

Drinking Water and Environmental
Compliance Division
Central Region
Laboratory Licensing and
Compliance Program

Division de la conformité en matière
d'eau potable et d'environnement
Région du Centre
Programme de délivrance des permis et
de conformité des laboratoires

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Drinking-Water Testing Licence

Under the Drinking-Water Testing Services Regulation,
O. Reg. 248/03 and the Safe Drinking Water Act, 2002

Licence #: 2316

This supercedes licence issued: Mar 13, 2023

Located at: 3239 Penetanguishene Rd.

Licensee: Aquatic and Environmental Laboratory Inc.

Barrie ON L4M 4Y8
Canada

The licensee is authorized to conduct the following drinking-water tests at the laboratory:

Class: Microbiological	Technique - Sub-Technique:
E. coli Lab Method Code: AELAB01	MF-DC Appendix #: C001
HPC Lab Method Code: AELAB02	Spread Plate Appendix #: C002
Total coliform Lab Method Code: AELAB01	MF-DC Appendix #: C001
Total coliform background Lab Method Code: AELAB01	MF-DC Appendix #: C001
Class: Physical/Others	Technique - Sub-Technique:
Microcystin Lab Method Code: AELAB03	ELISA-Screening DM Appendix #: C003
pH Lab Method Code: AELAB05	Meter Appendix #: C005
Turbidity Lab Method Code: AELAB04	Nephelometry Appendix #: C004

**Ministry of the Environment,
Conservation and Parks**

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



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Subject to the following terms and conditions:

Terms and conditions are specified in Appendix 1.

Expiry Date: Mar 17, 2028

March 8, 2024

Date Issued

T. Villeneuve

Director

Licence Number: 2316

Date Issued: March 8, 2024

Appendix 1 - Conditions

Pursuant to the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, and the regulations made thereunder, this drinking-water testing services licence is issued subject to the following conditions.

Part I: Definitions

1.1 In this licence, unless the context otherwise requires, words and phrases shall be given the same meaning as those set out in the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32 and any regulations made in accordance with that Act.

1.2 In this licence

“accreditation body” means any body designated or established pursuant to section 64 of the SDWA;

“director” means a director appointed pursuant to s. 6 of the SDWA for the purposes of Part VII of the SDWA;

“HPPA” means the *Health Protection and Promotion Act, R.S.O. 1990*, chapter H.7, as amended.

“laboratory” means the drinking-water testing laboratory located at 3239 Penetanguishene Road, Barrie, ON, L4M 4Y8

“licence” means this entire drinking water testing licence document, issued in accordance with Part VII of the SDWA, and includes this appendix, any schedules to it, and the application and other supporting documents listed in schedule “A” that are attached to and form part of this licence, except as otherwise specified in the conditions contain herein;

“licensee” means Aquatic and Environmental Laboratory Inc.;

“Ministry” means the Ministry of the Environment, Conservation and Parks;

“protocol” means the document published by and available from the Ministry entitled “Protocol of Accepted Drinking-Water Testing Methods”, Version 2.0 dated May 31, 2010.

“provincial officer” means a provincial officer designated pursuant to s. 8 of the SDWA;

“sample drop-off depots” means any location under the direct care and control of the laboratory that is offsite from the laboratory where drinking water samples are deposited, collected and stored for shipping to the laboratory;

“SDWA” means the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, as amended.

Part II – Authorized Tests

- 2.1 Subject to the conditions of this licence, the licensee is authorized to provide a drinking-water testing service at the laboratory.
- 2.2 The licensee is only authorized to conduct drinking-water tests at the laboratory for the class and for the parameters set out in the licence.
- 2.3 Subject to conditions 2.4 and 2.5, the licensee shall only conduct drinking water tests at the laboratory for parameters using the methods that were listed in the application, and approved by this licence.

[Where applicable]

- 2.4 Despite condition 2.3, where the licensee listed a method for a parameter in the application for this licence, but the method is not designated as an acceptable testing method for that parameter in the protocol, the licensee is not authorized to use the method listed in the application for this licence, unless the method is specifically authorized under condition 2.5.

