

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3274-CBML29
Issue Date: March 9, 2022

5001947 Ontario Inc.
1703 South Service Rd
St. Catharines, Ontario
L2R 6P9

Site Location: 4865 Martin Road North
Lincoln Town, Regional Municipality of Niagara

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:

installation of on-site sewage systems for the collection, transmission, treatment and disposal of sewage from a new warehouse development, including office space and a series of greenhouses for the purpose of growing, storing and distributing flowers and potted plants, consisting of the following:

PROPOSED WORKS

installation of one sewage treatment systems, receiving sewage from warehouse and office space at a daily maximum flow of 16,138 L/day, comprising of the following:

Septic Tanks

- One (1) proposed single compartment septic tank with a minimum capacity of 36,000 L, and one (1) double compartment septic tank with a minimum capacity of 25,000 L, equipped with two (2) OBC approved effluent filters, discharging by gravity to the pump tank as described below;

Pump Tank

One (1) 22,500 L pump tank with two (2) effluent pumps operating on a timer, pumping sewage to the AQUA Wetland System (AWS) for treatment;

AQUA Wetland System (AWS)

One AQUA Wetland System (AWS) consisting of a vertical, subsurface flow, constructed wetland, fully lined

with an impermeable PVC liner that prevents contact between the wastewater and the surrounding soil or groundwater, with a designed hydraulic loading rate (HLR) of 67.5 L/m²/d, having a total area of 250 square metres, including four (4) cells, each with 62.5 square metres and a depth of 1.22 m:

- Cell 1: pre-treatment cell with aerobic conditions to initiate organic decomposition, filled with gravel (1/4" clear) for physical filtration;
 - Cell 2: aerobic treatment to remove organic material and allow for nitrification, filled with gravel (1/4" clear) for physical filtration;
 - Cell 3: anaerobic treatment cell with woodchips to allow for denitrification; and
 - Cell 4: polishing cell to remove any residual contaminants and organic material released in cell 3, filled with gravel (1/4" clear) for physical filtration.
- Recirculation to an anoxic volume, e.g. standing water in pump tank, allowing denitrification of recirculated nitrate;
- A final pump tank, pumping the treated and polished effluent from AWS to raised Type A Sand Dispersal Beds;

Type A Dispersal Beds

- Two (2) Raised Type A Dispersal Beds, having a total combined active dispersal area of 328.6 m², each having an area of 164.3 m² and a 300 mm thick stone layer on top a 600 mm thick imported sand layer (having percolation time of 6 to 10 min/cm), with stone layer protected with a permeable geotextile fabric and equipped with seven (7) runs of 29.8 m long, 100 mm diameter distribution pipes, having sand mantle with an area of 2,028 m², extending 19.9 m beyond the perimeter of stone layer in the direction of effluent flow, with a minimum of 300 mm thick sand layer and 100 mm thick topsoil;

EXISTING WORKS

four (4) existing sewage treatment systems servicing one (1) residential dwelling and three (3) seasonal farm help houses, including the following:

Sewage System for Residential House #1

one existing septic system servicing a three-bedroom dwelling, with a daily sewage flow of 1,600 L/day, consisting of an approximate 4,500 L double-chamber septic tank with green poly-lock lids, discharging by gravity to fill-based absorption trench leaching bed with dimensions of 17.0 m x 13.0 m;

Sewage System for Seasonal Farm Help House #2

one existing septic system servicing a three-bedroom seasonal farm house with four seasonal workers, with a daily sewage flow of 1,000 L/day, consisting of an approximate 3,600 L double-chamber septic tank,

discharging by gravity to in-ground absorption trenches with dimensions of approximately 15.0 m x 8.0 m;

Sewage System for Farm Help House #3

one existing septic system servicing a four-bedroom farm house with four seasonal workers, with a daily sewage flow of 2,000 L/day, consisting of an approximate 3,600 L double-chamber septic tank, discharging by gravity to in-ground absorption trenches with dimensions of approximately 9.88 m x 13.63 m;

Sewage System for Seasonal Farm Help House #4

one existing septic system servicing a three-bedroom seasonal farm house with four seasonal workers, with a daily sewage flow of 1,000 L/day, consisting of an approximate 3,600 L double-chamber septic tank, discharging by gravity to in-ground absorption trenches with dimensions of approximately 10.0 m x 16.8 m; All in accordance with the supporting documents set out in Schedule "A" attached to this Approval.

