

**AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 0706-CD3GZT  
Issue Date: July 12, 2022

Piccioni Bros. Mushroom Farm Limited  
355 Rock Chapel Rd RR #2 Dundas  
Hamilton, Ontario  
L9H 5E2

Site Location: 355 Rock Chapel Road  
City of Hamilton, 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:*

addition, usage and operation of process water treatment and re-use system, sanitary sewage treatment and subsurface disposal system, as well as stormwater management Works serving a mushroom farm located at 355 Rock Chapel Road, consisting of the following:

**PROPOSED WORKS**

**Process Water Treatment and Re-Use System (Zero discharge to the environment)**

Wash water treatment and re-use system, having a design capacity of 30,000 litres per day for the treatment of irrigation water and washwater generated from mushroom growing process, and reclamation of treated effluent back to the mushroom growing process, consisting of the following:

- one (1) existing 40,000 litre pump tank, equipped with effluent pump, with effluent demand dosed into a constructed wetland treatment system;
- one (1) three (3) cell Aqua Wetland System (AWS) with a total AWS area of 697 square metres, each cell having a depth of 1.2 metres and lined with an impervious PVC liner, with Cell #1 dosed from the 40,000 litre pump tank described above and each of the other cells dosed by the preceding cell (i.e., Cell #2 dosed by Cell #1) via sewage pumps operated by float, with a minimum one high-level alarm (visible and audible) located in one of Cells #1 or #3, and each cell having the option to recirculate a portion of the effluent to a preceding AWS cell via pipe branches, valves, extra pumps, and/or controls, and with treated effluent discharged via a pump chamber in Cell #3 to a 40,000 L pump tank described below; and

- one (1) new 40,000 litre pump tank quipped with high-level alarm (visible and audible), for the storage of treated process water prior to re-use in the mushroom growing and washing process.

### **Sanitary Sewage Treatment and Subsurface Disposal System**

Sewage treatment and subsurface disposal system with a total Rated Capacity of 14,000 litres per day, for the treatment and disposal of domestic sewage from the site for accommodating a maximum of 160 employees, consisting of the following:

- one (1) existing septic tank (approximately 10,000 litre of volume) and one (1) pump tank, discharging effluent into a new 20,000 litre septic tank;
- one (1) new 20,000 litre septic tank, equipped with effluent filter, discharging into a 13,700 pump tank;
- one (1) new 13,700 litre pump tank, equipped with effluent pump, discharging via a 50 millimetre diameter forcemain into a new 27,000 litre pump tank;
- one (1) existing septic tank (approximately 3,600 litre of volume) and one (1) 1,800 litre new pump tank, receiving sanitary sewage from a three-bedroom house, discharging effluent into a new 27,000 litre pump tank via a 50 millimetre diameter forcemain;
- one (1) new 27,000 litre pump tank, equipped with effluent pump to dose the constructed wetland treatment system;
- one (1) four (4) cell Aqua Wetland System (AWS) with a total AWS area of 260 square metres, each cell having a depth of 1.22 metres, with Cell #1 dosed from the 27,000 litre pump tank described above and each of the other cells dosed by the preceding cell (i.e. Cell #2 dosed by Cell #1) via pumps capable of pumping 130 litres per minute at a Total Dynamic Head (TDH) of 2.5 metres in pump chambers in Cells #1, #2, and #4, each cell having the option to recirculate a portion of the effluent to the 27,000 litre pump tank described above or to a preceding AWS cell via pipe branches, valves, extra pumps, and controls, and Cell #4 equipped with a pump capable of pumping 130 litres per minute at a TDH of 7 metres discharging treated effluent to the 17,600 litre pump tank described below;
- one (1) new 17,600 litre pump tank, equipped with duplex effluent pumps to dose existing Filter Beds and a new Type A dispersal bed;
- one (1) new raised Type A dispersal bed with a design capacity of 7,000 litres per day, consisting of 140 square metre stone area with a minimum thickness of 275 millimetres and 875 square metre sand layer with a minimum thickness of 600 millimetres beneath the stone layer and 300 millimetres in the extended sand mantle, with the stone layer protected with a permeable Geotextile fabric and equipped with six (6) runs of 20.0 metre long 75 millimetre diameter distribution pipes, and the sand layer having a percolation time of 6 to 10 minutes per centimetre;
- Four (4) existing Filter Beds, to be operated as one (1) modified Type A dispersal bed and with a design capacity of 7,000 litres per day, consisting of approximately 400 square metres of stone area and

approximately 1,530 square meters of sand area; and

- all other electrical system, instrumentation and control system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only.

