

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4698-BJQM4U
Issue Date: February 27, 2020

1725596 Ontario Limited
201 Regional Road 42
Clarington, Ontario
L1B 1L9

Site Location: 2145 Bragg Rd
Municipality of Clarington, Regional Municipality of
Durham
L1B 1L9

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:

an existing sewage septic system and establishment of two (2) new sewage septic systems, all seasonally-operated (from March to November, approximately 140 days per year), for collection, treatment and disposal of domestic sanitary sewage generated from existing a 3-storey brick house, five (5) residence trailers, and a bunk house, occupied by approximately up to ninety nine (99) seasonal workers at Algoma Orchards Ltd., at the above location, consisting of the following:

Proposed Works

- New Septic System No.1
 - located to the southeast of the 3-storey brick house, designed with a Rated Capacity of 9,400 L/day to serve 47 seasonal workers, including,
 - one (1) in-ground dual chamber precast concrete **18,800 L Septic Tank**, equipped with an effluent filter, discharging sewage by gravity to following a 9,400 L Pumping Tank;
 - one (1) in-ground **9,400 L Pumping Tank**, located immediately downstream of the 18,800 L Septic Tank, equipped with two (2) submersible sewage pumps (Flygt, or approved equivalent) running in alternating mode, each pump rated at 1.5 m³/h with a TDH of 10 m and running cyclically for approximately 3~4 hours per day; complete with a set of high- and low- level switches, as well as a high level alarm system; discharging effluent via twin 100 mm diameter forcemains (each forcemain equipped with a flow meter housed in a meter chamber) to an Absorption Trenches Bed No.1;
 - **Absorption Trenches Bed No.1**, including,
 - Two (2) **Pumping Stations**, located adjacent to the east edge of the Absorption Trenches Bed

No.1: each including a 4,500 L volume of distribution tank equipped with a submersible sewage pump (Flygt, or approved equivalent) rated at 1.0 m³/h with a TDH of 10m, distributing effluent via pumping to the dedicated cell.

- one (1) fully-raised Absorption Trenches Bed No.1, with a total loading area of 3,015 m² measured 67 m x 45 m, will be raised approximately 1.0 m above the native grade, to be constructed in two (2) cells, each cell consisting of twelve (12) runs of 75 mm diameter perforated PVC pipes (spaced at 1.6 m from centre to centre) installed in twelve (12) 0.6 m (depth) x 0.5 m (width) x 30 m (length) clear stone trenches protected with permeable geo-textile fabric, each run to be approximately 30 m long for a total distribution pipe length of approximately 720 m, underlain by 900 mm thick (including 500 mm cut depth into native grade) of approved imported soil / imported sand with a percolation T-time of 15 min/cm and backfilled with approximately 75 mm thick top soil; complete with minimum 300 mm thick sand mantle extending northward, southward and westward for approximately 15 m respectively at 3:1 slope from the perimeter of the trenches area to the native grade;
- **New Septic System No.2**
located to the southeast of the 5 residence trailers, designed with a Rated Capacity of 8,600 L/day to serve 42 seasonal workers, including,
 - one (1) in-ground dual chamber precast concrete **17,200 L Septic Tank**, equipped with an effluent filter, discharging sewage by gravity to following a 8,600 L Pumping Tank;
 - one (1) in-ground **8,600 L Pumping Tank**, located immediately downstream of the 17,200 L Septic Tank, equipped with two (2) submersible sewage pumps (Flygt, or approved equivalent) running in alternating mode, each pump rated at 1.5 m³/h with a TDH of 10 m and running cyclically for approximately 3~4 hours per day; complete with a set of high- and low- level switches, as well as a high level alarm system; discharging effluent via twin 100 mm diameter forcemains (each forcemain equipped with a flow meter housed in a meter chamber) to an Absorption Trenches Bed No.2;
 - **Absorption Trenches Bed No.2**, including,
 - Two (2) Pumping Stations, located adjacent to the east edge of the Absorption Trenches Bed No.2: each including a 4,500 L volume of distribution tank equipped with a submersible sewage pump (Flygt, or approved equivalent) rated at 1.0 m³/h with a TDH of 10m, distributing effluent via pumping to the dedicated cell.
 - one (1) fully-raised Absorption Trenches Bed No.2, with a total loading area of 2,880 m² measured 64 m x 45 m, will be raised approximately 1.0 m above the native grade, to be constructed in two (2) cells, each cell consisting of eleven (11) runs of 75 mm diameter perforated PVC pipes (spaced at 1.6 m from centre to centre) installed in eleven (11) 0.6 m (depth) x 0.5 m (width) x 30 m (length) clear stone trenches protected with permeable geo-textile fabric, each run to be approximately 30 m long for a total distribution pipe length of approximately 660 m, underlain by 1,000 mm thick of approved imported soil / imported sand with a percolation T-time of 15 min/cm and backfilled with approximately 75 mm thick top soil; complete with minimum 300 mm thick sand mantle extending northward, southward and westward for approximately 15 m respectively at 3:1 slope from the perimeter of the trenches area to the native grade ;

