

#### **ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 1271-D28HY6 Issue Date: April 19, 2024

Procyk Farms (1994) Limited 758 Concession 3 Townsend Wilsonville, Ontario N0E 1Z0

Site Location: 726 Concession 3 Townsend Norfolk County

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:

establishment, usage and operation of new non-municipal Works, for the treatment of domestic sanitary sewage from Procyk Farms bunkhouses and subsurface disposal of treated effluent via a Sewage Treatment Plant as follows:

Classification of Sewage Treatment Plant: Secondary

#### **Details of Service Area:**

- Type of Occupancy: Agricultural
- Type and Number of Units:
  - Agricultural Bunkhouses existing and Phase 1 expansion servicing 120 workers
  - · Agricultural Bunkhouses Phase 2 future expansion servicing 200 workers

# **Design Capacity of Sewage Treatment Plant**

Design Capacity with All	Prior to Completion of	Upon Completion of
Treatment Trains in	Construction of All	Construction of All
Operation	Proposed Works	Proposed Works
Maximum Daily Flow	Phase 1: 30 m <sup>3</sup> /d	Phase 2: 50 m <sup>3</sup> /d

# **Preliminary Treatment**

• two (2) existing dual-compartment septic tanks each with effective volume of 10,789 L and one (1) existing solids removal pump tank with

- an effective volume of 4,680 L, to be repurposed as grease interceptor tanks, receiving raw sewage from the two (2) existing bunkhouses, discharging to the existing pump tank B1;
- one (1) existing pump tank B1 with an effective volume of 4,680 L, discharging via an existing 50 mm diameter forcemain to the proposed Flow Equalization Tank identified below;
- five (5) proposed three-compartment precast concrete oil grease interceptors, each with an effective volume of 4,050 L, receiving raw sewage from the kitchen facilities of each of the five (5) proposed bunkhouses for Phases 1 and 2;
- one (1) proposed pump tank B2 with an effective volume of 9,000 L, discharging via a 50 mm diameter forcemain to the proposed Flow Equalization Tank identified below;

### **Flow Equalization Tank**

 one (1) proposed Flow Equalization Tank (EQT), having an approximate effective volume of 42,000 L, equipped with liquid level control system and two (2) timer-operated sewage pumps, receiving raw sewage from the two (2) existing and five (5) proposed bunkhouses identified above, discharging to the Sludge Storage tank identified below via a 50 mm diameter forcemain;

# Proposed Sewage Treatment Plant - Moving Bed Biofilm Reactor (BNA iQ.MBBR) Primary Treatment System

- one (1) Sludge Storage Tank (SS), having an effective volume of 52,500 L, receiving effluent from the Flow Equalization Tank described above, recirculation from Aerobic Bioreactor 2 and sludge from the Secondary Clarification Chamber described below, discharging effluent by gravity to the Primary Clarification Tank described below;
- one (1) Primary Clarification Tank (PC), having an effective volume of 22,700 L, receiving effluent from the Sludge Storage Tank described above, and discharging effluent by gravity to the Aerobic Reactor described below;

### **Secondary Treatment System**

- two (2) Moving Bed Biofilm Aerobic Bioreactor treatment tanks, operating in series as Aerobic Bioreactor 1 (BR1) and Aerobic Bioreactor 2 (BR2), having a working volume of 17,100 L and 16,800 L respectively, each tank equipped with fine bubble diffusers and one (1) blower:
  - Phase 1 expansion each bioreactor tank (BR1 and BR2) consisting of 5.5 cubic metres of engineered plastic carrier media providing 5,500 square metres of media surface area;
  - Phase 2 expansion each bioreactor tank (BR1 and BR2) consisting of 7 cubic metres of engineered plastic carrier media providing 7,000 square metres of media surface area;
  - discharging effluent to the Secondary Clarification Chamber, and recirculation to the Sludge Storage Tank;
- one (1) Secondary Clarification Chamber, having an approximate
  working volume of 8,700 L, specified surface area of approximately
  6.9 square metres with a hopper bottom, equipped with a sludge
  return pump to the Sludge Storage Tank, and discharging by gravity to
  the Anoxic Bioreactor described below;

