Ontario

MUNICIPAL DRINKING WATER LICENCE

Licence Number: 090-101
Issue Number: 5

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

The Corporation of the Township of North Huron

274 Josephine Street
P.O. Box 90
Wingham ON N0G 2W0

For the following municipal residential drinking water system:

Blyth 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

Upon the effective date of this drinking water licence #090-101, all previously issued versions of licence #090-101 are revoked and replaced by this licence.

DATED at TORONTO this 17th day of June, 2025

Signature

A. Ahmed

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 North Huron**
Licence Number	**090-101**
Drinking Water System Name	**Blyth Drinking Water System**
Licence Effective Date	**June 17th, 2025**

1.0 Licence Information

Licence Issue Date	2025-06-17
Licence Effective Date	2025-06-17
Licence Expiry Date	2030-06-16
Application for Licence Renewal Date	2029-12-15

2.0 Incorporated Documents

The following documents are applicable to the above drinking water system and form part of this licence:

2.1 Drinking Water Works Permit

Drinking Water System Name	Permit Number	Issue Date
Blyth Drinking Water System	090-201	2025-06-17

2.2 Permits to Take Water

Water Taking Location	Permit Number	Issue Date
Well No. 1, Well No. 2 and Well No. 5	6057-A3SJAU	December 9, 2015

2.3 Other Documents

Document Title	Version Number	Version Date
Not applicable	Not applicable	Not applicable

3.0 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:	090-301
Alternately, if one Financial Plan is developed for all drinking water systems owned by the owner, the Financial Plan Number shall be:	090-301A

4.0 Accredited Operating Authority

Drinking Water System or Operational Subsystems	Accredited Operating Authority	Operational Plan No.	Operating Authority No.
Blyth Drinking Water System	Veolia Water Canada Inc.	090-401	090-OA2

Schedule B: General Conditions

System Owner	**The Corporation of the Township of North Huron**
Licence Number	**090-101**
Drinking Water System Name	**Blyth Drinking Water System**
Licence Effective Date	**June 17th, 2025**

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;

"Clean Water Act" means the *Clean Water Act*, 2005, S.O. 2006, c. 22.

"**compound of concern**" means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged to the air from a component of the drinking water system in an amount that is not negligible;

"CT" means the CT Disinfection Concept, as described in subsection 3.1.1 of the Ministry's Procedure for Disinfection of Drinking Water in Ontario, dated July 29 2016.

"**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;

"Duty" means the unit installed and used in regular operation of the drinking water system. The duty unit is included in determining the design capacity calculation.

"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;

"Harmful Algal Bloom (HAB)" means an overgrowth of aquatic algal bacteria that produce or have the potential to produce toxins in the surrounding water, when the algal cells are damaged or die. Such bacteria are harmful to people and animals and include microcystins produced by cyanobacterial blooms.

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

"**licensed engineering practitioner**" means a person who holds a licence, limited licence, or temporary licence under the *Ontario Professional Engineers Act* R.S.O. 1990, c. P.28.

"Minister" means the Minister of the Ministry or such other member of the Executive Council as may be assigned the administration of the SDWA under the Executive Council Act, R.S.O. 1990, c. E.25.

"Ministry" means the Ministry of the Minister and includes all employees or other persons acting on its behalf.

"**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;

"OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. 0.40;

"**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**" has the same meaning as in section 2 of O. Reg. 419/05 under the EPA;

"**point of impingement limit**" means the appropriate standard from Schedule 2 or 3 of O. Reg. 419/05 under the EPA and if a standard is not provided for a compound of concern, the concentration set out for the compound of concern in the document titled "Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time and published by the Ministry and available on a government of Ontario website;

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

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

"**SCADA system**" means a supervisory control and data acquisition system used for process monitoring, automation, recording and/or reporting within the drinking water system;

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

"**sensitive receptor***"* means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from a discharge to air from an emergency generator that is a component of the drinking water system, including one or a combination of:

(a) private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
(b) institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
(c) outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
(d) other outdoor public areas where there are continuous human activities (e.g.: commercial plazas and office buildings).

"**Spare**" means a separate unit that is not connected and can be installed and placed into operation when the Duty unit is out of service (not operational). The spare should be the same size or larger than the duty unit it may be replacing.

"**Standby**" means a separate unit that is connected for use and operation. The standby unit is available for operation when the duty unit is offline or out of service. The standby unit is not considered in determining the design capacity calculation, but should be the same size or larger than the duty unit it may be replacing.

