schedule A Issue Date.
- 7.2 A drinking water works permit identified in Schedule A of this licence is the applicable permit on the date identified as the Schedule A Issue Date.

8.0 Financial Plan

- 8.1 For every financial plan prepared in accordance with subsections 2(1) and 3(1) of O. Reg. 453/07, the owner of the drinking water system shall:
 - 8.1.1 Ensure that the financial plan contains on the front page of the financial plan, the appropriate financial plan number as set out in Schedule A of this licence; and
 - 8.1.2 Submit a copy of the financial plan to the Ministry of Municipal Affairs and Housing within three (3) months of receiving approval by a resolution of municipal council or the governing body of the owner.

9.0 Interpretation

- 9.1 Where there is a conflict between the provisions of this licence and any other document, the following hierarchy shall be used to determine the provision that takes precedence:
 - 9.1.1 The SDWA;
 - 9.1.2 A condition imposed in this licence that explicitly overrides a prescribed regulatory requirement;
 - 9.1.3 A condition imposed in the drinking water works permit that explicitly overrides a prescribed regulatory requirement;
 - 9.1.4 Any regulation made under the SDWA;
 - 9.1.5 Any provision of this licence that does not explicitly override a prescribed regulatory requirement;
 - 9.1.6 Any provision of the drinking water works permit that does not explicitly override a prescribed regulatory requirement;
 - 9.1.7 Any application documents listed in this licence, or the drinking water works permit from the most recent to the earliest; and
 - 9.1.8 All other documents listed in this licence, or the drinking water works permit from the most recent to the earliest.
- 9.2 If any requirement of this licence or the drinking water works permit is found to be invalid by a court of competent jurisdiction, the remaining requirements of this licence and the drinking water works permit shall continue to apply.

- 9.3** The issuance of and compliance with the conditions of this licence and the drinking water works permit does not:
- 9.3.1 Relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including the *Environmental Assessment Act*, R.S.O. 1990, c. E.18; and
 - 9.3.2 Limit in any way the authority of the appointed Directors and provincial officers of the Ministry of the Environment and Climate Change to require certain steps be taken or to require the owner to furnish any further information related to compliance with the conditions of this licence or the drinking water works permit.
- 9.4** For greater certainty, nothing in this licence or the drinking water works permit shall be read to provide relief from regulatory requirements in accordance with section 46 of the SDWA, except as expressly provided in the licence or the drinking water works permit.

10.0 Adverse Effects

- 10.1** Nothing in this licence or the drinking water works permit shall be read as to permit:
- 10.1.1 The discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect; or
 - 10.1.2 The discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters.
- 10.2** All reasonable steps shall be taken to minimize and ameliorate any adverse effect on the natural environment or impairment of the quality of water of any waters resulting from the operation of the drinking water system including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- 10.3** Fulfillment of one or more conditions imposed by this licence or the drinking water works permit does not eliminate the requirement to fulfill any other condition of this licence or the drinking water works permit.

11.0 Change of Owner or Operating Authority

- 11.1** This licence is not transferable without the prior written consent of the Director.
- 11.2** The owner shall notify the Director in writing at least 30 days prior to a change of any operating authority identified in Schedule A of this licence.
- 11.2.1 Where the change of operating authority is the result of an emergency situation, the owner shall notify the Director in writing of the change as soon as practicable.

12.0 Information to be Provided

- 12.1 Any information requested by a Director or a provincial officer concerning the drinking water system and its operation, including but not limited to any records required to be kept by this licence or the drinking water works permit, shall be provided upon request.

13.0 Records Retention

- 13.1 Except as otherwise required in this licence or the drinking water works permit, any records required by or created in accordance with this licence or the drinking water works permit, other than the records specifically referenced in section 12 of O. Reg. 170/03, shall be retained for at least 5 years and made available for inspection by a provincial officer, upon request.