## **EXISTING WORKS**

### **Stormwater Management Works**

Stormwater management Works for the collection, transmission, treatment and disposal of stormwater runoff from existing indoor agricultural operations undergoing expansions with a total catchment area of approximately 41 hectares, to provide Enhanced level water quality protection and to attenuate post-development peak flows to pre-development levels for all storm events up to and including the 100-year return storm, discharging east to Borer's Creek via six (6) independent overland drainage outlets, consisting of the following:

- storm sewers along the northeast side of the main processing building, ranging from 675 mm to 750 mm in diameter for the conveyance of storm events up to the 100-year storm, discharging to Pond 1 described below via a 750 mm diameter culvert;
- one (1) vegetated swale (Swale 1) along the south-west side of the main processing building, with a 82.3 m length, v-notch bottom, minimum varying depth between 0.1 and 0.21 m, 3:1 to 83:1 side slopes and longitudinal slope of 1.0%, discharging to Swale 2 described below via a 675 mm diameter culvert;
- one (1) vegetated swale (Swale 2) along the south side of the main processing building, with a 50.3 m length, v-notch bottom, minimum varying depth between 0.17 and 0.33 m, 3:1 to 17:1 side slopes and longitudinal slope of 1.5%, discharging to Pond 1 described below via a 500 mm diameter culvert;
- one (1) vegetated swale (Swale 3) along the south side of the main processing building, with a 72.9 m length, v-notch bottom, minimum varying depth between 0.08 and 0.2 m, 4:1 to 38:1 side slopes and longitudinal slope of 2-5%, discharging to Pond 2 described below;
- one (1) vegetated swale (Swale 4) along the south-west property line, with a 46.8 m length, v-notch bottom, minimum depth of 0.42 m, 3:1 side slopes and longitudinal slope of 2.0%, discharging to the 120 m vegetated swale located at the southeast corner of the site via a 500 mm diameter culvert;
- one (1) dry pond (Pond 1) located southeast of the main processing building servicing a catchment area of 4.7 ha with an imperviousness of 64%, having a total storage volume of 1,545 cubic metres for the 100-year storm at a total depth of 1.36 metres (bottom elevation is 210.61 m and top elevation is 211.97 m), complete with an outlet structure consisting of a 525 millimetre diameter pipe equipped with a 75 mm diameter orifice at an elevation of 210.45 m and a weir at an elevation of 211.52 m with a breadth width of 0.325 m and 1:1 sides to an elevation of 211.92 m, allowing a maximum discharge of 331 litres per second under the 100-year storm event to the existing 155 m long vegetated swale located at the

southeast corner of the site;

- one (1) dry pond (Pond 2) located southeast of the main processing building servicing a catchment area of 0.48 ha with an imperviousness of 48%, having a total storage volume of 144 cubic metres for the 100-year storm at a total depth of 0.71 metres (bottom elevation is 211.10 m and top elevation is 211.81 m), complete with an outlet structure consisting of a 300 millimetre diameter pipe equipped with a 75 mm diameter orifice at an elevation of 210.61 m and a weir at an elevation of 211.70 m with a breadth width of 0.35 m and 1:1 sides to an elevation of 211.81 m, allowing a maximum discharge of 31 litres per second under the 100-year storm event to the oil/grit separator described below;
- One (1) proposed oil/grit separator rated at a maximum of 31 L/s, having an oil holding capacity of 723 L and a solids holding capacity of 500 L, discharging effluent via a 300 mm diameter gravity pipe to the 155 m long vegetated swale located at the southeast corner of the site;
- one (1) dry pond (Pond 3) located along the northwest side of the storage building servicing a catchment area of 0.55 ha with an imperviousness of 51%, having a total storage volume of 33 cubic metres for the 100-year storm at a total depth of 0.3 metres (bottom elevation is 213.85 m and top elevation is 214.15 m), complete with an outlet structure consisting of a 300 mm culvert equipped with a 0.3 m high rectangular weir with a 0.17 m width at an elevation of 213.85 m and a 3.25 m width at an elevation of 214.15 m, allowing a maximum discharge of 148 litres per second under the 100-year storm event to the 165 m long vegetated swale located at the north corner of the site;