"**sub-system**" has the same meaning as in Ontario Regulation 128/04 (Certification of Drinking Water System Operators and Water Quality Analysts) under the SDWA;

"**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;

"UV" means ultraviolet, as in ultraviolet light produced from an ultraviolet reactor.

2.0 Applicability

2.1 In addition to any other applicable legal 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 Effective Date of this licence.

7.2 A drinking water works permit identified in Schedule A of this licence is the applicable permit on the date identified as the Effective Date of this licence.

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.

9.1.9 Any other technical bulletin or procedure issued by the Ministry 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 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 and in a timeframe outlined by the Director or a provincial officer.

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 or section 13 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/14, 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.

14.2 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 that may come into contact with drinking water, but are not added directly to the drinking water; or

14.3.6 Any particular chemical or material where the owner has written documentation signed by the Director that indicates that the Ministry 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 twelve (12) months of the alteration being completed or placed into service.

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 to all persons responsible for all or part of the operation or maintenance of the drinking water system.

16.1.1 For clarity, up-to-date in the context of condition 16.1 means an operations and maintenance manual or manuals that reflects the current procedures in use within 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 used to ensure that at all times, CT provided shall be greater than or equal to the CT required for the pathogen inactivation; 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;

16.2.8 An maintenance and schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells, that ensures:

a) Above grade components for each well are inspected at least once every 12 months;

b) For all production wells and standby wells that are not artesian wells, below grade components for each well are inspected at least once every 10 years;

c) For all production wells and standby wells that are artesian wells (free flowing), below grade components for each well are inspected if the raw water quality changes.

16.2.9 Well inspection and maintenance procedures that consider the entire well structure of each well including all above and below grade well components and, where applicable utilizes standard procedures for disinfection and bacteriological testing of wells following inspection and maintenance such as American Water Works Association ("AWWA") procedure C654-21, as updated from time to time;

16.2.10 Remedial action plans for situations where inspection of above grade or below grade well components indicates a risk to raw well water quality.

16.2.11 Procedures for undertaking a review of information obtained during well inspection and maintenance to confirm that the schedule(s) described in condition 16.2.8 and procedures described in condition 16.2.9 remain adequate based on the current condition of the well(s) and associated structures.

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 For each production well, standby well, test well and monitoring well where below grade components have not been inspected since June 21, 2015, a below grade inspection of that well shall be completed on or before June 21, 2027.

16.5 The requirement for the Owner to comply with conditions 16.2.8 and 16.2.11 shall come into force on June 21, 2026.

17.0 CT Calculations

Table B1: CT Calculations

Column 1 Document Title or File Name	Column 2 Version Number and Date
Blyth Well 1 and 2 CT Calculation Sheet	V2, May 6, 2025
Blyth Well 5 CT Calculation Sheet	V2, May 6, 2025

17.1 Any changes to the CT calculations used as the basis for primary disinfection in the drinking water system, described in Table B1 must be:

17.1.1 structured to ensure that the provided CT is greater than or equal to the CT (or log inactivation) required for the pathogen inactivation as described in Schedule E of this licence;

17.1.2 included in the operations and maintenance manual described in condition 16 of Schedule B in this licence prior to being implemented;

17.1.3 reviewed by a Licensed Engineering Practitioner; and,

17.1.4 submitted to the Director no later than 30 days after the date that the changes have been implemented.

Schedule C: System-Specific Conditions

System Owner	**The Corporation of the Township of North Huron**
Licence Number	**090-101**
Drinking Water System Name	**Blyth Drinking Water System**
Licence Effective Date	**June 17th, 2025**

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.

1.1.1 Despite condition 1.1, where maximum flow rates in Table 2 limit the volume of water that may be treated by the treatment subsystem, the maximum daily volume of treated water that flows from the treatment subsystem listed in column 1 of Table 1 to the distribution system shall not exceed the value identified as the operational capacity in column 3 of the same.

Table 1: Rated Capacity

Column 1 Treatment Subsystem Name	Column 2 Rated Capacity (m^3/day)	Column 3 Operational Capacity (m^3/day)
Blyth Drinking Water System (Well No. 1 and Well No. 2)	1,149	1,149
Blyth Drinking Water System (Well No. 5)	1,728	1,728

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 or column 3 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.