### **Post-Secondary Treatment System**

- one (1) MBBR Anoxic Bioreactor for tertiary denitrification, having an approximate working volume of 6,700 L, equipped with coarse bubble diffusers for mixing and two (2) blowers and timer operated pump rated at 75 L/min at TDH of 4.5 m to the Aerobic Bioreactor 3 described below;
  - Phase 1 expansion anoxic bioreactor tank consisting of 2.2 cubic metres of engineered plastic carrier media providing 1,100 square metres of media surface area;
  - Phase 2 expansion anoxic bioreactor tank consisting of 2.6 cubic metres of engineered plastic carrier media providing 1,300 square metres of media surface area;
- one (1) MBBR Aerobic Bioreactor 3 (BR3) for tertiary polishing, having an approximate working volume of 5,300 L and containing a volume of 1.8 cubic metres of engineered plastic carrier media providing 900 square metres of media surface area, equipped with fine bubble

- diffusers and two (2) blowers discharging to the Phosphorous Separation Tank described below;
- one (1) Phosphorous Separation Tank, having an approximate working volume of 1,300 L for phosphorous removal via the injection of liquid coagulant;
- one (1) Tertiary Clarification Chamber, having an approximate working volume of 5,900 L and specified surface area of approximately 5.0 square metres with hopper bottom, equipped with sludge return pumps to the Sludge Storage Tank and discharging via gravity to the Effluent Pump Tank described below;

### **Effluent Pump Tank**

 one (1) Effluent Pump Tank (EPT), having an approximate working volume of 13,800 L, equipped with liquid level control system with high level visual/audible alarms and three (3) demand-operated effluent pumps, discharging via a 50 mm diameter forcemain to the effluent disposal beds identified below;

# **Final Effluent Disposal Facilities**

- one (1) proposed Type A dispersal bed (F1) rated for 15,000 litres per day, complete with Type II leaching chambers over a chamber area of 438 square metres, consisting of 22 runs of 24.0 m Type II Infiltrator model Equalizer 36 Chambers with a total length of 528 m of 100 mm perforated distribution pipe installed within the chambers and spaced 0.8 m apart from centre to centre, and overlying an imported sand layer having a T-time in the range of 6 to 10 min/cm with a total contact area of 2,065 square metres (59 m by 35 m) including a 22.4 m mantle extension, with the bottom of the chambers at least 900 mm above the native soil or high groundwater table or bedrock, and a thickness of 300 to 900 mm across the sand mantle;
- one (1) proposed Type A dispersal bed for Phase 1 (F2) rated for 15,000 litres per day, having a stone layer with an area of 346 square metres (51 metres by 6.8 metres) and a minimum thickness of 300 millimetres, protected by permeable geo-textile fabric, complete with 12 runs of 24 m long 100 mm diameter perforated distribution pipe

- spaced 1.15 m apart from centre to centre in the stone layer, overlying an imported sand layer having a T-time in the range of 6 to 10 min/cm with a contact area of 2,065 square metres (59 m by 35 m) including a 24.2 m mantle extension, with the bottom of the stone layer at least 900 mm above the native soil or high groundwater table or bedrock, and a thickness of 300 to 900 mm across the sand mantle;
- one (1) proposed Type A dispersal bed for Phase 2 (F3) rated for 20,000 litres per day, having a stone layer with an area of 459 square metres (63 metres by 7.3 metres) and a minimum thickness of 300 millimetres, protected by permeable geo-textile fabric, complete with 14 runs of 30 m long 100 mm diameter perforated distribution pipe spaced 1.05 m apart from centre to centre in the stone layer, overlying an imported sand layer having a T-time in the range of 6 to 10 min/cm with a contact area of 2,737 square metres (73 m by 37.5 m) including a 25.2 m mantle extension, with the bottom of the stone layer at least 900 mm above the native soil or high groundwater table or bedrock, and a thickness of 300 to 900 mm across the sand mantle;

including all other mechanical system, 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;