14.0 Chemicals and Materials

- 14.1 All chemicals and materials used in the alteration or operation of the drinking water system that come into contact with water within the system shall meet all applicable standards set by both the American Water Works Association ("AWWA") and the American National Standards Institute ("ANSI") safety criteria standards NSF/60, NSF/61 and NSF/372.
- 14.1.1 In the event that the standards are updated, the owner may request authorization from the Director to use any on hand chemicals and materials that previously met the applicable standards.
- 14.1.2 The requirement for the owner to comply with NSF/372 shall come into force no later than September 12, 2018.
- 14.2 The most current chemical and material product registration documentation from a testing institution accredited by either the Standards Council of Canada or by the American National Standards Institution ("ANSI") shall be available at all times for each chemical and material used in the operation of the drinking water system that comes into contact with water within the system.
- 14.3 Conditions 14.1 and 14.2 do not apply in the case of the following:
- 14.3.1 Water pipe and pipe fittings meeting AWWA specifications made from ductile iron, cast iron, PVC, fibre and/or steel wire reinforced cement pipe or high density polyethylene (HDPE);
- 14.3.2 Articles made from stainless steel, glass, HDPE or Teflon®;
- 14.3.3 Cement mortar for watermain lining and for water contacting surfaces of concrete structures made from washed aggregates and Portland cement;
- 14.3.4 Gaskets that are made from NSF approved materials;
- 14.3.5 Food grade oils and lubricants, food grade anti-freeze, and other food grade chemicals and materials that are compatible for drinking water use; or

- 14.3.6 Any particular chemical or material where the owner has written documentation signed by the Director that indicates that the Ministry of the Environment and Climate Change is satisfied that the chemical or material is acceptable for use within the drinking water system and the chemical or material is only used as permitted by the documentation.

15.0 Drawings

- 15.1 All drawings and diagrams in the possession of the owner that show any treatment subsystem as constructed shall be retained by the owner unless the drawings and diagrams are replaced by a revised or updated version showing the subsystem as constructed subsequent to the alteration.
- 15.2 Any alteration to any treatment subsystem shall be incorporated into process flow diagrams, process and instrumentation diagrams, and record drawings and diagrams within one year of the substantial completion of the alteration.
- 15.3 Process flow diagrams and process and instrumentation diagrams for any treatment subsystem shall be kept in a place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system.

16.0 Operations and Maintenance Manual

- 16.1 An up-to-date operations and maintenance manual or manuals shall be maintained and applicable parts of the manual or manuals shall be made available for reference by all persons responsible for all or part of the operation or maintenance of the drinking water system.
- 16.2 The operations and maintenance manual or manuals, shall include at a minimum:
- 16.2.1 The requirements of this licence and associated procedures;
 - 16.2.2 The requirements of the drinking water works permit for the drinking water system;
 - 16.2.3 A description of the processes used to achieve primary and secondary disinfection within the drinking water system, including where applicable:
 - a) A copy of the CT calculations that were used as the basis for primary disinfection under worst case operating conditions; and
 - b) The validated operating conditions for UV disinfection equipment, including a copy of the validation certificate;
 - 16.2.4 Procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;

- 16.2.5 Procedures for the operation and maintenance of monitoring equipment;
- 16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;
- 16.2.7 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint;
- 16.3** Procedures necessary for the operation and maintenance of any alterations to the drinking water system shall be incorporated into the operations and maintenance manual or manuals prior to those alterations coming into operation.
- 16.4** The operations and maintenance manual or manuals shall be updated within three months of any change to the treatment process that results in a change to the CT calculations.
- 16.5** The requirement for the owner to comply with condition 16.2.3 shall come into force on March 12, 2017.

Schedule C: System-Specific Conditions

System Owner	The Corporation of the Township of Assiginack
Licence Number	254-102
Drinking Water System Name	Manitowaning Drinking Water System
Schedule C Issue Date	April 29, 2021

1.0 System Performance

Rated Capacity

- 1.1 For each treatment subsystem listed in column 1 of Table 1, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the value identified as the rated capacity in column 2 of the same row.

Table 1: Rated Capacity	
Column 1 Treatment Subsystem Name	Column 2 Rated Capacity (m ³ /day)
Manitowaning Water Treatment Plant	1,045

Maximum Flow Rates

- 1.2 For each treatment subsystem listed in column 1 of Table 2, the maximum flow rate of water that flows into a treatment subsystem component listed in column 2 shall not exceed the value listed in column 3 of the same row.