Decommissioning

Decommissioning of an old septic system serving the 3-storey brick house upon commissioning of New Septic System No.1; and removal of all this sewage system's components from the site, including a septic tank and a septic bed.

Existing Works

Existing Septic System No.3, located to the west of the bunk house and the north of the warehouse, with an estimated design capacity of 1,800 L/day, serving 9 seasonal workers, including,

- one (1) 4,500 L septic tank, and
- one (1) approximately 450 m² leaching bed consisting of fifteen (15) runs of 75 mm diameter 30 m long perforated distribution pipes.

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, including the application and Supporting Documentation;
2. "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;
3. "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;
4. "District Manager" means the District Manager of the York - Durham District Office;
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. "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;
8. "OBC" means the Ontario Building Code;
9. "Owner" means 1725596 Ontario Limited and its successors and assignees;
10. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
11. "Rated Capacity" means maximum daily sanitary sewage design flow for which the Works are approved to handle;
12. "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;

13. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
14. "Supporting Documentation" means the documents listed in Schedule A of this Approval;
15. "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 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

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) The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.

(3) Upon construction of the Works, the Owner shall prepare a statement, certified by a 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.

(4) The Owner shall prepare a complete set of "as constructed" drawings within one (1) year of Substantial Completion of the Works. The drawings must be retained at the site and kept current and shall be made available for inspection by Ministry staff.

5. 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 stream over the time period being monitored.

(2) Establish three (3) permanent groundwater monitoring wells (MW1, MW2, and MW3) down-gradient of the proposed New Septic System No.1 and New Septic System No.2 respectively, as

located in Figure No.3 listed in item No.5 of **Schedule A**.

(3) Collect groundwater samples at the two (2) existing onsite water supply wells (one adjacent to the bunk house, the other to the west of the 3-storey brick house fronting Bragg Road), and the three (3) groundwater monitoring wells MW1, MW2, and MW3, illustrated in Figure No.3 listed in item No.5 of **Schedule A**, at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 1 - Groundwater Monitoring	
Frequency	twice per year (once in March/April, once in September / October)
Sample Type	Grab
Parameter	Total Phosphorus, Total Ammonia Nitrogen, Nitrite and Nitrate Nitrogen, Chlorides, <i>E.coli</i> , Total Coliforms

Table 2 - Groundwater Triggers		
Trigger Parameter	Total Inorganic Nitrogen	Nitrate Nitrogen
Trigger Value	7.0 mg/L	7.0 mg/L

(4) The temperature and pH of the groundwater at the groundwater wells shall be measured and recorded in the field at the time of sampling for Total Ammonia Nitrogen. The concentration of un-ionized ammonia shall be calculated by taking into account the total ammonia concentration, pH and temperature, and using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

(5) In the event of an exceedance of any trigger value set out in Table 2 at any listed water supply well or groundwater monitoring well ,

(a) The Owner shall notify the District Manager forthwith in writing if the Total Inorganic Nitrogen (TIN), being the sum of nitrate nitrogen, nitrite nitrogen, and ammonia nitrogen, in the groundwater sample exceeds 7.0 mg/L.