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

All in accordance with the submitted supporting documents listed in Schedule A.

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

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
2. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
3. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
4. "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;
5. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
6. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19;

7. "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;
8. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28;
9. "Maximum Daily Flow" (also referred to as Peak Daily Flow Rate or Maximum Day Flow) means the largest volume of flow to be received during a one-day period for which the sewage treatment process unit or equipment is designed to handle;
10. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
11. "OBC" means the Ontario Building Code, Ontario Regulation 332/12 (Building Code) as amended to January 1, 2015, made under the *Building Code Act*, 1992, S.O. 1992, c. 23;
12. "Operating Agency" means the Owner, person or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;
13. "Owner" means Piccioni Bros. Mushroom Farm Limited, and any successors and assignees;
14. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
15. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
16. "Rated Capacity" means the designed Maximum Daily Flow for which the Sanitary Sewage Treatment and Subsurface Disposal System is designed to handle;
17. "Single Sample Result" means the test result 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; and
18. "Works" means the Works described above and approved herein being defined in the OWRA as 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 terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
4. The issuance of, and compliance with the conditions of this Approval does not:
  - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage Works; or
  - b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

### **2. CHANGE OF OWNER AND OPERATING AGENCY**

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;
  - b. change of Owner, including address of new owner;
  - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17*, shall be included in the notification;
  - d. change of name of the corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C.39*, shall be included in the notification.

2. The Owner shall notify the District Manager, in writing, of any of the following changes within thirty (30) days of the change occurring:
  - a. change of address of the Operating Agency;
  - b. change of the Operating Agency, including address of the new Operating Agency.
3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.
4. The Owner shall ensure that all communications made pursuant to this condition refer to the number of Approval.

### **3. CONSTRUCTION OF PROPOSED WORKS / RECORD DRAWINGS**

1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within five (5) years of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Works not in operation. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).
2. The Owner shall ensure that the treatment technologies are installed in accordance with the manufacturer's installation manual.
3. The Owner shall ensure that an imported soil that is required for construction of any subsurface disposal bed as per this Approval is tested and verified by the Licensed Engineering Practitioner for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.
4. Upon completion of construction of the Proposed Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Proposed Works is constructed in accordance with this Approval.
5. One (1) week prior to the commencement of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
6. Within one (1) year of completion of construction of the Proposed Works, a set of record drawings of the Works shall be prepared or updated. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.

#### 4. DESIGN OBJECTIVES AND VISUAL OBSERVATIONS

1. The Owner shall design and undertake everything practicable to operate the Sanitary Sewage Treatment System and the Stormwater Management Works in accordance with the following objectives:
  - a. The design objectives listed in the Table B-1 included in **Schedule B** are met for the effluent prior to discharging into the Filter Bed and Type A Dispersal Bed.
  - b. The Maximum Daily Flow is within the Rated Capacity of the Sanitary Sewage Treatment and Subsurface Disposal System.
2. The Owner shall use best efforts to design, construct and operate the stormwater management Works with the objective that the four (4) month rolling average concentrations of the materials named in Table B-2 in **Schedule B** as effluent parameters are not exceeded in the final effluent from the 3 stormwater detention ponds after any oil/grit separators.
3. Notwithstanding any other conditions of this Approval, the Owner shall ensure that the effluent from the stormwater management Works is essentially free of floating and settable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discoloration on the receiving waters.