Table 2: Maximum Flow Rates		
Column 1 Treatment Subsystem Name	Column 2 Treatment Subsystem Component	Column 3 Maximum Flow Rate (L/s)
Not Applicable	Not Applicable	Not Applicable

- 1.3 Despite conditions 1.1 and 1.2, a treatment subsystem may be operated temporarily at a maximum daily volume and/or a maximum flow rate above the values set out in column 2 of Table 1 and column 3 of Table 2 respectively for the purposes of fighting a large fire or for the maintenance of the drinking water system.
- 1.4 Condition 1.3 does not authorize the discharge into the distribution system of any water that does not meet all of the requirements of this licence and all other regulatory requirements, including compliance with the Ontario Drinking Water Quality Standards.

Residue Management

- 1.5** In respect of an effluent discharged into the natural environment from a treatment subsystem or treatment subsystem component listed in column 1 of Table 3:
- 1.5.1 The annual average concentration of a test parameter identified in column 2 shall not exceed the value in column 3 of the same row; and
- 1.5.2 The maximum concentration of a test parameter identified in column 2 shall not exceed the value in column 4 of the same row.

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Annual Average Concentration (mg/L)	Column 4 Maximum Concentration (mg/L)
Manitowaning Water Treatment Plant	Total suspended solids	25*	Not Applicable

* this limit applicable only when operation opts for discharging wastewater effluent into Manitowaning Bay

UV Disinfection Equipment Performance

- 1.6** For each treatment subsystem or treatment subsystem component listed in column 1 of Table 4, and while directing water to the distribution system:
- 1.6.1 The UV disinfection equipment shall be operated such that a continuous pass-through UV dose is maintained throughout the life time of the UV lamp(s) that is at least the minimum continuous pass-through UV dose set out in column 2 of the same row at the maximum design flow rate for the equipment;
- 1.6.2 In addition to any other sampling, analysis and recording that may be required, the ultraviolet light disinfection equipment shall test for the test parameters set out in column 4 of the same row at a testing frequency of once every five (5) minutes or less and record the test data at a recording frequency of once every four (4) hours or less;
- 1.6.3 If there is a UV disinfection equipment alarm, the test parameters set out in column 4 of the same row shall be recorded at a recording frequency of once every five minutes or less until the alarm condition has been corrected;
- 1.6.4 A monthly summary report shall be prepared at the end of each calendar month which sets out the time, date and duration of each UV equipment alarm, the volume of water treated during each alarm period and the actions taken by the operating authority to correct the alarm situation;

Table 4: UV Disinfection Equipment			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Minimum Continuous Pass-Through UV Dose (mJ/cm ²)	Column 3 Control Strategy	Column 4 Test Parameter
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.0 Flow Measurement and Recording Requirements

- 2.1 For each treatment subsystem identified in column 1 of Table 1 and in addition to any other flow measurement and recording that may be required, continuous flow measurement and recording shall be undertaken for:
- 2.1.1 The flow rate and daily volume of treated water that flows from the treatment subsystem to the distribution system.
 - 2.1.2 The flow rate and daily volume of water that flows into the treatment subsystem.
- 2.2 For each treatment subsystem component identified in column 2 of Table 2 and in addition to any other flow measurement and recording that may be required, continuous flow measurement and recording shall be undertaken for the flow rate and daily volume of water that flows into the treatment subsystem component.
- 2.3 Where a rated capacity from Table 1 or a maximum flow rate from Table 2 is exceeded, the following shall be recorded:
- 2.3.1 The difference between the measured amount and the applicable rated capacity or maximum flow rate specified in Table 1 or Table 2;
 - 2.3.2 The time and date of the measurement;
 - 2.3.3 The reason for the exceedance; and
 - 2.3.4 The duration of time that lapses between the applicable rated capacity or maximum flow rate first being exceeded and the next measurement where the applicable rated capacity or maximum flow rate is no longer exceeded.