Residuals 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:

a) not exceed the value in column 3 of the same row; and

b) be calculated at least once monthly as the running annual average based on the previous twelve months of results;

1.5.2 Where the average concentration of a test parameter identified in column 2 exceeds the value in column 3, the concentration shall be reported to the local Ministry district office within 72 hours of receipt of the last lab result used in the calculation;

1.5.3 The maximum concentration of a test parameter identified in column 2 shall not exceed the value in column 4 of the same row;

1.5.4 Where the maximum concentration of a test parameter identified in column 2 exceeds the value in column 4, the discharge shall be reported in accordance with s.13.2 of O. Reg. 675.98 and recorded in accordance with s.12.2 of O. Reg. 675/98 within 24 hours of receipt of the lab result; and,

1.5.5 The test parameters listed in column 2 of Table 3 shall be sampled in accordance with conditions 5.2, 5.3 and 5.4 of Schedule C in this Licence.

Table 3: Residuals Management

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)
Not Applicable	Not Applicable	Not Applicable	Not Applicable

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 and being used to meet pathogen log removal/inactivation credits specified in Schedule E:

1.6.1 The UV disinfection equipment shall be operated within the validated limits for the equipment at all times 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

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 signaling that the disinfection equipment is malfunctioning, has lost power, or is not providing the appropriate level of disinfection 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 described in condition 1.6.3, 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

Filtration Performance

1.7 For each treatment subsystem in column 1 of Table 1, filtrate turbidity shall be continuously monitored from each filter while the filter effluent line is directing water to the next stage of the treatment process and being used to meet pathogen log removal/inactivation credits specified in Schedule E.

1.7.1 Filtrate turbidity performance shall be calculated for each filter using all turbidity measurements taken in a calendar day (‘daily filtrate turbidity performance’).

1.7.2 When filtrate turbidity test results are examined within 72 hours after the tests are conducted in accordance with Schedule 6, condition 6-5(1)(3), daily filtrate turbidity performance shall be evaluated against the percentage criterion specified in Schedule E.

1.7.3 If an evaluation of daily filtrate turbidity performance indicates performance for a filter does not meet the percentage criterion specified in Schedule E, the owner shall ensure that:

a) Appropriate action is taken to identify the cause(s), and resolve where necessary.

b) A record is created to describe the action(s) taken.

1.7.4 The owner shall ensure that performance criterion for filtered water turbidity specified in Schedule E is achieved for each filter using all turbidity measurements taken in a calendar month ('monthly filtrate turbidity performance').

a) Within 72 hours of the end of each calendar month, the monthly filtrate turbidity performance shall be evaluated against the percentage criterion specified in Schedule E.

b) If an evaluation of monthly filtrate turbidity performance indicates performance for a filter does not meet the percent criterion specified in Schedule E, an adverse water quality report shall be made as per Schedule 16-4 of O. Reg. 170/03 immediately after the evaluation is conducted.

1.8 The requirement for the Owner to comply with condition 1.7 shall come into force on June 21, 2026.

1.8.1 Prior to transitioning to the requirements set out in condition 1.7, the owner shall ensure that performance criterion for filtered water turbidity specified in Schedule E is achieved for each filter using all turbidity measurements taken in calendar month.

1.8.2 For greater certainty the timeframe described in condition 1.8 is intended to provide a period for transition. Implementation may occur on or before the date indicated in this condition.

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 (L/s) and daily volume (m^3/day) of treated water that flows from the treatment subsystem to the distribution system.

2.1.2 The flow rate (L/s) and daily volume (m^3/day) 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 090-201, or by a condition otherwise imposed by the Ministry, shall be checked and where necessary 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 where necessary calibrated at least once every twelve (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 where necessary 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 Calibration of CT Monitoring System

4.1 Any measuring instrumentation that forms part of the monitoring system for CT shall be checked and where necessary calibrated at least once every 12 months during which the drinking water system is in operation, or more frequently in accordance with the manufacturer's instructions.

4.1.1 For greater certainty, if condition 4.1 applies, the instrumentation shall be checked and where necessary 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.

5.0 Additional Sampling, Testing and Monitoring

Drinking Water Health and Non-Health Related Parameters

5.1 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

5.2 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.

5.3 For the purposes of Table 7:

5.3.1 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

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

5.4 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”, 23rd Edition, 2017, or as amended from time to time by more recently published editions.

Table 7: Environmental Discharge Parameters				
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**
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

5.5 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:

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

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

a) To a road or storm sewer; or

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

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

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

5.5.5 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.

5.5.6 The discharge of any excess water to a road, storm sewer or the environment, associated with the management of materials excavated as part of watermain construction or repair, where necessary sediment, erosion and environmental control measures have been implemented.