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

"Act" means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"Annual Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year;

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

"BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"CBOD₅" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"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 Niagara District Office;

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

"Existing Works" means those portions of the sewage Works previously approved under an Approval;

"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;

"Owner" means 5001947 Ontario Inc. and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Substantial Completion" has the same meaning as "substantial performance" in the *Construction Lien Act* ;

"Works" means the sewage works described in the Owner's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval 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 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 the description given in this Approval, and the application for approval of the Works.

(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 submitted documents, 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.

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 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. 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.

4. **CONSTRUCTION**

(1) The Owner shall ensure that the construction of the works is supervised by a Licensed Installer as defined in the *Ontario Building Code* or a Professional Engineer, as defined in the *Professional Engineers Act*.

(2) 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 and staff of the local municipality.

5. **EFFLUENT LIMITS**

(1) The Owner shall operate and maintain the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent being discharged from the AWS to the Type A dispersal beds.

Table 1 - Effluent Limits	
(for samples collected from the final pump tank upstream of the Type A dispersal beds)	
Effluent Parameter	Annual Average Concentration limits (milligrams per litre unless otherwise indicated)
CBOD ₅	10.0
Total Suspended Solids	10.0
Nitrate Nitrogen	5.0

(2) For the purposes of determining compliance with and enforcing subsection (1):

(a) The Annual Average Effluent Concentration of a parameter named in Column 1 of the tables in subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of the tables in subsection (1).

(b) The pH of the effluent shall be maintained between 6.0 to 9.0, at all times.

(3) Paragraphs (a) to (b) of subsection (2) shall apply upon the Substantial Completion of the Works.

6. OPERATIONS AND MAINTENANCE

(1) The Owner shall prepare an Operations Manual within six (6) months of the start up of the Works, that includes, but is not necessarily limited to, the following information:

(a) operating procedures for routine operation of the Works;

(b) procedures for the inspection and calibration of monitoring equipment;

(c) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary.

(d) repair and maintenance programs, including the frequency of repair and maintenance for the sewage Works;

(e) contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the District Manager; and

(f) complaint procedures for receiving and responding to public complaints.

(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 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.
- (4) The Owner shall sign a Service and Maintenance Agreement with the manufacturer or approved agent of the Aqua Wetland System (AWS). 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.
- (5) The Owner shall receive from the manufacturer or distributor of Aqua Treatment Technologies Ltd. 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.
- (6) The Owner shall ensure that the treatment systems are at minimum inspected annually by Aqua Treatment Technologies Ltd. authorized personnel, and maintained according to the manufacturer's recommendations;
- (7) 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).
- (8) The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal beds, and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.
- (9) The Owner shall ensure that the drainage operations in the subsurface disposal bed on the property are observed on a monthly basis for breakouts and results recorded in a log book.
- (10) The Owner shall ensure that in the event a breakout is observed from the subsurface disposal bed, the discharge to the bed is immediately discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within one (1) week. The Owner shall also ensure that during the time remedial actions are taking place the discharge from the Works is collected and disposed off-site through a licensed waste hauler to an approved waste disposal site.
- (11) The Owner, prior to the start-up of the Works, shall test the proposed effluent dosing pumps installed upstream of leaching beds to verify capacity and pump(s) running time as per this Approval, so the Works will operate within the approved capacity by this Approval.
- (12) The Owner shall employ for the overall operation of the Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.
- (13) The Owner shall maintain a physical or digital logbook to record the results of Operation and Maintenance activities specified in the above subclauses, and shall make the logbook available for inspection by the Ministry staff.