3.0 Calibration of Flow Measuring Devices

- 3.1 All flow measuring devices that are required by regulation, by a condition in the Drinking Water Works Permit, or by a condition otherwise imposed by the Ministry of the Environment and Climate Change, shall be checked and calibrated in accordance with the manufacturer's instructions.
- 3.2 If the manufacturer's instructions do not indicate how often to check and calibrate a flow measuring device, the equipment shall be checked and calibrated at least once every 12 months during which the drinking water system is in operation.

3.2.1 For greater certainty, if condition 3.2 applies, the equipment shall be checked and calibrated not more than 30 days after the first anniversary of the day the equipment was checked and calibrated in the previous 12-month period.

4.0 Additional Sampling, Testing and Monitoring

Drinking Water Health and Non-Health Related Parameters

4.1 For each treatment subsystem or treatment subsystem component identified in column 1 of Tables 5 and 6 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 at the sampling frequency listed in column 3 and at the monitoring location listed in column 4 of the same row.

Table 5: Drinking Water Health Related Parameters			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sampling Frequency	Column 4 Monitoring Location
Not Applicable	Not Applicable	Not Applicable	Not Applicable

Table 6: Drinking Water Non-Health Related Parameters			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sampling Frequency	Column 4 Monitoring Location
Not Applicable	Not Applicable	Not Applicable	Not Applicable

Environmental Discharge Parameters

4.2 For each treatment subsystem or treatment subsystem component identified in column 1 of Table 7 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 using the sample type identified in column 3 at the sampling frequency listed in column 4 and at the monitoring location listed in column 5 of the same row.

4.3 For the purposes of Table 7:

4.3.1 Manual Composite means the mean of at least three grab samples taken during a discharge event, with one sample being taken immediately following the commencement of the discharge event, one sample being taken approximately at the mid-point of the discharge event and one sample being taken immediately before the end of the discharge event; and

4.3.2 Automated Composite means samples must be taken during a discharge event by an automated sampler at a minimum sampling frequency of once per hour.

4.4 Any sampling, testing and monitoring for the test parameter Total Suspended Solids shall be performed in accordance with the requirements set out in the publication "Standard Methods for the Examination of Water and Wastewater", 21st Edition, 2005, or as amended from time to time by more recently published editions.

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sample Type	Column 4 Sampling Frequency	Column 5 Monitoring Location
Manitowaning Water Treatment Plant	Total suspended solids	Manual composite	**	Point of discharge

** sampling requirement applicable only when operation opts for discharging wastewater effluent into Manitowaning Bay

4.5 Pursuant to Condition 10 of Schedule B of this licence, the owner may undertake the following environmental discharges associated with the maintenance and/or repair of the drinking water system:

4.5.1 The discharge of potable water from a watermain to a road or storm sewer;

4.5.2 The discharge of potable water from a water storage facility or pumping station:

4.5.2.1 To a road or storm sewer; or

4.5.2.2 To a watercourse where the discharge has been dechlorinated and if necessary, sediment and erosion control measures have been implemented.

4.5.3 The discharge of dechlorinated non-potable water from a watermain, water storage facility or pumping station to a road or storm sewer;

4.5.4 The discharge of raw water from a groundwater well to the environment where if necessary, sediment and erosion control measures have been implemented; and

4.5.5 The discharge of raw water, potable water or non-potable water from a treatment subsystem to the environment where if necessary, the discharge has been dechlorinated and sediment and erosion control measures have been implemented.

5.0 Studies Required

5.1 Not applicable.

6.0 Source Protection

6.1 Not applicable.

Schedule D: Conditions for Relief from Regulatory Requirements

System Owner	The Corporation of the Township of Assiginack
Licence Number	254-102
Drinking Water System Name	Manitowaning Drinking Water System
Schedule D Issue Date	April 29, 2021

1.0 Lead Regulatory Relief

- 1.1 Any relief from regulatory requirements previously authorized by the Director in respect of the drinking water system under section 38 of the SDWA in relation to the sampling, testing or monitoring requirements contained in Schedule 15.1 of O. Reg. 170/03 shall remain in force until such time as Schedule 15.1 of O. Reg. 170/03 is amended after June 1, 2009.

2.0 Other Regulatory Relief

- 2.1 Not applicable.