

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 3841-BP3GWL

Issue Date: May 30, 2020

Cuesta Estates & Winery Inc.  
71 Ennisclare Dr  
Oakville, Ontario  
L6J 4N3

Site Location: 3991 King Street  
Town of Lincoln  
Regional Municipality of Niagara, Ontario

*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:*

sewage treatment and subsurface disposal works for the treatment and disposal of domestic sewage, having a Rated Capacity of 11,222 litres per day with a balanced flow rate of 8,600 litres per day, accepting sanitary sewage from tasting room, beer garden (patio), retail area, production building, and event building (renovated from a church), at a brewery production site located at 3991 King Street, in the Town of Lincoln, consisting of the following:

- one (1) 4,700 litre pump tank, receiving sanitary sewage from the event building, equipped with grinder pump, discharging into a 30,000 litre septic tank;
- one (1) 30,000 litre septic tank, equipped with effluent filter, receiving all sanitary sewage from the site, discharging via gravity into 33,400 litre pump tank;
- one (1) 33,400 litre pump tank, also functioning as a balancing tank, equipped with effluent pump with timer control and high level audible/visible alarm systems, discharging into an Aqua Wetland System;
- one (1) Aqua Wetland System (AWS) with a total area of 300 square metres, consisting of two (2) cells and two (2) dosing effluent pumps capable of pumping 140 litres per minute at a Total Dynamic Head (TDH) of 6 metres, with Cell #2 dosing pump operating on demand via float and effluent pump operating on a timer to discharge effluent into a Waterloo Biofilter Treatment System;
- One (1) Waterloo Biofilter Treatment System, having a design capacity of 8,600 litres per day and comprising the following:

- one (1) 28,000 litre Waterloo Biofilter anaerobic digester tank, received effluent from the above mentioned AWS pre-treatment system, discharging into a 10,000 litre pump tank;
- one (1) 10,000 litre pump tank, equipped with effluent pump, discharging to a Waterloo Biofilter tank;
- one (1) Waterloo Biofilter BT28000 Biofilter Treatment Tank, with closed loop recirculation component, comprising spray units and mesh baskets filled with Biofilter media, discharging via an effluent pump into a WaterNOx-LS Tank,
- one (1) 20,000 litre Waterloo Biofilter WaterNOx-LS Tank, equipped with Biofilter media which promotes the growth of denitrifying bacteria, discharging into a 4,700 litre pump tank;
- one (1) 4,700 pump tank, equipped with alternating duplex effluent pumps, discharging final effluent into a Type A Dispersal Bed at a dosing rate of approximately 520 litres per dose;
- one (1) raised Type A Dispersal Bed, having an active area of 172 square metres consisting of a 300 millimetre thick stone layer on top of a 600 millimetre thick imported sand layer (having a percolation time of 6 to 10 minutes per centimetre), with the stone layer protected with a permeable Geotextile fabric and equipped with twenty-two (22) runs, 5.4 metre long each, 75 millimetre diameter distribution pipes, complete with a 1,075 square metre mantle area extending approximately 45 metres beyond the perimeter of stone layer in a northerly direction, with a minimum of 300 millimetre thick sand layer and 100 millimetre thick topsoil; and
- all other controls, electrical equipment, instrumentation, piping, valves, vents and appurtenances essential for the proper operation of the aforementioned sewage works.

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:*

1. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
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. "District Manager" means the District Manager of the Niagara District Office;
4. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
5. "Licensed Installer" means a person who holds a licence under Article 2.12.3.1 of the Ontario Building Code;
6. "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;

7. "OBC" means the Ontario Building Code;
8. "Owner" means Cuesta Estates & Winery Inc., and its successors and assignees;
9. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
10. "Rated Capacity" means design daily sanitary sewage flow for which the Works are approved to handle;
11. "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;
12. "Single Sample Concentration" means the concentration of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;
13. "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 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. 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 or a Professional Engineer, as defined in the *Professional Engineers Act*.
2. The Owner shall ensure that the Waterloo Biofilter Treatment System is installed in accordance with the Manufacturer's Installation Manual.
3. 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.
4. Upon construction of the Works, the Owner shall prepare a set of as-built drawings showing the works "as constructed", which 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.