#### 5. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Sanitary Sewage Treatment System such that compliance limits listed in the Table C-1 included in **Schedule C** are met for the effluent parameters prior to discharging into the Filter Bed and Type A Dispersal Bed.

#### 6. OPERATION AND MAINTENANCE

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
2. The Owner shall prepare an operations manual within **six (6) months** of the introduction of sewage to the Sanitary Sewage Treatment System and Subsurface Disposal System, that includes, but not necessarily limited to, the following information:
  - a. operating procedures for routine operation of the Sanitary Sewage Treatment System and Subsurface Disposal System;
  - b. inspection programs, including frequency of inspection, for the Sanitary Sewage Treatment System and Subsurface Disposal System 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 Sanitary Sewage Treatment System and Subsurface Disposal System; 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 Spills Action Centre (SAC) and District Manager; and
  - f. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
3. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference for the operational life of the Sanitary Sewage Treatment System and Subsurface Disposal System. Upon request, the Owner shall make the manual available to Ministry staff.
  4. The Owner shall, upon the construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology or its authorized agent. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.
  5. 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.
  6. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground Works is protected from vehicle traffic.
  7. The Owner shall visually inspect the general area where the Sanitary Sewage Treatment System and Subsurface Disposal System are located for break-out once every month during the operating season.
  8. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:
    - a. sewage discharge to that subsurface disposal system shall be discontinued;
    - b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;

- c. submit a written report to the District Manager within **one (1) week** of the break-out;
  - d. access to the break-out area shall be restricted until remedial actions are complete;
  - e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and
  - f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.
9. The Owner shall employ for the overall operation of the Sanitary Sewage Treatment System and Subsurface Disposal System a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Sanitary Sewage Treatment System and Subsurface Disposal System.
10. The Owner shall inspect the stormwater management Works at least two (2) times per year and, if necessary, clean and maintain the Works to prevent the excessive build-up of sediments, oil/grit, and/or vegetation.
11. The Owner shall operate the oil/grit interceptor with the objective that no visible oil sheens occur in the effluent discharged from the oil/grit interceptor.
12. The Owner shall carry out and maintain an annual inspection and maintenance program on the operation of the oil/grit interceptor in accordance with the manufacturer's recommendation.
13. The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken for the stormwater management Works, and shall keep the logbook available for inspection by the Ministry.
14. Mushroom substrate stored outside shall be covered by a canopy that does not allow stormwater to infiltrate.

## **7. 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 D** 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. if conditions on the day of sampling exist where there is no flow or standing water at the sampling location of stormwater management Works, the Owner shall record the condition as "Dry". The Owner shall not incorporate "Dry" conditions in rolling average calculations in accordance with the

note "Understanding Four-month Rolling Average" included in Schedule B. In situations where "Dry" is recorded, the Owner shall use the four (4) most recent events where a sample was collected in calculating the four-month rolling average.

- c. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 2.b.
  - d. definitions for frequency:
    - i. Monthly means once every month
  - e. The measurement frequencies specified in Table D-1 of **Schedule D** in respect to any parameter may, after one (1) year of monitoring in accordance with this Condition, be modified by the Director in writing.
  - f. The sampling frequencies and/or parameters specified in Table D-2 of **Schedule D** may be reduced where authorized in writing by the Director if the Owner is able to demonstrate satisfactory performance for two (2) consecutive years.
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 Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;
  - 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", as amended; and
  - d. for any parameters not mentioned in the documents referenced in Paragraphs 2.a, 2.b and 2.c, the written approval of the District Manager shall be obtained prior to sampling.
3. The Owner shall monitor and record the flow rate and daily quantity using flow measuring devices or other methods of measurement as approved below calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flowrate of the following:
- a. Influent to or effluent discharged from the Sanitary Sewage Treatment System by continuous flow measuring devices and instrumentations/pumping rates, or in lieu of an actual installation of equipment, adopt the flow measurements of the effluent,
4. 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. The Owner shall report to the District Manager orally as soon as possible any non-compliance with the compliance limits, and in writing within seven (7) days of non-compliance.
2. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges) made under the EPA, the Owner shall, within fifteen (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a 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 performance reports on a calendar year basis and submit to the District Manager upon request in an electronic format April 1 for the previous calendar year for the sanitary sewage treatment and subsurface disposal system. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
  - a. a summary and description of efforts made and results achieved in meeting the Design Objectives outline in Table B-1 of Schedule B.
  - b. a summary and interpretation of all monitoring data and a comparison to the effluent compliance limits outlined in Schedule C including an overview of the success and adequacy of the Works, and a Contingency Plan in the event of not in compliance with the effluent compliance limits.
  - c. a summary and interpretation of surface water monitoring data;
  - d. a review and assessment of performance of sewage Works, including all treatment units and disposal beds;
  - e. a description of any operating problems encountered and corrective actions taken at sanitary sewage treatment and subsurface disposal system located at the property;
  - f. a record of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property including but not limited to: records of maintenance inspections for the treatment system, records of septic tank effluent filters cleaning, records of septic tank pump-outs, records of sludge pump-outs accumulated from the treatment system, records of visual inspections of all disposal systems;
  - g. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
  - h. a summary and interpretation of all daily flow data and results achieved in not exceeding the