(14) 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. 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) For the purposes of this condition, the following definitions apply:

- (a) Monthly means once every month;
- (b) Quarterly means once every three months;
- (c) Annually means once every year;
- (d) biannually means once every two years;

(3) Samples shall be collected at the following sampling points, at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 2 - Raw Sewage Monitoring (Samples to be collected at the outlet of the first septic tank)		
Parameters	Sample Type	Frequency
BOD ₅	Grab	Quarterly
Total Suspended Solids	Grab	Quarterly
Total Phosphorus	Grab	Quarterly
Total Kjeldahl Nitrogen	Grab	Quarterly
Alkalinity	Grab	Quarterly
pH	Grab	Quarterly

Table 3 - Effluent Monitoring		
(Samples to be collected at the final pump tank upstream of the beds)		
Parameters	Sample Type	Frequency
CBOD ₅	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Nitrite Nitrogen	Grab	Monthly
Nitrate Nitrogen	Grab	Monthly
Temperature	Grab	Monthly
pH	Grab	Monthly

Table 4 - Groundwater Monitoring			
Locations	Parameters	Sample Type	Frequency
MW1, MW2, MW3	Nitrate-N, CBOD ₅ , TSS	Grab	Annually
MW4, MW5	Nitrate-N, CBOD ₅ , TSS	Grab	Biannually

(4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(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;

(b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;

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

(d) for any parameters not mentioned in the documents referenced in (a), (b) and (c), the written approval of the District Manager shall be obtained prior to sampling.

(5) After the start operation of the sewage works, groundwater monitoring at MW1, MW2 and MW3 shall be conducted for five years and monitoring at MW4 and MW5 shall be conducted over ten years.

(6) The Owner shall measure/estimate and record the daily volume of effluent being discharged to the sewage treatment system.

(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) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 6 orally, as soon as reasonably possible, and in writing within seven (7) days after receiving analytic results of the exceedance.
- (3) 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.
- (4) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- (5) Within three (3) months upon the issuance of this Approval, the Owner shall develop a contingency plan in case that the AWS treatment system can't achieve the required nitrate-nitrogen concentration less than 5 mg/L (Annual Average Concentration) and submit this plan to the District Manager.
- (6) The Owner shall prepare, and submit to the District manager, a performance report, 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 interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 5, including an overview of the success and adequacy of the Works;
 - (b) a tabulation of the daily volumes of effluent disposed through the sewage treatment systems during the reporting period;
 - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works; and
 - (d) a description of any operating problems encountered and corrective actions taken.
 - (e) a summary and interpretation of all flow data and results achieved in meeting the maximum daily flows for each sewage Works as approved under this Approval.

(f) a summary of any complaints received during the reporting period and any steps taken to address the complaints;

(g) a summary of all spill or abnormal discharge events; and

(h) any other information the District Manager requires from time to time.

SCHEDULE "A"

1. Environmental Compliance Approval Application for Municipal and Private Sewage Works, submitted by T.I Services, dated March 19, 2021 and received on May 6, 2021.
2. Waterview Farms Large Subsurface Sewage Disposal System Design 4865 Martin Rd. N Lincoln, ON, along with drawings, dated December 9, 2021, prepared by T.I Services.
3. Engineering Report for the Design of an Aqua Wetland System, dated February 10, 2021, prepared by Rivercourt Engineering Inc.

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 in accordance with the approval and that record drawings of the Works "as Constructed" are maintained for future references.
5. Condition 5 is imposed to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body.
6. Condition 6 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 a 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.
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.

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

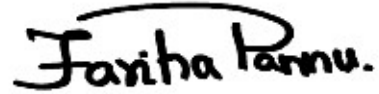
The Director appointed for the purposes of
Part II.1 of the *Environmental Protection Act*
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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**

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 9th day of March, 2022

A handwritten signature in black ink that reads "Fariha Pannu." The signature is written in a cursive style with a large, sweeping initial 'F'.

Fariha Pannu, P.Eng.

Director

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

YZ/

c: District Manager, MECP Niagara District Office
Trevor Imhoff, T.I. Services