

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER: 0001119543

Version: 1.0

Issue Date: 02/13/2020

Pursuant to section 20.3 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

**Client Name:** WUHU INDUSTRIES LTD**Address:** Street Information: 461 Lexington Crescent  
City/Town: Waterloo  
Municipality: WATERLOO CITY  
State/Province: ONTARIO  
Postal Code: N2K 2J7  
Country: Canada

For the following site:

**Site Name:** 813 Old HWY 2**Site Location:** Street Information: 813 OLD HIGHWAY 2  
Postal Code: K8V 5P5  
City/Town: TRENTON  
Municipality: QUINTE WEST  
State/Province: ONTARIO  
Country: CANADA  
MECP District/Area Office: Peterborough District Office

This Environmental Compliance Approval includes the following:

<b>Section</b>	<b>Contents</b>
1	Activity Description
2	Definitions
3	Terms and Conditions
4	Reasons
5	Schedules

**Section 1: Activity Description**

*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:*

subsurface sewage disposal Works for the collection, transmission, treatment and subsurface disposal of domestic sewage with a daily sanitary sewage flow of **13,500 litres per day** located at the above Site Location, consisting of the following:

**Existing Works**

## **System A** (South – 6,750 litres per day)

### ***Septic Tanks***

- existing two (2) dual compartment ***septic tanks*** in parallel, each having a minimum capacity of 5,000 litres, receiving wastewater from the one (1) building (comprising of twenty-four (24) bedrooms, twelve (12) washrooms and one (1) washer) and discharging effluent to the pump chamber described below by gravity;

### ***Pump Tank***

- existing one (1) single-compartment ***pump chamber*** equipped with submersible effluent pump, receiving wastewater from the existing septic tank (described above) and pumping the wastewater to the subsurface sewage disposal system described below.

### ***Subsurface Sewage Disposal Bed***

- existing one (1) subsurface sewage disposal bed with nine (9) runs of 12 metres long of 75 millimetre diameter perforated distribution pipes (for a total of 108 metres long perforated distribution pipes).

## **Proposed Works**

## **System B** (North - 6,750 litres per day)

### ***Septic Tanks***

- proposed two (2) dual compartment ***septic tanks*** in parallel, each having a minimum capacity of **9,092 litres**, receiving wastewater from the one (1) building (comprising of twenty-four (24) bedrooms, twelve (12) washrooms and one (1) washer) and discharging effluent to the pump chamber described below by gravity;

### ***Pump Tank***

- proposed one (1) single-compartment ***pump chamber*** having a minimum capacity of 4,546 litres equipped with two (2) submersible effluent pumps and an alarm system, receiving wastewater from the proposed septic tanks (described above) and pumping the wastewater to the proposed treatment systems described below.

### ***Treatment System***

- three (3) Ecoflo Biofilter treatment unit (Model No. ST-650), each having a maximum design capacity of 2,500 litres per day installed over the subsurface sewage disposal bed – type A bed described below.

### ***Type A Bed***

- one (1) above-ground ***type A bed*** configured in three-cells, **each** of a minimum 200 millimetre deep x 7 metres wide x 7 metres long washed septic stone layer protected with a permeable geo-textile fabric, overlying a sand area of 690 square metres consisting of a layer of sand with a minimum thickness of 300 millimetres below the stone layer and a minimum thickness of 300 millimetres in the remainder of the sand contact area, and a percolation rate of 6 to 10 minutes per centimetre complete with a sand mantle extending a minimum of 15 metres beyond the outermost distribution pipes in any direction which the effluent will move laterally in the soil away from the dispersal bed.

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

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

## **Section 2: Definitions**

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

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

"BOD<sub>5</sub>" (also known as TBOD<sub>5</sub>) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"CBOD<sub>5</sub>" 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 Peterborough District Office;

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

"Existing Works" means those portions of the Works included in the Approval that have been constructed previously;

"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;

"OBC" means the Ontario Building Code;

"Owner" means WUHU INDUSTRIES LTD, and its successors and assignees;

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

"Professional Engineer" means a person entitled to practise as a Professional Engineer in the Province of Ontario under a licence issued under the *Professional Engineers Act*;

"Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed; and

"Works" means the sewage works described in the Approval, and includes both Proposed Works and Existing Works.

## **Section 3: Terms and Conditions**

*You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:*

### **1. GENERAL CONDITION**

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these terms and 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 this environmental compliance approval and any document submitted by the Owner, the conditions in this environmental compliance approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Owner, the Application shall take precedence unless it is clear that the purpose of the document was to amend the Application
- (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 terms and conditions of this Approval are severable. If any term and condition of this environmental compliance approval, or the application of any requirement of this environmental compliance 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 Proposed 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 address of Owner or operating authority;
  - (b) change of Owner or operating authority or both, including address of new Owner or operating authority, or both;
  - (c) change of partners where the Owner or operating authority 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*; and
  - (d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the “Initial Return” or “Notice of Change” 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, 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.

- (3) The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this environmental compliance approval.

