

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 2294-CESMCM  
Issue Date: June 28, 2022

David Michael Carnahan  
163 Candlewood Cres  
Waterloo, Ontario  
N2L 5M7

Site Location: Conestogo Lake Cottage  
Cottage Lot 112, Road 100, Conestogo Lake  
Part Lot 1, Concession 4  
Township of Mapleton, County of Wellington  
N0G 1P0

*You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

a subsurface disposal works for the collection, transmission, treatment and disposal of domestic sewage with a maximum design capacity of **1,100 litres per day**, to service the proposed 2-bedroom residential cottage, located at the above Site Location, and consisting of the following:

***Anaerobic Digester with Internal Pump Chamber***

one (1) 3,618 Litre Waterloo Biofilter anaerobic digester model ADIPC-4000 complete with an internal pump chamber, equipped with two watertight access risers with covers up to ground level, collecting wastewater from the dwelling and discharging effluent via a internal pump chamber to the treatment unit, equipped with high level audible/visual alarm system and one (1) effluent pump rated at capacity of 250 litres per minute at a total dynamic head of 6 meters, and demand-dosing via a 32 millimetre diameter forcemain to a Waterloo Biofilter flat bed treatment unit as described below;

***Waterloo Biofilter Flat Bed***

one (1) Waterloo Biofilter Flat Bed Model FB-1200 or approved equivalent with a minimum treatment capacity of 1,100 litres per day, having a minimum foam filter media volume of 2.06 cubic-metres, and consisting of open-bottom unit located directly on top of the stone layer of Type A dispersal bed as described below;

### ***Type A Dispersal Bed***

one (1) Type A dispersal bed receiving effluent from the Waterloo Biofilter Flat Bed treatment unit, consisting of a stone layer of area of 15 square-meters (5m x 3m) with a minimum thickness of 200 millimetres, covered by geotextile fabric, overlaying a minimum 300 millimetre imported sand layer (having a T-time in the range of 6 to 10 minutes per centimetre) with a total area of 90 square-meters (5m x 18m) including a minimum of 15 metres mantle extension in the downgradient direction beyond the outmost distribution pipe, and maintaining a minimum separation distance of 600 millimetres between the bottom of the stone layer and native underlying soil with a T-time greater than 50 minutes per centimetre.

including all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for proper operation of the aforementioned sewage works;

all in accordance with Supporting Documentation submitted to the Ministry as listed in the **Schedule A** in this Approval.

*For the purpose of this environmental compliance approval, the following definitions apply:*

"Approval" means this entire document and any schedules attached to it, and the application;

"CBOD<sub>5</sub>" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Total Suspended Solids" is the dry weight of suspended particles, that are not dissolved, in a sample of water that can be trapped by a filter that is analyzed using a filtration process.

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"District Manager" means the District Manager of the Guelph District Office of the Ministry;

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

"Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28;

"Licensed Installer" means a person who is registered under the Building Code to construct, install, repair, service, clean or empty on-site sewage systems;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"OBC" means the Ontario Building Code, Ontario Regulation 332/12 (Building Code) as

amended to January 1, 2015, made under the *Building Code Act*, 1992, S.O. 1992, c. 23;

"Owner" means David Michael Carnahan, and includes their successors and assignees;

"OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c.O40, as amended;

"Supporting Documentation" means the documents listed in Schedule A of this Approval;

"Works" means the sewage works described in the Owner's application and this Approval.

*You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:*

## **TERMS AND CONDITIONS**

### **1. GENERAL PROVISIONS**

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.

### **2. EXPIRY OF APPROVAL**

1. This Approval will cease to apply to those parts of the Works which have not been constructed within five (5) years of the issuance date of this Approval.

### **3. CHANGE OF OWNER**

1. (1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
  - a. change of Owner;
  - b. change of address of the Owner;
  - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c. B17 shall be included in the notification to the District Manager;

- d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C 39 shall be included in the notification to the District Manager;
2. In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

#### **4. CONSTRUCTION**

1. The Owner shall ensure that the construction of the Works is supervised by a Licensed Installer or a Licensed Engineering Practitioner.
2. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.
3. Upon construction of the Works, the Owner shall prepare a statement, certified by a Licensed Installer or a Licensed Engineering Practitioner that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff and staff of the local municipality.
4. Upon construction of the Works, as-built drawing(s) showing the works “as constructed” shall be prepared by the Licensed Installer or a Licensed Engineering Practitioner. The drawing(s) shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

#### **5. OPERATIONS AND MAINTENANCE AND RECORDING**

1. The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.
2. The Owner shall sign a Service and Maintenance Agreement with the manufacturer or approved agent of the Waterloo Biofilter (Waterloo Biofilter Level IV Treatment Unit) treatment system. The maintenance agreement must be retained at the site for as long as the Works are in operation, kept current and made available for inspection by the Ministry staff.
3. The Owner shall receive from the manufacturer or distributor of Waterloo Biofilter treatment unit printed literature that describes the unit in detail and provides complete instructions regarding the operation, servicing, and maintenance requirements of the unit and its related components necessary to ensure the continued proper operation in accordance with the original design and specifications.

4. The Owner shall ensure that the treatment system is at minimum inspected annually by the Waterloo Biofilter treatment unit authorized personnel, and maintained according to the manufacturer's recommendations including minimal yearly effluent sampling for CBOD<sub>5</sub> and Total Suspended Solids to ensure that it meets design objectives of 10 mg/l for both CBOD<sub>5</sub> and Total Suspended Solids in a grab effluent sample before discharge to the subsurface disposal bed;
5. The Owner shall ensure that the septic tank(s) is pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filter(s) is cleaned out at minimum once a year (or more often if required).
6. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.
7. The Owner shall visually inspect the general area where sewage works are located for break-out once every month during the operating season.
8. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:
  - a. sewage discharge to that subsurface disposal system shall be discontinued;
  - b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;
  - c. submit a written report to the District Manager within **one (1) week** of the break-out;
  - d. access to the break-out area shall be restricted until remedial actions are complete;
  - e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and
  - f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.
9. The Owner shall maintain a logbook to record the results of Operation and Maintenance activities specified in the above subclauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.
10. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

## 6. REPORTING

1. One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date of the Works.
2. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges), the Owner shall, within **fifteen (15) days** of the occurrence of any reportable spill as provided in Part X of the EPA and Ontario Regulation 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.

*The reasons for the imposition of these terms and conditions are as follows:*

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected.
6. Condition 6 is included to ensure that the Ministry records are complete.

## **SCHEDULE A**

1. Application for Environmental Compliance Approval submitted by David Michael Carnahan at the Ministry on March 10, 2022 for the proposed Class 4 Onsite Sewage System, including design report, drawing and specifications, supporting documentation and correspondence.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Hearing") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar\*  
Ontario Land Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5  
OLT.Registrar@ontario.ca

and

The Minister of the Environment,  
Conservation and Parks  
777 Bay Street, 5th Floor  
Toronto, Ontario  
M7A 2J3

and

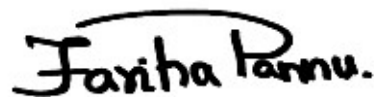
The Director appointed for the purposes of  
Part II.1 of the *Environmental Protection Act*  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

\* **Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or [www.olt.gov.on.ca](http://www.olt.gov.on.ca)**

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 28th day of June, 2022



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Fariha Pannu, P.Eng.

Director

appointed for the purposes of Part II.1 of the



MS/

c: District Manager, MECP Guelph District Office  
Marc Ethier, E2TECH Services