(b) The Owner shall notify the District Manager forthwith in writing if the Nitrate Nitrogen in the groundwater sample exceeds 7.0 mg/L.

(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:

(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 Version 2.0" January 2016), PIBS 2724E02, as amended;

(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.

(7) The sampling frequencies, parameters and locations outlined in Subsection (3) are minimum requirements. The monitoring shall be undertaken for a period of at least three (3) years in accordance with this Condition following the issuance of the Approval, after which time, the monitoring program may be amended by the Director in writing from time to time, upon receiving written recommendations from the District Manager.

(8) The Owner shall retain for a minimum five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by the Approval.

6. OPERATIONS, MAINTENANCE, AND RECORDING

(1) The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.

(2) The Owner shall 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 filters are 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 beds, and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.

(4) The Owner shall ensure that in the event a break-out is observed from a subsurface disposal bed, the sewage discharge to the bed is discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within seven (7) days. 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 safely collected and disposed of through a licensed waste hauler to an approved waste disposal site.

(5) 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.

(6) 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.

7. REPORTING

(1) One (1) week prior to the start up of the operation of the Proposed 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, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or 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.

PROHIBITION

The Owner shall ensure that the Works are operated exclusively for the collection, transmission, treatment and disposal of sanitary sewage. Under **no** circumstance shall any industrial process wastewater (including, but not limited to, the wastewater from irrigation of the plants, the wastewater from the washing of floors/fruits (if any)/equipment, floor drain wastewater, or boiler blow downs or condensate) generated from the site or pesticide chemicals be discharged into the Works.

SCHEDULE A

1. Environmental Compliance Approval Application submitted by and signed by Mr. Kirk Kemp of 1725596 Ontario Limited O/A Algoma Orchards Ltd., dated June 8, 2019, and all supporting documentation and engineering design information provided by Mr. Chad Stewart, P.Eng. of Altech Environmental Consulting Ltd..
2. Response to Letter of Acknowledgement Reference Number 1601-BCEPNH, Signed by Chad Stewart, P. Eng. of Altech Environmental Consulting Ltd. June 26, 2019
3. Altech. 2019a. Hydrogeologic Abstract & Discussion of Reasonable Use Guideline, 1725596 Ontario Limited (Algoma Orchards Inc.) 2145 Bragg Road, Clarington, ON; Application for Approval of Private Sewage Works, Reference number 0762-AXQ59; Signed by Chad Stewart, P. Eng of Altech Environmental Consulting Ltd, December 9, 2019;
4. Altech. 2019b. Monitoring & Contingency Plan for Septic Systems 1725596 Ontario Limited (Algoma Orchards Inc.) 2145 Bragg Road, Clarington, ON; Application for Approval of Private Sewage Works, Reference number 1601-BCEPNH; Signed by Chad Stewart, P. Eng of Altech Environmental Consulting Ltd, December 11, 2019.
5. Altech. 2019c. Site Plan with Groundwater Flow Direction 2145 Bragg Road, Clarington 2019/10/04, Project No. 6336-19, 6497-19, Figure No.3 signed and stamped by C.R. Stewart, P. Eng. 10/07/2019, Altech Environmental Consulting Ltd.

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 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 objectives outlined in the Reasonable Use Policy and that the Works does not cause any impairment to the receiving watercourse and the groundwater users.
6. Condition 6 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected.
7. Condition 7 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 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

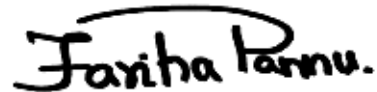
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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 27th day of February, 2020



Fariha Pannu, P.Eng.

Director

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

YD/

c: District Manager, MECP York-Durham
Chad Stewart, Altech Environmental Consulting Ltd.