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. "*E. coli*" refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen or chromogen, that produces fluorescence under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 + 0.5 °C or 44.5 + 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well methods);
- 7. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
- 8. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, that are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);
- 9. "Grab Sample" or "Grab" 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;
- 10. "Influent" means flows to the Sewage Treatment Plant from the collection system;
- 11. "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;
- 12. "Maximum Daily 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;
- 13. "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;
- 14. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month;

- 15. "Monthly Average Daily Effluent Flow" means the cumulative total Final Effluent discharged during a calendar month divided by the number of days during which Final Effluent was discharged that month;
- 16. "Normal Operating Condition" means the condition when all unit process(es), excluding Preliminary Treatment System, in a treatment train is operating within its design capacity;
- 17. "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;
- 18. "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;
- 19. "Owner" means Procyk Farms (1994) Limited , including any successors and assignees;
- 20. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
- 21. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;
- 22. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;
- 23. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 24. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;
- 25. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;
- 26. "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;

"Works" means the approved sewage works, and includes Proposed 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 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 this Approval.

#### 3. CONSTRUCTION OF PROPOSED WORKS

- 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. 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.
- 3. 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. The Owner shall ensure that the treatment technologies are installed in accordance with the manufacturer's installation manual.
- 5. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.
- 6. 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. DESIGN OBJECTIVES

- 1. The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the following objectives:
  - a. Final Effluent parameters design objectives listed in the table(s) included in Schedule B.

#### 5. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Sewage Treatment Plant such that compliance limits for the Final Effluent parameters listed in the table(s) included in **Schedule C** are met.

#### 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 staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and relevant regulations made under the OWRA, process controls and alarms and the use of process chemicals and other substances used in the Works.
- 2. The Owner shall prepare/update the operations manual for the Works 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 the Works under Normal Operating Conditions;
  - b. inspection programs, including frequency of inspection, for 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 the Works;
  - d. procedures for the inspection and calibration of monitoring equipment;
  - e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition;
  - f. 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;

- g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.
- 3. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference at the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- 4. The Owner shall maintain a logbook to record the results of all inspections, repair and maintenance undertaken, calibrations, monitoring and spill response or contingency measures undertaken and shall make the logbook available for inspection by Ministry staff. The logbook shall include the following:
  - a. the name of the operator making the entry; and
  - b. the date and results of each inspection, repair, maintenance, calibration, monitoring, spill response and contingency measure.
- 5. The Owner shall, upon completion of construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.
- 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 Works 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 bed 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 ensure that the septic tanks be inspected **at least twice per year**, and the sewage sludge accumulated in the septic tanks be periodically withdrawn

at the frequency required to maintain efficiency of the treatment system. The effluent filters in septic tanks shall be cleaned out at least once every six (6) months, when the tank is pumped out, or as determined by the Operating Agency, whichever comes first.

- 10. The Owner shall ensure that the Operating Agency possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.
- 11. The Owner shall have a valid written agreement with a hauler who is in possession of a Waste Management Systems Approval, for the treatment and disposal of the sludge generated from the Works, at all times during operation of the Works.
- 12. The Owner shall ensure the grease interceptors be cleaned out **at least twice per year**, or more frequently as determined by the Works operator, for removal of fats, oil and grease from the kitchen wastewater.
- 13. The Owner shall ensure that flow of effluent discharged into each of the following subsurface disposal beds does not exceed:
  - a. Existing Type A Dispersal Bed (F1): 15,000 litres per day;
  - b. Proposed Type A Dispersal Bed (F2): 15,000 litres per day;
  - c. Future Proposed Type A Dispersal Bed (F3): 20,000 litres per day.
- 14. The Owner shall retain for a minimum of **five (5) years** from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.