6.0 Studies Required

6.1 Not Applicable.

7.0 Harmful Algal Blooms

7.1 Not Applicable.

8.0 Source Protection

8.1 The Owner shall implement risk management measures, as appropriate, to manage any potential threat to drinking water that results from the operation of the drinking water system.

8.2 Where the drinking water system, or a portion thereof, is located in a source protection area as defined in the *Clean Water Act, 2006*, the owner shall prepare an "Assessment of Fuel Storage and Handling" (the "Assessment") on or before June 21, 2026.

8.3 At a minimum, the Assessment shall:

8.3.1 Identify all locations that are part of drinking water system where fuel is stored or handled within a well head protection area (WHPA) or intake protection zone (IPZ), as identified in the ministry's Source Protection Information Atlas (SPIA) mapping tool.

8.3.2 For each location identified under 8.3.1, document an evaluation of the fuel storage or handling for the purposes of determining if the fuel storage or handling is a Significant Drinking Water Threat by using the SPIA, the latest Technical Rules under the *Clean Water Act, 2006* and in particular, the tables of drinking water quality threats, having regard to the circumstances set out in the table and the vulnerability score of each fuel storage or handling location in the WHPA or IPZ.

8.3.3 Having regard to conditions 8.8, 8.9 and 8.10, determine and document the risk management measures that shall be implemented in respect of each fuel storage or handling location mentioned in condition 8.3.2 that is determined to be a Significant Drinking Water Threat.

8.4 If the Owner proposes to make alterations to the drinking water system authorized in Schedule B of the drinking water works permit that would result in any new or modified fuel storage or handling that is part of the drinking water system, the Owner shall, before making the alteration, ensure that the new or modified fuel storage or handling is identified and evaluated in accordance with conditions 8.3.1, 8.3.2 and 8.3.3, and the Assessment is updated accordingly.

8.5 The owner shall review the Assessment at least once every twelve (12) months and:

8.5.1 If the Technical Rules under the *Clean Water Act, 2006*, the delineation of any WHPA or IPZ in the source protection area, or any applicable source protection plan policies have changed since the Assessment was last reviewed under this condition, identify and evaluate fuel storage or handling in accordance with conditions 8.3.1, 8.3.2 and 8.3.3 and update the Assessment accordingly.

8.5.2 Record the date that the review was completed and outcome(s) of the review.

8.6 The owner shall notify the Director in writing within thirty (30) days of preparing or updating an Assessment that identifies or changes one or more fuel storage or handling Significant Drinking Water Threats.

8.7 The notification required in condition 8.6 shall:

8.7.1 list new location(s) where fuel storage or handling has been identified as a Significant Drinking Water Threat;

8.7.2 list the locations where existing fuel storage or handling has become or is no longer a Significant Drinking Water Threat; and,

8.7.3 be submitted using the "Director Notification Form" published by the Ministry.

8.8 Where fuel storage or handling is identified as a Significant Drinking Water Threat, the owner shall implement risk management measures for the fuel oil storage systems that ensure fuel is appropriately stored and managed to protect the raw water source of supply for the drinking water system or subsystem.

The measures shall include the following:

8.8.1 The storage tank(s) associated with the fuel oil systems shall be inspected at least once every twelve months, or more frequently as recommended by the manufacturer or required by the Technical Standards and Safety Act (TSSA) 2000, and applicable regulations, codes and standards.

8.8.2 the inspection required by condition 8.8.1 shall be performed by a person certified for that purpose under the TSSA and shall include, at a minimum,

a) Visual inspection of the fuel oil tank, tubing, and piping for leaks;

i. Where the tank is below grade (underground), visible components of the tank should be inspected, including the fill pipe and vent;

b) Visual inspection of any grade-level secondary containment;

c) Inspection of any equipment installed to monitor or measure fuel levels;

d) Inspection of any cut-off or control valves and associated equipment;

e) Visual inspection of any fuel pumps and/or sumps and testing of such devices for proper operation;

f) Inspection of any installed corrosion protection systems;

g) Testing for water at the bottom of storage tanks that are not bottom outlet tanks; and,

h) Inspection of any installed electronic or mechanical leak-detection equipment.

8.9 A record of the inspections performed in accordance with condition 8.8.1 and a record of any associated repairs, maintenance or upgrades shall be kept on-site and available for review by ministry staff.

8.10 Spill or leak detection and spill response procedures shall be incorporated into the Operations and Maintenance Manual required under condition 16 of this licence.

