

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0493-CTPHLE
Issue Date: November 30, 2023

Grand River Conservation Authority
400 Clyde Road
Cambridge, Ontario
N1R 5S4

Site Location: Conestogo Lake Conservation Area
6580 Wellington County Rd 11, R.R. #2, Lot 2, Concession 3
Township of Mapleton, County of Wellington

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:

replacement of seasonal on-site sewage disposal system rated at maximum capacity of 8,035 L/d to service the existing Washroom 1 building and upgrades to the on-site sewage system servicing the Washroom 2 building to incorporate the dump station at a maximum rated capacity of 30,409 L/d, all in addition to existing sewage works servicing existing facilities, having an overall Maximum Design Flow Rate of 40,069 L/day (Class 4 Sewage Systems only), at the Conestogo Lake Conservation Area as described below:

PROPOSED WORKS

1. Washroom 1 System Upgrade and Re-rating (Q=8,035 L/day)

Re-rating and replacement of the existing Washroom 1 system from a Maximum Daily Flow Rate of 5,500 L/day to 8,035 L/day, collecting domestic wastewater from the existing Washroom 1 building, comprising;

- **Septic Tank**
one (1) proposed 18,200 L two-compartment septic tank, receiving gravity flow from existing

Washroom 1 building, and located just north of the existing building, complete with an effluent filter on the outlet, and discharging effluent to a Balancing Tank by gravity;

- **Balancing/Dosing Tank**

One (1) proposed 15,900 L single-compartment concrete balancing tank, located just south of the leaching bed, designed with a theoretical Maximum Daily Flow of 8,035 Litres/day and designed to dose 6,000 L/day to the subsurface disposal bed with a minimum dose equal to 75% of the internal volume of the distribution piping delivered in a 15 minute time (flow rate of 1.1 L/s) through two (2) submersible sewage pumps configured in an alternating duplex pumping arrangement and controlled by a timer system set to operate the pumps on an alternating basis designed to dose, each pump rated at 2.4 L/s under a TDH of 6.8m, complete with a liquid level float control system connected to an audible and visual high level alarm system, set at 93% capacity;

- **Raised Absorption Trench Leaching Bed**

a subsurface sewage disposal bed, located north of the existing Washroom 1 building, constructed in four cells, each cell with four runs of 19 m length, with a total length of distribution piping of approximately 304 m 75 mm perforated pipes installed within clear stone surround and overlying an imported granular fill layer of 1 m deep with an estimated percolation time of approximately 10 min/cm overlying native soil with an estimated percolation time of 10 min/cm;

2. Washroom 2 System Upgrade, Re-rating and Routing additional sewage flow from the existing dumping station (Q=30,409 L/day)

Re-rating and upgrades to the existing Washroom 2 system from a Maximum Daily Flow Rate of 22,000 L/day to 30,409 L/day that includes the additional from the existing Dumping Station Sewage Work, comprising;

- **Septic Tank**

one (1) proposed 13,600 L capacity single compartment Septic Tank that replaces the existing Dumping Station Septic Tank, receiving gravity flow from a new Dumping Station inlet structure, located west of the existing Washroom 2 building, and discharging effluent to a converted 9,000 L Septic Tank chamber by gravity;

- **Conversion of Existing Pump Chamber to a Septic Tank chamber**

conversion of existing pump chamber located southwest of the existing Washroom 2 building, to a Septic Tank chamber, by removal of existing pumps, and to receive sewage flow from the one-compartment Dumping Station Septic Tank chamber, and continue receiving sewage from the existing 45,000 L Septic Tank, complete with a Proposed Effluent Filter rated at a minimum of 30,409 L/day, and discharging the effluent by gravity to a new Proposed Balancing/Dosing Tank;

- **Balancing/Dosing Tank**

One (1) proposed 29,500 L single-compartment concrete balancing tank, located at ???, designed with a theoretical Maximum Daily Flow of 30,409 Litres/day and designed to dose 22,000 L/day to the existing Washroom 2 System subsurface disposal bed with a minimum dose equal to 75% of the internal volume of the distribution piping delivered in a 15 minute time (flow rate of 2 L/s) through two (2) submersible sewage

pumps configured in an alternating duplex pumping arrangement and controlled by a timer system set to operate the pumps on an alternating basis designed to dose, each pump rated at 2.3 L/s under a TDH of 10.2 m, complete with a liquid level float control system connected to an audible and visual high level alarm system, set at 93% capacity;

EXISTING WORKS

Class 4 Sewage System at Workshop (Q = 1,625 L/d)

