

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1619-CHSLQX Issue Date: November 7, 2022

Janet Burt and David Allan Burt 540 Clear Lake Rd, Town of Rideau Lakes, Ontario, K0G 1E0

Site Location: Green Valley Cottages and Trailer Park 538 Clear Lake Road Rideau Lakes Township, United Counties of Leeds and Grenville Ontario, K0G 1E0

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

Works for the establishment of sewage treatment and subsurface disposal of effluent to service fifty-six (56) seasonal RV trailer sites, five (5) seasonal cottages and one (1) year round single family dwelling with six (6) existing subsurface sewage works, two (2) of which are to be decommissioned and replaced with two (2) new subsurface sewage effluent disposal system, rated for a maximum daily sewage flow of 28,625 litres per day, consisting of the following Works:

SEWAGE WORKS #1 - COTTAGES 1-3: servicing two (2) 3-bedroom cottages and one (1) 2-bedroom cottage (was approved by the Leeds, Grenville and Lanark District Health Unit # SF-1102-88) for the collection, treatment and subsurface disposal of domestic sewage effluent described as follows:

<u>Septic Tank (ST#1)</u>: One (1) existing precast concrete two compartment tank, having a capacity of 9,000 litres and equipped with an effluent filter at the outlet, discharging by gravity to a pump tank as described below;

<u>Pump Tank (PT#1)</u>: One (1) existing precast concrete single compartment tank, having a capacity of 1,700 litres, discharging by one (1) pump to the leaching bed as described below:

Leaching Bed (LB#1): One (1) existing raised conventional type trench leaching bed consisting of 150 m of 76 mm diameter distribution piping constructed in ten (10) runs of fifteen (15) metre lengths with the runs spaced 1.5 metres apart.

SEWAGE WORKS #2 - COTTAGE 6: servicing one (1) two (2) bedrooms / three (3) people per cottage (was approved by the Leeds, Grenville and Lanark District Health Unit permit # LG-214-86), for the collection,

treatment and subsurface disposal of domestic sewage effluent, as described below:

<u>Septic Tank (ST#2)</u>: One (1) existing precast concrete two compartment tank, having a capacity of 2,700 litres and equipped with an effluent filter at the outlet, discharging by gravity to a leaching bed as described below:

<u>Leaching Bed (LB#2)</u>: One (1) existing raised conventional trench leaching bed consisting of 75 m of 76 mm diameter distribution piping constructed in five (5) runs of fifteen (15) metre lengths with the runs spaced 1.5 metres apart.

SEWAGE WORKS #3: servicing a comfort station for thirty-one (31) RV trailer sites (RV1 - RV31), and includes eight (8) holding tanks, an existing septic tank (ST#3) and a leaching bed (LB#3) located near the comfort station. The existing holding tanks are to be converted into containment tanks, reuse the existing septic tank and decommission the existing leaching bed. Sewage from the containment tanks will be transferred via owner's haulage vehicle into a new transfer tank (TT#3) located near the existing comfort station and as described below:

<u>Septic Tank (ST#3)</u>: One (1) existing precast concrete two (2) compartment tank, having a capacity of 5,500 litres and to be retrofitted with an effluent filter at the outlet, to discharge into a transfer tank as described below;

<u>Transfer Tank (TT#3)</u>: One (1) proposed precast concrete single compartment tank, having a capacity of 9,400 litres and equipped with two (2) submersible grinder pumps operating alternating and demand controlled. The pumps are Goulds WS07-BHF 0.7 hp submersible dosing sewage, each rated a discharge of 94.6 L/min against 10.4 m total dynamic head (TDH) into the septic tank ST#7A as described later on:

SEWAGE WORKS #4 - 18 RV SITES (TO BE DECOMMISSIONED AND RETROFITTED FOR REUSE): servicing eighteen (18) RV trailer sites (RV39 - RV56), includes an existing septic tank (ST#4) and a leaching bed (LB#4); to be reused as follows:

<u>Septic Tank (ST#4)</u>: One (1) existing precast concrete double compartment tank, having an estimated working capacity of 5,500 litres and equipped with an effluent filter at the outlet, discharging by gravity to a proposed transfer /pump tank as described below;

<u>Transfer Tank (TT#4)</u>: One (1) proposed precast concrete single compartment tank, having a capacity of 1,700 litres and equipped with one (1) submersible effluent pump to work on demand; Goulds model WS07-BHF 0.7 hp rated for a discharge of 124.9 L/min against 10.1 m total dynamic head (TDH) to discharge into the septic tank (ST#7A) as described later on.