8.11 Where the local source protection plan outlines risk management measures for fuel storage or handling in addition to those identified in 8.8, the measures identified in the source protection plan shall also be implemented.

8.12 The owner shall undertake alterations and develop operating procedures as appropriate to ensure that the storage and handling of fuel is adequately managed to protect the source of drinking water.

8.13 Conditions 8.8 to 8.10 have been included to ensure that the fuel storage facilities at the water treatment plant, which have been identified as a significant drinking water threat, conform to the applicable source protection policies. This statement may be relied upon by the owner for the purposes of subsection 61 (4) of O. Reg. 287/07 under the Clean Water Act in order to obtain an exemption from the requirement for a risk management plan under section 58 of that Act.

Schedule D: Conditions for Relief from Regulatory Requirements

System Owner	**The Corporation of the Township of North Huron**
Licence Number	**090-101**
Drinking Water System Name	**Blyth Drinking Water System**
Licence Effective Date	**June 17th, 2025**

1.0 Continuous Monitoring

1.1 Notwithstanding the requirements of O. Reg. 170/03 and the table to Schedule 6, the last column (Minimum Alarm Standard), items 1 and 2 shall be changed from:

> "0.1 milligrams per litre less than the concentration of free chlorine residual that is required to achieve primary disinfection", to:
>
> "at least 0.1 milligrams per litre greater than the concentration of free chlorine residual that is required to achieve primary disinfection"

2.0 Chlorine Residual in the Distribution System

2.1 Where a chlorine residual below the values set out in s.1-2(2)(4) of Schedule 1 of O. Reg. 170/03 is identified at a location within the distribution system and:

a) the drinking water system's water treatment equipment is confirmed to be operating effectively;
b) any adverse result is reported in accordance with s.16-3(1)(4) or s.16-3(1)(5) in Schedule 16 of O. Reg. 170/03;
c) the operator undertakes corrective action required by s.17-4 in Schedule 17 or s.18-4 in Schedule 18 of O. Reg. 170/03; and
d) actions are taken to prevent reoccurrence(s) of low chlorine residual results at the location,

the owner shall be deemed not to have contravened s.1-2(2)(4) in Schedule 1 of O. Reg. 170/03.

2.2 For clarity, actions taken under condition 2.1 d) may include but are not limited to implementation of a flushing program, enhancement of an existing flushing program, or infrastructure upgrades.

Schedule E: Pathogen Log Removal/Inactivation Credits

System Owner	**The Corporation of the Township of North Huron**
Licence Number	**090-101**
Drinking Water System Name	**Blyth Drinking Water System**
Licence Effective Date	**June 17th, 2025**

1.0 Primary Disinfection Pathogen Log Removal/Inactivation Credits

Blyth Drinking Water System

Well No. 1 and Well No. 2 [GROUNDWATER]

Minimum Log Removal/ Inactivation Required	Cryptosporidium Oocysts	Giardia Cysts	Viruses
Blyth Drinking Water System	0	0	2

Log Removal/Inactivation Credits Assigned [a]	Cryptosporidium Oocysts	Giardia Cysts	Viruses
Chlorination [CT: Reservoir]	-	-	2+

[a] Log removal/inactivation credit assignment is based on each treatment process being fully operational and the applicable log removal/inactivation credit assignment criteria being met.

Treatment Component	Log Removal/Inactivation Credit Assignment Criteria
Chlorination	1. Sampling and testing for free chlorine residual shall be carried out by continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario; and 2. At all times, CT provided shall be greater than or equal to the CT required to achieve the log removal credits assigned.
Primary Disinfection Notes	

Well No. 5 [GROUNDWATER]

Minimum Log Removal/ Inactivation Required	Cryptosporidium Oocysts	Giardia Cysts	Viruses
Blyth Drinking Water System	0	0	2

Log Removal/Inactivation Credits Assigned [a]	Cryptosporidium Oocysts	Giardia Cysts	Viruses
Chlorination [CT: contact pipe]	-	-	2+

[a] Log removal/inactivation credit assignment is based on each treatment process being fully operational and the applicable log removal/inactivation credit assignment criteria being met.

Treatment Component	Log Removal/Inactivation Credit Assignment Criteria
Chlorination	1. Sampling and testing for free chlorine residual shall be carried out by continuous monitoring equipment in the treatment process at or near a location where the intended contact time has just been completed in accordance with the Ministry's Procedure for Disinfection of Drinking Water in Ontario; and 2. At all times, CT provided shall be greater than or equal to the CT required to achieve the log removal credits assigned.
Primary Disinfection Notes	