

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 7690-BH3HN3
Issue Date: November 25, 2019

2490789 Ontario Inc.
1500 Yonge Street, No. 151
Toronto, Ontario
M5C 2W7

Site Location: 1133 Boyces Road
Township of Lake of Bays
District Municipality of Muskoka
P0A 1H0

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:

the establishment, use and operation of the proposed sewage works for the treatment and subsurface disposal of domestic sewage with a daily design sanitary sewage of 13,000 litres per day, to service proposed cottage, garage and boathouse, located at the above noted Site Location, consisting of the following:

Collection System

- collection system to be approved under the Ontario Building Code (OBC), located on Land Registry Information - PIN: 48063-0040, receiving sewage from the proposed cottage, garage and boat house and discharging to the Primary Treatment Tank described below;

Primary Treatment Tank

- one (1) tank (AD-36300 anaerobic digester by Waterloo Biofilter), located on Land Registry Information - PIN: 48063-0399, having a minimum capacity of 36,300 litres, equipped with inner-tube, receiving wastewater from the Collection System, and discharging to the pump tank described below, by gravity.

Pump Tank

- one (1) pump tank (PT-9000 Pump Tank by Waterloo Biofilter), located on Land Registry Information - PIN: 48063-0399, having a minimum capacity of 9000 litres, equipped with one (1) submersible effluent pump operating on a timer and run by Waterloo Smart Panel, dosing the effluent to basket biofilter described below.

Waterloo Biofilter Tertiary Treatment System

- one (1) 36,300 litres capacity Waterloo Biofilter treatment unit, located on Land Registry Information - PIN: 48063-0399, containing two (2) wire mesh baskets filled with biofilter medium, equipped with one (1) submersible effluent pump operating on demand and run by Waterloo Smart Panel, dosing approximately 50% of the effluent to the inlet of the primary treatment tank and the remaining effluent to the leaching bed described

below, via a distribution box.

Sub-surface Disposal System: Type A Dispersal Bed

- one (1) fully raised type A dispersal bed, located on Land Registry Information - PIN: 48063-0399, with a minimum 300 millimeters thick layer of imported sand fill having a percolation time (T) of 6 to 10 minutes per centimeter, with 350 millimeters deep clear washed top stone layer having an area of 260 square meters covered with a geotextile fabric, installed with ten (10) lines of 100 millimeters perforated distribution pipes, each 25 meters long (for a total of 250 meters), spaced 1000 millimeters apart center to center, with a 300 millimeters thick sand layer over geotextile fabric and 100 millimeters thick top soil cover over sand layer, complete with a minimum 250 mm thick imported soil mantle (T not greater than 15 minutes per centimeter) over the area covered by the leaching bed fill, and for at least 15 meters beyond the outer distribution pipes in any direction in which the effluent entering the soil or leaching bed fill will move horizontally.

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

all in accordance with supporting documents listed in **Schedule A**.

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

1. "Approval" means this entire approval document and any Schedules to it, and the application;
2. "BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;
3. "CBOD₅" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
4. "Certificate of Requirement" means a requirement made pursuant to section 103 of the *Ontario Water Resources Act*
5. "Director" means a person appointed by the Minister pursuant to Section 5 of the EPA for the purposes of Part II.I of the EPA;
6. "Grab Sample" means an individual sample of at least 1000 millilitres collected in an appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;
7. "District Manager" means the District Manager of the Barrie District Office;
8. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
9. "Licensed Installer" means a person who is registered under the OBC to construct, install, repair, service, clean or empty on-site sewage systems;
10. "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;

11. "OBC" means the *Ontario Building Code* ;
12. "Owner" means 2490789 ontario Inc., and its successors and assignees;
13. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
14. "Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a licence issued under the *Professional Engineers Act* ;
15. "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 conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with this Approval.
3. Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
4. Where there is a conflict between the documents listed in the Schedule A, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
5. The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.
6. The issuance of, and compliance with the conditions of this Approval does not:

(a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage works; or

(b) limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

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 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 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. B.17 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.
3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this environmental compliance approval.

4. CONSTRUCTION

1. The Owner shall ensure that the construction of the Works is supervised by a Licensed Installer or a Professional Engineer.
2. The Owner shall ensure that the Waterloo Biofilter Treatment system is installed in accordance with the Manufacturer's Installation Manual.

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 Professional Engineer or Licensed Installer 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 installer or a Professional Engineer, 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 AND MAINTENANCE

1. The Owner shall prepare an operations manual within six (6) months of the introduction of sewage to the Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for routine operation of all the Works;
 - b. inspection programs, including frequency of inspection, for all the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for all the Works; copies of maintenance contracts for any routine inspections & pump-outs should be included for all the tanks and treatment units;
 - d. procedures for the inspection and calibration of monitoring equipment;
 - e. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the District Manager; and
 - f. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
2. The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
3. The Owner shall, upon the construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology or its authorized agent. The maintenance agreement must be retained at the site and kept current for the

operational life of the Works.