## 5. DESIGN OBJECTIVES

1. The Owner shall use best efforts to design, construct and operate the sewage treatment works with the objective that the concentrations of the materials named as effluent parameters in the Effluent Objectives Table (Table 1) listed in **Schedule B** are not exceeded in the effluent being discharged to the Type A Dispersal Bed.
2. The Owner shall ensure that the total flow of treated effluent from Waterloo Biofilter Treatment System discharged into the Type A Dispersal Bed does not exceed the design capacity of 8,600 litres per day.

## 6. EFFLUENT LIMITS

1. The Owner shall operate and maintain the sewage treatment works such that the compliance limits for the effluent parameters from the Waterloo Biofilter Treatment System prior to discharging into Type A Dispersal Bed, as listed in the Effluent Limits Table (Table 2) in **Schedule B** are met.

## 7. 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 prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed"

drawings within one (1) year of Substantial Completion of the Works. The maintenance agreement and drawings must be retained at the site and kept current.

4. The Owner shall ensure that all septic tanks are pumped out every 3-5 years or when the 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 drainage operations in all beds 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 safely collected and disposed of 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.
7. 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.

## **8. MONITORING AND RECORDING**

1. The Owner shall, upon commencement of operation of the Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in **Schedule C** and record all results, as follows:
  - a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.
  - b. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 2.a.
2. 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 from time to time by more recently published editions;
  - 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. an approved method that meets the same data quality objectives specified in either of the above documents.
3. The Owner shall employ any measurement devices to accurately measure quantity of effluent being discharged to the Type A Dispersal Bed, including but not limited to water/wastewater flow meters, event counters, running time clocks, or electronically controlled dosing, and shall record the daily volume of effluent being discharged to the Type A Dispersal Bed.
4. The measurement parameters, frequencies and locations specified in subsection 1 in respect to any parameter are minimum requirements which may, after **one (1) year** of monitoring in accordance with this Condition, be modified by the Director in writing from time to time when approved by District Manager upon reviewing annual monitoring and performance report.
5. 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.

## 9. 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, on an annual basis, within ninety (90) days following the end of each operational season to the District Manager. 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 effluent monitoring data and a comparison to the Effluent Limits (Condition 6) including an overview of the success and adequacy of the Works;
  - b. a review and assessment of performance of Works, including sewage treatment units and subsurface disposal beds;
  - c. a description of any operating problems encountered and corrective actions taken at all sewage

Works located at the property;

- d. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property;
- e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- f. a summary and description of efforts made and results achieved in meeting the Effluent Objectives of Condition 5;
- g. a summary and interpretation of all flow data and results achieved in not exceeding the maximum daily flow discharged into each 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; and
- j. any other information the District Manager requires from time to time.



## Schedule A

1. Application for Environmental Compliance Approval dated November 8, 2019 and received on December 6, 2019, and submitted by Cuesta Estates & Winery Inc., for the proposed sewage treatment and subsurface disposal systems, including design brief, final plans and specifications.

## Schedule B

**Table 1 - Effluent Concentration Objectives Table**

<b>Final Effluent Parameter</b>	<b>Averaging Calculator</b>	<b>Effluent Design Objective</b>
CBOD5	Single Sample Concentration	10.0 mg/L
Total Suspended Solids	Single Sample Concentration	10.0 mg/L
Total of Nitrate, Nitrite and Ammonia Nitrogen	Single Sample Concentration	3.1 mg/L

**Table 2 - Effluent Concentration Limits Table**

<b>Final Effluent Parameter</b>	<b>Averaging Calculator</b>	<b>Effluent Compliance Limit</b>
CBOD5	Single Sample Concentration	20.0 mg/L
Total Suspended Solids	Single Sample Concentration	20.0 mg/L

## Schedule C

**Table 3 - Effluent Monitoring Table**

Sample location: effluent from the final pump tank of the Waterloo Biofilter System,  
prior to discharging into Type A Dispersal Bed

<b>Parameters</b>	<b>Sample Type</b>	<b>Minimum Frequency</b>
CBOD5	Grab	Once per Month
Total Suspended Solids	Grab	Once per Month
Nitrate Nitrogen	Grab	Once per Month
Nitrite Nitrogen	Grab	Once per Month
Ammonia Nitrogen	Grab	Once per Month

*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 imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
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 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.
8. Condition 8 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 criteria specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.

9. Condition 9 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](http://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 30th day of May, 2020



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

NH/

c: District Manager, MECP Niagara District Office  
Andrew Hellebust, Rivercourt Engineering Inc.