A sewage treatment and subsurface disposal system rated at maximum daily sewage flow of 1,625 L/d to replace existing Works to service a new Workshop as follows:

- **Septic Tank**

one (1) two-compartment septic tank having a total capacity of minimum 4,900 L discharging via gravity to a proposed pump chamber bed as described below;

- **Pump Chamber**

one (1) pump chamber having a minimum capacity of 900 L, equipped with one (1) effluent submersible pump rated at approximately 20 L/min at a TDH of 4 m discharging a dosing volume of 278 L/dose in less than 15 minutes via a 32 mm dia forcemain, approximately 25 m long, to a proposed leaching bed as described below;

- **Subsurface Sewage Disposal System**

a raised leaching bed consisting of six (6) runs of 75 mm dia perforated distribution PVC piping, each being 14 m in length, with a total length of approximately 84 m, all installed within washed stone placed on top of imported fill soil having a percolation rate of $T = 6 - 10$ min/cm. The washed stone layer shall be overlain by a permeable geotextile fabric, and then backfilled with a minimum of 100 mm of topsoil, and seeded or sodded, and complete with a minimum 250 mm thick sand mantle with a percolation time of $T = 6 - 10$ min/cm), and extending a minimum of 15 m beyond the outermost distribution pipes in any direction which effluent will move laterally in the soil away from the leaching bed;

Existing Class 4 Sewage Works at Washroom No.2 Q = 22,000 L/d (Now being re-rated and also to receive additional sewage flow from the Dumping Station)

A sewage treatment and subsurface disposal system rated at maximum daily sewage flow of 22,000 L/d to replace existing Works to service Washroom No. 2, comprising;

- **Septic Tank**

one (1) two-compartment septic tank located on the east side of Washroom No.2, having a total

capacity of approximately 45,000 L, equipped with an effluent filter on the outlet and discharging to a pumping chamber (**now being converted to a septic tank chamber**) as described below:

- **Pumping Chamber (now being converted to a septic tank chamber, and also will receive additional sewage from the Dumping Station and to discharge to a new Proposed Balancing Tank)**

one (1) one-compartment pumping chamber, having a total capacity of approximately 9,000 L and dosing volume of 1,500 L/dose, equipped with two (2) effluent submersible pumps (one duty, one stand-by), each pump rated at approximately 100 L/min at a TDH of 4 m discharging the dosing volume in less than 15 minutes via a 50 mm dia forcemain, approximately 100 m long to a proposed subsurface sewage disposal system as described below;

- **Subsurface Sewage Disposal System**

a subsurface sewage disposal system comprising of two (2) above-ground leaching beds with a total length of distribution piping of 1080 m, each leaching bed consisting of 18 runs of 75 mm dia perforated pipes (30 m long) installed within clear stone surround and overlying an imported granular backfill with a percolation time ranging from 5 to 10 min/cm, including a sand mantle extending a minimum of 15 m beyond the outermost distribution pipes in any direction which the effluent will move laterally in the soil away from the leaching beds;

Existing Class 4 Sewage Works at Main Washroom No.1 (Now being amended as per Proposed Works)

An existing Septic Tank System servicing the Main Washroom No.1 and consisting of the following:

- **Septic Tank**

one (1) two-compartment septic tank (5.486 m x 1.829 m x 1.422 m working depth) having a total capacity of approximately 14,268 L discharging via gravity to an existing leaching bed as described below:

- **Subsurface Sewage Disposal System**

a subsurface sewage disposal system comprising of one (1) above-ground leaching bed constructed in two cells with a total length of distribution piping of approximately 275 m, consisting of eighteen (18) runs (9 runs per cell) of 15.24 long 100 mm dia perforated pipes installed within clear stone surround and overlying an imported granular fill layer of 400 mm deep with an estimated percolation time of approximately 10 min/cm overlying native soil with an estimated percolation time of 50 min/cm;

Existing Class 5 Sewage Works at Main Gatehouse

An existing Class 5 sewage system servicing the Main Gatehouse washroom, consisting of one-compartment precast concrete holding tank with a total capacity of approximately 4,500 L. The existing holding tank to be equipped with an audible/visual high level alarm system;

Existing Class 5 Sewage Works at Trailer Dump Station

An existing Class 5 sewage system servicing the mobile Trailer Dump Station, consisting of

one-compartment precast concrete holding tank with a total capacity of approximately 13,000 L. The existing holding tank to be equipped with an audible/visual high level alarm system;

Existing Class 1 Sewage Works

Eight (8) existing Class 1 sewage systems (vault privies) servicing outhouse washrooms located on the property to be continued to operate, each comprising one (1) holding tank with a total capacity of approximately 4,500 L;

including all other mechanical system, electrical system, instrumentation and control system, standby power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only;

all in accordance with the **Schedule A**.