[Where applicable]

- 2.5 The licensee is specifically authorized to conduct drinking-water tests for the parameters listed below using the corresponding method listed below, despite the method not being designated as an acceptable testing method for that parameter in the protocol:

None

Accreditation

- 2.6 Except as authorized by condition 2.7, the licensee shall only conduct a drinking-water test if the laboratory is accredited by an accreditation body for the conduct of that test.

Non-accredited Tests [Where applicable]

- 2.7 In accordance with section 74 of the SDWA, the licensee is authorized to conduct the following tests for which the laboratory is not accredited by an accreditation body, using the method specified. The use of these non-accredited tests must be approved in writing by the ‘Director’ and records maintained according to the Laboratory’s Quality Assurance Manual.

None

Part III: Operational Requirements

- 3.1. A copy of this licence shall be made readily available for reference by all persons responsible for all or part of the operation of the drinking-water testing laboratory.

- 3.2. A copy of this licence shall be made readily available to laboratory clients and for Ministry inspection.
- 3.3. The Certificate of Drinking Water Testing Licence shall be conspicuously displayed in a location at the laboratory which maximizes the likelihood of a client seeing it upon entry to the laboratory's sample receiving area.

Part IV: General

Compliance

- 4.1 The licensee shall operate the laboratory in accordance with the SDWA, including the statutory conditions enumerated in 75(3), any applicable regulations made thereunder, and this licence.
- 4.2 The licensee shall ensure that any person authorized to carry out a drinking-water test or any aspect of a drinking-water test at a laboratory has been informed of the SDWA, all applicable regulations made in accordance with that Act, and this licence and shall take all reasonable measures to ensure any such person complies with the same.

Interpretation

- 4.3 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:
 - i. the SDWA;
 - ii. any regulation made under the SDWA;
 - iii. this licence;
 - iv. any application or supporting documents listed in Schedule "A".
- 4.4 The conditions of this licence are severable. If any requirement of this licence, or the application of any requirement of this licence to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this licence shall not be affected thereby.

Other Legal Obligations

- 4.5 The issuance of, and compliance with the conditions of, this licence does not:
 - i. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
 - ii. limit in any way the authority of the ministry to require certain steps be taken or to require the licensee to furnish any further information related to compliance with this licence.

Change of Licensee's Information

- 4.6 The licensee shall notify the director, in writing, of any of the following changes within 30 days of the change occurring,
 - i. change of address of the laboratory; or

- ii. change of business name, and the notification shall include a copy of the most recent documentation filed under the *Business Names Act*, R.S.O. 1990, c. B17 or *Corporations Information Act*, R.S.O. 1990, c. C.39.
- 4.7 The licensee shall notify the director, in writing, of any changes to the following personnel identified on the licence application form whenever staffing changes are made
- (a) Owner of the Laboratory;
 - (b) Laboratory Administrator;
 - (c) Laboratory Operator;
 - (d) Laboratory Director, and
 - (e) Laboratory Director Designate
- 4.8 As per section 73(6) of the SDWA this licence is not transferable without the consent of the Director.

Information

- 4.9 Any information requested, by the Ministry, concerning the drinking-water testing laboratory and its operation under this licence, including but not limited to any records required to be kept by this licence shall be provided to the Ministry, upon request.
- 4.10 Records required by or created in accordance with the SDWA, any regulations under the SDWA, or this licence shall be retained for at least 5 years in a location where a provincial officer who is inspecting the laboratory can conveniently view them.
- 4.11 The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this licence or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this approval or any statute, regulation or other legal requirement.

Standard Conditions

- 4.12 The licensee shall distribute to any person with whom the licensee enters into an arrangement to conduct a drinking-water testing service, the document available from the Ministry entitled “MOE Practices for the Collection and Handling of Drinking-Water Samples” or one produced by the laboratory in fulfillment of the licensee’s obligation pursuant to subsection 9(1) of O. Reg. 248/03.
- 4.13 The licensee shall collect and handle drinking water samples in accordance with the Ministry’s Protocol or its licensed method.
- 4.14 The licensee shall track the custody of samples submitted for drinking-water tests using either;
- a. A chain of custody form approved by the Ministry, or

b. A client generated chain of custody form, provided that the licensee ensures that all necessary and required information is obtained and included on the form. The licensee is expected to review and approve the client generated form prior to use.