4. The Owner shall ensure that all tanks are pumped out every 3-5 years or when the primary treatment tank is 1/3 full of solids and the effluent filters are cleaned out at minimum once a year or more often if required.
5. The Owner shall ensure that grass-cutting is maintained regularly over all the subsurface disposal beds, and the surface of the bed(s) are visually observed on a monthly basis. In the event a break-out is observed from a subsurface disposal bed, the Owner shall ensure that the sewage discharge to the bed is discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within one (1) week. The Owner shall ensure that during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to a surface water body or to the environment, and shall be safely collected and disposed off through a licensed waste hauler to an approved waste disposal site.
6. The Owner shall ensure that adequate steps are taken to ensure that the area of the Works are protected from all forms of vehicle traffic.

6. EFFLUENT LIMITS

1. The Owner shall design, construct, operate and maintain the Works such that the concentrations of the materials named as effluent parameters in the Effluent Limits Table listed in **Schedule B** are not exceeded in the effluent from the Works.
2. Non-compliance with respect to a Concentration Limit is deemed to have occurred when any single grab sample analyzed for a parameter named in subsection (1) is greater than the corresponding maximum concentration set out in subsection (1);

7. 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 at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Influent Monitoring Table included in **Schedule B**.
3. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Effluent Monitoring Table included in **Schedule B**.

4. 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.
5. The Owner shall ensure that flow of treated effluent discharged into the subsurface sewage system does not exceed 13,000 litres per day.
6. 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 Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions; and
 - 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.
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.

8. 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 *Environmental Protection Act*, the Owner shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
4. The Owner shall prepare and submit a performance report to the District Manager on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter.

The reports shall contain, but shall not be limited to, the following information:

- a. a summary and description of efforts made and results achieved in meeting the Effluent Limits of Condition 6;
- b. a summary and interpretation of all monitoring data and a comparison to the Effluent Limits including an overview of the success and adequacy of the Works, and a Contingency Plan in the event of not in compliance with the Effluent Limits.
- c. a review and assessment of performance of Works, including treatment unit and disposal bed;
- d. a description of any operating problems encountered and corrective actions taken at all Works located at the property;
- e. a record of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property' including but not limited to: records of maintenance inspections for the treatment system, records of sludge pump-outs accumulated from the treatment system, records of visual inspections of disposal system;
- f. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- g. a summary and interpretation of all daily flow data and results achieved in not exceeding the maximum daily sewage flow discharged into the subsurface disposal system;
- h. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- i. a summary of all spill or abnormal discharge events;
- j. any other information the District Manager requires from time to time;

9. CERTIFICATE OF REQUIREMENT

1. Pursuant to Section 103 of the OWRA, no person having an interest in the Property, shall deal with the Property in any way without first giving a copy of this Approval to each person acquiring an interest in the Property as a result of the dealing.
2. The Owner shall:
 - i. within sixty (60) days of the date of the issuance of this Approval, submit to the Director for their review, two copies of a completed Certificate of Requirement and a registerable description of the Property; and

- ii. within ten (10) calendar days of receiving the Certificate of Requirement authorized by the Director, register the Certificate of Requirement in the appropriate Land Registry Office on title to the Property and submit to the Director the duplicate registered copy immediately following registration.
3. For the purposes of this condition, Property shall mean the property located at 1133 Boyces Road, Franklin Ward, Township of Lake of Bays, District Municipality of Muskoka.

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. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such information is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.
6. Condition 6 is imposed to ensure that the effluent discharged from the Works to the groundwater meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
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 design objectives specified in the Approval and that the Works does not cause any

impairment to the receiving watercourse.

8. Condition 8 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.
9. Condition 9 is included in order to require the Owner to give notice of this Approval to potential future owners of the property before the property is dealt with.

Schedule A

1. Application for Environmental Compliance Approval for Private Sewage Works submitted by Dan Duke, P.Eng., of Duke Engineering received on July 30, 2019, including design report, final plans, specifications and all supporting documentation and correspondence submitted in support of this application.

Schedule B

Influent Monitoring Table

| | |
|--------------------------|--|
| Sampling Location | Primary Treatment Tank |
| Frequency | Annually |
| Sample Type | Grab |
| Parameters | BOD ₅ Total Suspended Solids (TSS) |

Effluent Monitoring Table

| | |
|--------------------------|---|
| Sampling Location | Distribution Box |
| Frequency | Quarterly |
| Sample Type | Grab |
| Parameters | CBOD ₅ Total Suspended Solids (TSS) |

Effluent Limits Table

| Effluent Parameter (tested on outlet from the final Waterloo Biofilter Treatment Units) | Concentration Limit (milligrams per litre unless otherwise indicated) |
|---|--|
| CBOD ₅ | 10 |
| Total Suspended Solids (TSS) | 10 |

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review 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 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

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

AND

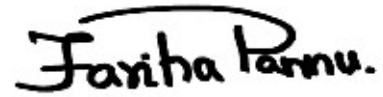
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.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 25th day of November, 2019



Fariha Pannu, P.Eng.

Director

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

SP/

c: District Manager, MECP Barrie District Office
Dan Duke, P.Eng., Duke Engineering