maximum daily sewage flow discharged into each one of the subsurface disposal system;

- i. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
  - j. a summary of all spill or abnormal discharge events;
  - k. any other information the District Manager requires from time to time;
5. The Owner shall prepare, and submit to the District Manager upon request, a performance report, on an annual basis, by April 1 for the previous calendar year for the stormwater management Works. The report 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 concentration objectives of the parameters outlined in Table B-2 of Schedule B;
  - b. a description of any operating problems encountered and corrective actions taken;
  - c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
  - d. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
  - e. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
  - f. a summary of all by-pass, spill or abnormal discharge events;
  - g. any other information the District Manager requires from time to time.

## **PROHIBITION**

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

## **Schedule A**

1. Application for an amendment Environmental Compliance Approval submitted by Piccioni Bros. Mushroom Farm Limited, dated May 7, 2021 and received on May 7, 2021, for the proposed addition of a process water treatment and re-use system and sanitary sewage treatment and subsurface disposal system, including design report, final plans and specifications.

## Schedule B

### B-1 Effluent Design Objectives (for the effluent from the sanitary sewage treatment system)

| Final Effluent Parameter   | Averaging Calculator        | Concentration Objectives<br>(maximum unless otherwise indicated) |
|----------------------------|-----------------------------|--|
| CBOD5                      | Single Sample Concentration | 10.0 mg/L*   |
| Total Suspended Solids     | Single Sample Concentration | 10.0 mg/L  |
| Total Inorganic Nitrogen** | Single Sample Concentration | 3.7 mg/L   |

**Note\*:** mg/L means milligrams per litre.

**Note\*\*:** Total Inorganic Nitrogen is the sum of ammonia nitrogen, nitrite nitrogen and nitrate nitrogen.

**Table B-2 - Effluent Objectives (for the effluent from the stormwater management Works)**

| Effluent Parameter | Concentration Objective<br>Four (4) month Rolling Average (Note 1)<br>(maximum unless otherwise indicated) |
|--------------------|--|
| Total Phosphorus   | 0.5 mg/L   |
| Nitrate Nitrogen   | 20 mg/L  |
| Copper             | 0.02 mg/L  |
| Chloride           | 200 mg/L   |
| Zinc               | 0.10 mg/L  |
| pH                 | between 6.5 to 10.0 (Single Sample Result)   |

**Note 1:** For an example of rolling average, see "Understanding Rolling Average" below.

### Understanding Rolling Average

A four-month rolling average is an average value based on the four (4) most recent months of data. The average "rolls along" with the most recent data. Rolling average is a useful means of illuminating trends in data where there is wide variation in the data from sample event to sample event.