- 4.15 The licensee shall not filter drinking water samples prior to analyses unless dictated by non-routine analytical contingencies.
- 4.16 Licensed laboratories shall report all adverse water quality results as per the drinking water legislation without any regard to calculated uncertainty estimations.
- 4.17 Drinking water samples shall be retained until either;
- a. The day the result of the drinking water test has been reported in accordance with section 12 or 12.0.1 of Ontario Regulation 248/03; or
 - b. Sample requirements are no longer met as outlined in the ministry's document entitled "Practices for the Collection and Handling of Drinking Water Samples" and dated April 1, 2009, as amended from time to time.
- 4.18 Where the sample hold time is measured in hours, the laboratory shall adhere to the absolute maximum hold time from sampling to analysis, for example - microbiological samples must be processed within 48 hours 0 minutes. Anything greater than 48 hours 0 minutes is considered past hold time.

For hold times that are described in days in the licensed method; the holding time is met if the sample analyzed by the end of the last calendar day of the respective holding time. For example, for a 7-day hold analyzed time; a sample collected on a Tuesday is considered to have met holding time if it is prepared or analyzed by the end of the day on the following Tuesday.

- 4.19 The laboratory shall ensure drinking water samples collected for the purpose of the SDWA and/or HPPA that are left at sample drop-off depots are:
- (a) traceable to a particular sample drop-off depot,
 - (b) accompanied by a chain of custody or submission form,
 - (c) protected against degradation and/or chemical or biological changes; and,
 - (d) secured against loss and tampering.
- 4.20 Each of the persons involved directly or indirectly with the provision of drinking water testing services shall,
- (a) exercise the level of care, diligence and skill in respect of a drinking water testing laboratory that a reasonably prudent person would be expected to exercise in a similar situation; and
 - (b) act honestly, competently and with integrity, with a view to providing timely, accurate and reliable test results and ensuring the protection and safety of the consumers of the drinking water tested at the laboratory.
- 4.21 Accreditation by a recognized accreditation body is a pre-requisite for licensing. The licensee shall inform the Ministry within 30 days in the event that the laboratory's accreditation for a licensed parameter is

lost, suspended or withdrawn and the licensee shall immediately cease any testing as until such time as accreditation and licensing is re-instated.

Part V: Special Conditions

- 5.1 When a sample is submitted to the licensee for a drinking-water test for a microbiological parameter, the licensee shall ensure that the test is conducted in a standardized timely manner and that microbiological plates/tests are processed and read without extended overnight refrigerated incubation.
- 5.2 When the licensee observes the “over-crowding/confluent/non-identifiable microbial growth” is detected on a plate relating to analyses under the SDWA, licensed laboratories are required to report the results to the appropriate parties as Adverse for TC and/or EC as appropriate, using the appropriate NDOG terminology as documented in the laboratory licensed method or associated SOPs.
- 5.3 The licensee shall ensure that test culture plates are incubated for the full incubation time stated in its licensed method. The licensee shall not read test culture plates before the minimum accepted incubation time has elapsed in order to report potential adverse results ahead of schedule.
- 5.4 The licensee must employ the appropriate positive and negative test controls for each licensed test, on each day that those tests are performed. These controls will be subject to the same conditions as the tests performed. Each identifying characteristic reaction (eg: colony or test well appearance/colour change) must be represented by an appropriate positive control organism.
- 5.5 When a sample is submitted to the licensee for a drinking-water test for microbiological analyses, the licensee shall ensure that the analysis is started within 48 hours of the sample collection time.
- 5.6 For quantitative Total Coliforms and or Escherichia Coli (E. Coli) tests, the minimum sample container size is 250 mL, and the minimum test volume is 100 mL.

For presence/absence Total Coliforms and or Escherichia Coli (E. Coli) tests, the minimum sample container size is 100 mL, and the minimum test volume is 100 mL.

5.7 Microcystin

Licensed laboratories shall ensure that only amber glass bottles with a minimum 500mL sample are used for the collection of drinking water samples for microcystin analyses.