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

1. "Approval" means this entire document and any schedules attached to it, and the application;
2. "Commissioned" means the construction is complete and the system has been tested, inspected, and is ready for operation consistent with the design intent;
3. "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;
4. "District Manager" means the District Manager of the Guelph District;
5. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19, as amended;
6. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
7. "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;
8. "Maximum Daily Flow" means the largest volume of flow to be received during a one-day period for which the Works is designed to handle;
9. "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;
10. "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;

11. "Owner" means Grand River Conservation Authority and its successors and assignees;
12. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
13. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;

14. "Works" means the approved sewage works, and includes Proposed Works, and Existing Works.

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. The approval issued by this Approval will cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes **within 30 days** of the change occurring:
 - a. change of address of Owner;
 - b. change of Owner, including address of new 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;

- d. change of name of the corporation and a copy of the most current information filed under the *Corporations Information Act* , R.S.O. 1990, c. C39 shall be included in the notification.

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.
3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

4. CONSTRUCTION

1. The Owner shall ensure that the construction of the Works is supervised by 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. The Owner shall ensure that any imported soil that is required for construction of any subsurface disposal bed as per this Approval is tested and verified by the Licensed Engineering Practitioner for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.
4. Within **six (6) months** of the Works being Commissioned, the Owner shall prepare a statement, certified by 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.
5. Within **six (6) months** of the Works being Commissioned, the Owner shall prepare a set of as-built drawings showing the Works "as constructed". "As-built" drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the site for the operational life of the Works and shall be made available for inspection by Ministry staff.

5. OPERATIONS, MAINTENANCE AND RECORDING

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance,

adequate funding, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.

2. The Owner shall ensure that the septic tanks are pumped out every 3-5 years or when the tanks are 1/3 full of solids and the effluent filter is cleaned out at minimum once a year (or more often if required).
3. The Owner shall ensure that the oil/grease interceptor is inspected and maintained on regular basis as required, and grease is disposed off site by a licensed hauler (e.g. at approved recycling sites).
4. 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.
5. The Owner shall visually inspect the general area where Works are located for break-out once every month during the operating season.
6. 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.
7. The Owner shall maintain a logbook to record the results of operation and maintenance activities specified in the above sub-clauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.
8. The Owner shall employ measurement devices to accurately measure quantity of effluent being discharged to each individual subsurface disposal bed, including but not limited to

water/wastewater flow meters, event counters, running time clocks, or electronically controlled dosing, and shall record the daily volume of effluent being discharged to the subsurface disposal bed.

9. The Owner shall ensure that the flow of treated effluent discharged into the subsurface disposal beds does not exceed the following;
 1. 6,000 L/day for the Washroom 1 System disposal bed, and,
 2. 22,000 L/day for the Washroom 2 System disposal bed
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 operation and maintenance activities required by this Approval.

6. REPORTING

1. **One (1) 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.
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) made under the EPA, the Owner shall, within **fifteen (15) days** of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 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.

7. DECOMMISSIONING OF UN-USED WORKS

1. The Owner shall properly abandon any portion of unused Existing Works, as directed below, and upon completion of decommissioning report in writing to the District Manager:
 - a. any sewage pipes leading from building structures to unused Works components shall be disconnected and capped;
 - b. any unused septic tanks, holding tanks and pump chambers shall be completely emptied of its content by a licensed hauler and either be removed, crushed and backfilled, or be filled with granular material;
 - c. if the area of the existing leaching bed is going to be used for the purposes of construction of a replacement bed or other structure, all distribution pipes and surrounding material must be removed by a licensed hauler and disposed off site at an approved waste disposal site; otherwise the existing leaching bed may be abandoned in place after disconnecting, if there are no other plans to use the area

for other purposes.

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 the Ministry is given prior notice of the pending start up date of the Works and all reportable spills are properly dealt with, documented and reported.
7. Condition 7 is included to ensure that any components of un-used Works are properly decommissioned.

Schedule A

1. Application for Environmental Compliance Approval dated March 7, 2023 and received on March 29, 2023

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 5853-8U4QJJ issued on May 15, 2012.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") 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.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

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 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**

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

DATED AT TORONTO this 30th day of November, 2023

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

Aziz Ahmed, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

KH/

c: District Manager, MECP Guelph District.

Anne Egan, P.Eng., R.J. Burnside and Associates