SEWAGE WORKS #5 - 7 RV SITES (Trailer sites - RV32 - RV38).

<u>Septic Tank (ST#5)</u>: One (1) existing precast concrete two compartment tank, having an estimated capacity of 5,500 litres and equipped with an effluent filter at the outlet, discharging by gravity to a leaching bed as described below;

Leaching Bed (LB#5): One (1) existing conventional trench leaching bed consisting of 135 m of 76 mm

diameter distribution piping constructed in nine (9) runs of fifteen (15) metre lengths with the runs spaced 1.5 metres apart.

SEWAGE WORKS #6 - SINGLE FAMILY DWELLING

<u>Septic Tank (ST#6)</u>: One (1) existing precast concrete two compartment tank, having an estimated capacity of 4,500 litres and equipped with an effluent filter at the outlet, discharging by gravity to a leaching bed as described below;

<u>Leaching Bed (LB#6)</u>: One (1) existing conventional trench leaching bed consisting of 90 m of 76 mm diameter distribution piping constructed in six (6) runs of fifteen (15) metre lengths with the runs spaced 1.5 metres apart.

SEWAGE WORKS #7 - PROPOSED REPLACEMENT SYSTEM FOR SEWAGE WORKS #3 & #4: (to service existing RV sites (RV1 - RV31, RV39 - RV56):

<u>Septic Tank (ST#7A)</u>: One (1) proposed precast concrete single compartment tank, having a working capacity of 23,000 litres and equipped a PVC baffle at the outlet, discharging by gravity to the septic tank 7B as described below:

<u>SepticTank (ST#7B)</u>: One (1) proposed precast concrete single compartment tank, having a working capacity of 13,625 litres and equipped a Polylok PL-525 effluent filter at the outlet, discharging by gravity to a pump tank as described below:

<u>Pump Tank (PT#7)</u>: One (1) proposed precast concrete single compartment tank, having a working capacity of 18,500 litres equipped with two (2) submersible effluent pumps model Goulds WE10H 1.0 hp; connected to two (2) zones via a rotating distribution valve. During a pumping event both pumps will operate for the specified time and will dose one (1) zone per event. During the next pumping event the rotating valve will rotate to allow the next zone to be dosed and so on. Each pump is rated for a discharge of 254 L/min against 13.1 m total dynamic head (TDH). Pumps are to be timer dosed, setting for will be ON: 2.35 min, OFF: 27.65 min. Flow meters are to be installed to monitor the actual sewage flow being pumped to the leaching bed as follows:

<u>Leaching Bed (LB#7):</u> The proposed subsurface leaching bed is a conventional stone and pipe leaching bed (Fill Based Absorption Trench), as defined in the Ontario Building Code (2012) subsection 8.7.2; total length of distribution piping 630 metres, in an area A = 2,590 square metre; divided in four (4) zones, with each zone having seven (7) runs of twenty-two and half (22.5) metre lengths with the runs spaced 1.6 metres apart, in trenches filled with imported septic sand depth 1200 mm with a "T" time = 6 - 8 min/cm, in a 300 millimetre deep layer of washed stone. A sand mantle with 500 millimetre in thickness and 30 metre long and 4% slope is extended beyond the distribution area.