#### 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. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 2.b.
  - c. definitions for frequency:
    - i. Monthly means once every month;

- ii. Quarterly means once every three months;
- iii. Annually means once every year.
- 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:
  - a. final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates.
  - b. quantity of effluent being discharged to each individual subsurface disposal 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 subsurface disposal bed.
- 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 specified in Condition 5, 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 in an electronic format by **March 31** of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
  - a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
  - b. a summary and interpretation of all flow data and results achieved in not exceeding the Maximum Daily Flow discharged into the subsurface disposal system;
  - c. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
  - d. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;
  - e. a summary of all operating issues encountered and corrective actions taken;
  - f. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
  - g. a summary of any effluent quality assurance or control measures undertaken;
  - h. a summary of the calibration and maintenance carried out on all monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;
  - i. a summary of efforts made to achieve the design objectives in this Approval,

including an assessment of the issues and recommendations for pro-active actions when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in deterioration of Final Effluent quality;

- j. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- k. a summary of any complaints received and any steps taken to address the complaints;
- I. a summary of any situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
- m. any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works;
- n. any other information the District Manager requires from time to time.

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 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 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 Limited Operational Flexibility is included to ensure that the Works are constructed, maintained and operated in accordance with the Approval, and that any pre-approved modification will not negatively impact on the performance of the Works.
- 9. Condition 9 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.

# Schedule A

1. Application for Environmental Compliance Approval submitted by Procyk Farms Inc., received on October 11, 2023, including design report, final plans, specifications and all supporting documentation.

# Schedule B

# **Effluent Objectives Table**

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	10 mg/L

Total Suspended Solids	Monthly Average Effluent Concentration	10 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	< 1.0 mg/L
Nitrate-Nitrogen	Monthly Average Effluent Concentration	< 4.5 mg/L

# Schedule C

## **Effluent Limits Table**

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Single Sample Result	20 mg/L
Total Suspended Solids	Single Sample Result	20 mg/L
Total Phosphorus	Single Sample Result	1.0 mg/L
Nitrate-Nitrogen	Single Sample Result	4.5 mg/L

# Schedule D

# **Monitoring Program**

# Influent/Raw Sewage Monitoring Table

Influent/raw sewage sampling point at the Sludge Storage Tank

Parameters	Sample Type	Minimum Frequency*
BOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorous	Grab	Monthly
Total Ammonia Nitrogen	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly
pH**	Grab/Probe/Analyzer	Monthly

Note\* Monthly during the operating period of the site for the first three (3) years after issuance of the Approval, and quarterly thereafter after providing notice in writing of this change to the District Manager within thirty (30) days after the last monthly sample on the third year (e.g., third year) after the issuance date and receiving written concurrence from the District Manager.

Note\*\* pH of the Influent shall be determined in the field at the time of sampling for Total

Ammonia Nitrogen.

# **Final Effluent Monitoring Table**

Final Effluent sampling point at the effluent pump tank upstream from the subsurface

disposal bed

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorus	Grab	Monthly
Total Ammonia Nitrogen	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly
Nitrate-Nitrogen	Grab	Monthly
Nitrite-Nitrogen	Grab	Monthly
Total Nitrogen	Grab	Monthly
Total Inorganic Nitrogen	Grab	Monthly
E.coli	Grab	Monthly
рН*	Grab/Probe/Analyzer	Monthly
Temperature (ambient and wastewater)*	Grab/Probe/Analyzer	Monthly

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

# Sludge/Biosolids – sludge storage tank

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate as Nitrogen	Grab	Annually
Metal Scan	Grab	Annually
- Arsenic		
- Cadmium		
- Cobalt		
- Chromium		
- Copper		
- Lead		
- Mercury		
- Molybdenum		
- Nickel		
- Potassium		
- Selenium		
- Zinc		

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of

the *Environmental Bill of Rights*, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Hearing") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

#### The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;

and

- 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

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3

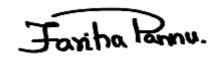
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment, Conservation
and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

\* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <a href="https://ero.ontario.ca/">https://ero.ontario.ca/</a>, 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 19th day of April, 2024



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

JY/

c: District Manager, MECP Hamilton - District David Morlock, FlowSpec Engineering Ltd.