| Sampling Period | Jan  | Feb | Mar  | Apr  | May  | Jun  | Jul  | Aug | Sep | Oct | Nov | Dec |
|-----------------|------|-----|------|------|------|------|------|-----|-----|-----|-----|-----|
| P1              | 0.20 | Dry | 0.30 | 0.36 | 0.55 |      |      |     |     |     |     |     |
| P2              | 0.20 | Dry | 0.30 | 0.36 | 0.55 | 0.45 |      |     |     |     |     |     |
| P3              | 0.20 | Dry | 0.30 | 0.36 | 0.55 | 0.45 | 0.25 |     |     |     |     |     |

For example, from the table above:

- The four-month rolling average for May reporting (for P1) is  $(0.20+0.30+0.36+0.55)/4 = 0.35$
- The four-month rolling average for June reporting (for P2) is  $(0.30+0.36+0.55+0.45)/4 = 0.42$
- The four-month rolling average for July reporting (for P3) is  $(0.36+0.55+0.45+0.25)/4 = 0.40$



## Schedule C

**Table C-1 Effluent Compliance Limits**  
**(for the effluent from the sanitary sewage treatment system)**

| <b>Final Effluent Parameter</b> | <b>Averaging Calculator</b>    | <b>Concentration Limits</b><br>(maximum unless otherwise indicated) |
|---------------------------------|--------------------------------|---|
| CBOD5                           | Single Sample Concentration    | 20.0 mg/L*  |
| Total Suspended Solids          | Single Sample Concentration    | 20.0 mg/L   |
| Total Inorganic Nitrogen**      | four (4) month rolling average | 5.0 mg/L  |

**Note\*:** mg/L means milligrams per litre.

**Note\*\*:** Total Inorganic Nitrogen is the sum of ammonia nitrogen, nitrite nitrogen and nitrate nitrogen.

## Schedule D

### Monitoring Program

**Table D-1 Effluent Monitoring Table  
(for the effluent from the sanitary sewage treatment system)**

|                        |  |
|------------------------|--|
| <b>Sample location</b> | The treated effluent from AWS Cell #4 pump tank that discharges into the Type A dispersal bed and Filter Beds  |
| <b>Sample Type</b>     | Grab   |
| <b>Frequency</b>       | Monthly  |
| <b>Parameters</b>      | CBOD5, Total Suspended Solids (TSS), Ammonia Nitrogen, Nitrate Nitrogen, Nitrite Nitrogen and Total Phosphorus |

**Table D-2 Effluent Monitoring  
(for the effluent from the stormwater management Works)**

|                            |   |
|----------------------------|---|
| <b>Sampling Station</b>    | Effluent from the 3 stormwater detention ponds after any oil/grit separators.<br><br>Note: When flow is present, a sample is to be collected at each outlet; if no flow is present and standing water is present, a sample shall be collected from the point in the vicinity of the outlet. |
| <b>Sampling Type</b>       | Grab  |
| <b>Sample Frequency</b>    | Monthly (year-round)  |
| <b>Sampling Parameters</b> | Total Suspended Solid, Total Ammonia Nitrogen, Nitrate Nitrogen, Total Phosphorus, Zinc, Copper, Iron, Molybdenum, Boron, Chloride, Hardness, pH*, Temperature*, Un-ionized Ammonia**, BOD5***  |

Note\*: pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.

Note\*\*: The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

Note\*\*\*: BOD5 is required to be sampled at Pond 3 only.

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

1. Condition 1 regarding general provisions is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted.
2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the 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.
3. Condition 3 regarding construction of Proposed Works/record drawings is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
4. Condition 4 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
5. Condition 5 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
6. Condition 6 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. Such a manual 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 Works.
7. Condition 7 regarding monitoring and recording 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 and compliance limits.

8. Condition 8 regarding reporting 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 this Approval.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s).  
1923-BPDPSM issued on July 6, 2020.**

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 Notice") 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:

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

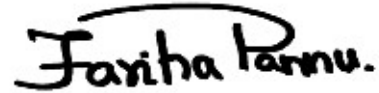
The Director appointed for the purposes of  
Part II.1 of the *Environmental Protection Act*  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

**\* 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](http://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 12th day of July, 2022



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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 Hamilton District Office  
Andrew Hellebust, Rivercourt Engineering Inc.