SEWAGE WORKS #8 - COTTAGE #4 (an existing three (3) bedroom cottage):

<u>Septic Tank (ST#8)</u>: One (1) proposed precast concrete double compartment tank, having a working capacity of 3,600 litres and equipped a Tufftite EF-6 effluent filter at the outlet, discharging by gravity to a pump tank as described below;

<u>Pump Tank (PT#8):</u> One (1) proposed precast concrete single compartment tank, having a working capacity of 450 litres equipped with one (1) submersible effluent pump, to operate on demand, model Goulds WE05H 0.5 hp, rated for a discharge of 83 L/min against 10.6 m total dynamic head (TDH) via one (1) 38 mm diameter polyethylene (PE) pipe forcemain to transfer the effluent from the pump tank to the leaching bed as described below:

<u>Leaching Bed (LB#8):</u> The proposed subsurface leaching bed is a conventional filter media leaching bed with an effective surface area of the filter medium is 77 square metre with five (5) runs of six (6) metre lengths and spaced 1.0 metres apart. The runs are to consist of 76 mm diameter PVC piping with a slope of 3 mm per 10 m from the header to the footer and to be laid on 750 mm deep filter media sand comprised of particles ranging in size between the limits of an effective size of 0.25 mm with a uniformity coefficient not less than 3.5, an effective size of 2.5 mm with a uniformity coefficient not greater than 1.5, and having a uniformity coefficient not greater than 4.5. A sand mantle with 300 mm in thickness with **a T value = 6-8 min/cm** <5% passing #200 sieve and 20 metre long and 4% slope is extended beyond the distribution area;

all including fills, grading, seeding, sodding, other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage Works;

all in accordance with the submitted supporting documents listed in 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. "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;
- 3. "District Manager" means the District Manager of the Kingston District office ;
- 4. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 5. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
- 6. "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;
- 7. "Licensed Installer" means a person who is registered under the OBC to construct, install, repair, service, clean or empty on-site sewage systems;
- 8. "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;
- 9. "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;

- 10. "Owner" means Janet Burt and David Allan Burt and its successors and assignees;
- 11. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;
- 12. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 13. "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 to the District Manager;

- 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 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.
- 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 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. The Owner shall ensure that an 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. Upon **construction of** the Works, 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. Upon construction of the Works, 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 tank is pumped out every 3-5 years or when the tank is 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 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.
- 4. The Owner shall visually inspect the general area where Works are located for break-out once every month during the operating season.
- 5. 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.
- 6. 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.
- 7. The Owner shall employ measurement devices to accurately measure quantity of effluent being discharged to each individual subsurface disposal system, 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 system.
- 8. 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. **GROUNDWATER MONITORING AND RECORDING**

The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in **Schedule B**.

(3) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:

(a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions; and

(c) in respect of any parameters not mentioned in (a) - (b), the written approval of the District Manager, which approval shall be obtained prior to sampling.

(5) The measurement frequencies specified in subsection (2) in respect of any parameter are minimum requirements which may, after (24) months of monitoring in accordance with this Condition, be modified by the District Manager in writing from time to time.

(7) 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.

7. **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.
- 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.

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 provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
- 7. Condition 7 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the Approval and that the Works does not cause any impairment to the receiving watercourse.

Schedule A

1. Application for Environmental Compliance Approval submitted by Kaleb Lakew, P.Eng. of Kollaard Associates Inc., dated April 21, 2022 and received on May 5, 2022, for the proposed sewage Works, including Sewage Works Design Report, final plans and related documents.

Schedule B

Table 1 - Groundwater Monitoring - (Sample taken at 3 locations within 5 metersfrom the water's edge between Cottages 1 and 2; between Cottage 5 and RV 17 andbetween RV 9 and 10)				
Frequency	3 times yearly: spring, summer and fall			
Sample Type	Grab			
Parameters	Chloride, Sodium, Ammonia, TKN, Nitrate and Nitrite.			

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	Part II.1 of the <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5
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* 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

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 7th day of November, 2022

Fariha Parnu.

Fariha Pannu, P.Eng. Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*

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c: District Manager, MECP Kingston - District Kaleb Lakew, P.Eng., Kollaard Associates Inc.