A. Samples Collected Under Ontario Regulation 170/03 or 319/08

All results of <1.5ug/L (Raw, Treated, Distribution)

Where a licensed laboratory employing the ELISA methodology, obtains a result of <1.5ug/L for a raw, treated or distribution sample from a regulated DWS or SDWS for total microcystins, the laboratory shall:

- a. Report all test results as per the appropriate regulations with the exception that total microcystin results must be uploaded to DWIS or LRMA no later than 24 hours after approval of the result.

Treated or Distribution results of $\geq 1.5\mu\text{g/L}$

Where a licensed laboratory employing the ELISA methodology, obtains a result of $\geq 1.5\mu\text{g/L}$ for a treated or distribution sample (NOT for raw water samples) from a regulated DWS or SDWS for total microcystins, the laboratory shall:

- a. Verbally report (and document) a provisional adverse Microcystin LR result as per laboratory procedures. State that the results is **PROVISIONAL MICROCYSTIN-LR UNTIL FURTHER NOTICE**. No follow up written confirmation is required.
- b. Within one business day contact MECP Laboratory Services Branch (LaSB) at the number below to arrange to send the remainder of the 500 mL sample to LaSB for “CONFIRMATION analysis of Microcystin-LR”.
 - i. Follow the LaSB directions and send the remainder of the sample to LaSB with the appropriate Chain of Custody form.
 - ii. Samples must be received by LaSB **within 7 days of the sample date**.
LaSB Contact: Janet Mills 1 416-235-5831 or Erik Wiersma 1 416-235-6310
- c. Upload the total microcystins -ELISA test results to DWIS or LRMA as appropriate, no later than 24 hours after the result has been approved.

NB: The parameter name for total microcystins in DWIS and LRMA is ‘Microcystin’ and the parameter group for Microcystin in LRMA is ‘organic’.

B. Private Drinking Water Samples

Where a licensed laboratory analyzes a potable water sample collected from a private drinking water system that is not regulated under the SDWA or HPPA for total microcystins employing the ELISA methodology, the laboratory shall:

- a. Report the results of the analysis to the client, **and**
- b. Report the results of the analysis which are greater than or equal to (\geq) **1.5 $\mu\text{g/L}$** to the Local Medical Officer of Health (LMOH).

Note to the Licensee Regarding Reviewable Decisions

All or part of this licence may be reviewable in accordance with the provisions of Part X of the SDWA. In accordance with Section 129(1) of the SDWA, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 129(2) sets out a procedure upon which the 15 days may be extended by the Tribunal. Section 129(3) of the SDWA provides that the Notice requiring the hearing shall state:

1. The aspect of the decision, including the portion of the permit, licence, approval, order or notice of administrative penalty in respect of which the hearing is required; and
2. The grounds for review to be relied on by the person at the hearing.

Except with leave of the Tribunal, a person requiring a hearing in relation to a reviewable decision is not entitled to,

- (a) a review of an aspect of the decision other than that stated in the notice requiring the hearing; or**
- (b) a review of the decision other than on the grounds stated in the notice**

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The Licence number;
4. The date of the Licence;
5. The name of the Director;

The Notice should be signed and dated by the appellant. This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Part VII, Safe Drinking Water Act, 2002
Central Region
Ministry of Environment, Conservation and Parks
125 Resources Road
Toronto, Ontario
M9P 3V6

** If the Director believes that a reviewable decision that he or she is about to make in respect of a drinking-water testing licence, if stayed by an appeal, would endanger, or likely endanger, public health, the Director shall include in the decision the reasons for his or her belief and shall also serve a copy of the decision on the Chief Medical Officer of Health. In the case of a reviewable decision in respect of a drinking-water testing licence, if the Chief Medical Officer of Health advises the Tribunal, the licensee and the Director that in his or her opinion the staying of the decision would endanger, or likely endanger, public health, the Tribunal may not stay the operation of a reviewable decision.*

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

Schedule "A"
Application and Supporting Documentation

The following documents are incorporated into and constitute part of this licence:

1. Application received by the Director on 22/12/16.