## **CONSTRUCTION**

- (1) The Owner shall ensure that the construction of the Works is supervised by a Professional Engineer.
- (2) 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 personnel.
- (3) The Owner shall prepare and make available for inspection by Ministry staff, a complete set of "as constructed" drawings within **one (1) year** of completion of construction of the Proposed Works. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

## **4. OPERATIONS AND MAINTENANCE**

- (1) The Owner shall prepare an operations manual within **six (6) months** of the introduction of sewage to the Proposed Works, that includes, but not necessarily limited to, the following information:
  - (a) operating procedures for routine operation of the Works; and
  - (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary.
- (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 of the treatment process/technology and a complete set of "as constructed" drawings within **one (1) year** of completion of construction of the Proposed Works. The maintenance agreement and drawings must be retained at the site and kept current.
- (4) 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 and are not used for any purpose other than sewage disposal.
- (5) In the event a break-out is observed from the bed, the Owner shall do the following:
  - (a) sewage discharge to that subsurface disposal system shall be discontinued;
  - (b) incident immediately reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;
  - (c) followed by a written report to the District Manager within **one (1) week** of the break-out;
  - (d) 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

- (e) sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.

## 5. EFFLUENT OBJECTIVES

- (1) The Owner shall use best efforts to design, construct, operate and maintain the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent being discharged from the Works.

<b>Table 1 – Effluent Objectives</b>	
<b>Effluent Parameter</b>	<b>Concentration Objective</b> (milligrams per litre unless otherwise indicated)
CBOD <sub>5</sub>	10.0
Total Suspended Solids	10.0

- (2) The Owner shall use best efforts to operate the works within the design capacity of the Works.
- (3) In the event of an exceedence of the objective set out in condition 6.(1), the Owner shall:
- notify the District Manager as soon as possible during normal working hours,
  - take immediate action to identify the cause of the exceedence, and
  - take immediate action to prevent further exceedence.
- (4) The Owner shall include in all reports submitted in accordance with Condition 8 a summary of the efforts made and results achieved under this Condition.

## 6. MONITORING AND RECORDING

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

- 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.
- 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:

<b>Table 2 - Raw Sewage</b> (Samples to be collected at pump chambers)	
<b>Frequency</b>	Quarterly
<b>Sample Type</b>	Grab
<b>Parameters</b>	BOD <sub>5</sub> , pH, Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN), and Total Suspended Solids (TSS).

<b>Table 3 - Effluent Monitoring</b>	
(Samples to be collected of the effluent from the treatment unit)	
<b>Frequency</b>	Quarterly
<b>Sample Type</b>	Grab
<b>Parameters</b>	CBOD <sub>5</sub> , Nitrate Nitrogen, Nitrite Nitrogen, Total Ammonia Nitrogen, Total Phosphorus (TP) and Total Suspended Solids (TSS).

- (3) The Owner shall measure and record the daily volume of effluent being discharged to subsurface disposal systems and shall ensure that the daily flow of sewage discharged into the type A dispersal bed does not exceed **6,750 litres per day**.
- (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 Version 2.0" (January 2016), PIBS 2724e02, as amended from time to time by more recently published editions; and
  - (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.
- (5) The measurement frequencies specified in subsection 2 in respect to any parameter are minimum requirements which may be modified by the Director in writing from time to time.
- (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 monitoring 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 **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 to the District Manager, a **Performance Report** for the Works. The first such report shall cover the first annual period following the issuance of this Approval and subsequent reports shall cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
- (a) a description of any operating problems encountered, and corrective actions taken;
  - (b) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
  - (c) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
  - (d) a description of efforts made and results achieved in meeting the Effluent Objectives of condition 6.
  - (e) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
  - (f) a tabulation of the daily volume of effluent being treated by the Works during the reporting period; and
  - (g) any other information the District Manager requires from time to time.

#### **Section 4: Reasons**

*The reasons for the imposition of these terms and conditions are as follows:*

- Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described 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.
2. Condition 2 is included to ensure that the Proposed Works are constructed in a timely manner so that standards applicable at the time of Approval of the Proposed Works are still applicable 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 included to require that the Works be properly operated and maintained such that the environment is protected.
  6. Condition 6 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.



7. Condition 7 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis that the Works are properly operated and maintained and that the Works do not cause any impairment to the environment.
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.

## Section 5: Schedules

- Schedule A

Environmental Compliance Approval Application for Industrial Sewage Works uploaded by Curtis Vreugdenhil, P.Eng., of Three Hills Engineering Ltd., certified by Shenggen Wang, of WUHU INDUSTRIES LTD, dated October 31, 2018, and all supporting documentation and information.

*In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. 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.

*Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.*

*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 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)

*The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.*

DATED AT TORONTO this 26th day of March, 2020

c: Shenggen Wang  
Curtis Vreugdenhil

A handwritten signature in black ink that reads "Fariha Pannu." The signature is written in a cursive style with a horizontal line above the name.

Fariha Pannu  
Director

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