

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

#### **ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 8805-CZRTLD Issue Date: February 26, 2024

1000200051 Ontario Inc. 1595 16th Ave, No. 101 Richmond Hill, Ontario

L4B 3N9

Site Location: 1462 Old Highway 117

Lake of Bays Township, District Municipality of Muskoka

P0B 1A0

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

establishment, usage and operation of new non-municipal sewage works, for the treatment of sanitary sewage from the proposed cottages, a reception building and a clubhouse at the above Site Location and disposal of effluent to subsurface via a Sewage Treatment Plant (BNA iQ.MBBR Wastewater Treatment System) and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Secondary

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

• Type of Occupancy: Commercial

- Type and Number of Units:
  - Proposed twenty (20) 3-bedroom cottages;
  - Proposed one (1) reception building;
  - Proposed one (1) clubhouse and twenty (20) employees.

#### **Design Capacity of Sewage Treatment Plant:**

Design Capacity with All Treatment Trains in Operation	Upon Completion of Construction of All Proposed Works
Maximum Daily Flow	37,300 L/d

#### Influent

Receiving Location	Type(s)
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

#### PROPOSED WORKS

# Sewage Treatment Plant - Moving Bed Biofilm Reactor (BNA iQ.MBBR<sup>TM</sup>) Wastewater Treatment System

#### Flow Equalization Tank (EQT)

• one (1) in-ground single compartment equalization tank, having an approximate working volume of 39.2 cubic metres, equipped with a vent pipe, complete with two (2) alternating submersible sewage pumps, receiving raw sewage from the proposed cottages, a reception building, and a clubhouse described above, discharging effluent to the Sludge Storage Tank as described below;

#### **Primary Treatment System**

- one (1) in-ground single-compartment Sludge Storage Tank with an approximate working volume of 43.5 cubic metres, receiving effluent from the Flow Equalization Tank described above and recirculation from Aerobic Bioreactor 2 as described below, and to provide storage for the scum and sludge return from the clarifiers;
- one (1) in-ground single-compartment Primary Clarifier Tank with an approximate working volume of 23.3 cubic metres, receiving effluent from the Sludge Storage Tank described above, discharging effluent by gravity to the Aerobic Bioreactor 1 described below;
- sludge accumulated in the Sludge Storage Tank shall be periodically transported for off-site disposal at an approved receiving facility;

#### **Influent Sampling Point**

• Sampling of Influent from the Flow Equalization Tank;

#### **Secondary Treatment System**

- two (2) in-ground moving bed biofilm reactor (MBBR) cells for Total Suspended Solids and BOD5 removal and nitrification, operating in series as Aerobic Bioreactor 1 and Aerobic Bioreactor 2:
  - having an approximate working volume of 13 cubic metres and 12.4 cubic meters, respectively;
  - containing a combined volume of 8.6 cubic metres of engineered plastic carrier media providing 4,300 square metres of media surface area;
  - each bioreactor fitted with thirteen (13) fine bubble diffusers, two (2) regenerative air compressors to deliver 130 normal cubic meters per hour of air to the diffusers, and one (1) effluent recirculation pump in Aerobic Bioreactor 2 to recirculate mixed liquor flow to the Sludge Storage Tank;
  - receiving effluent from the Primary Clarifier Tank via Aerobic Bioreactor 1 and discharging from Aerobic Bioreactor 2 part of the effluent to the Sludge Storage Tank for recirculation and part of the effluent to the Secondary Clarifier described below;
- one (1) Secondary Clarifier of an approximate working volume of 6 cubic metres, having a specified surface area of approximately 7.6 square metres with a sloped wall double hopper, equipped with two (2) sludge return pumps and one (1) floating skimmer pump to send solids into the Sludge Storage Tank, receiving effluent from the Aerobic Bioreactor 2, discharging by gravity to the Anoxic Bioreactor Chamber described below;

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

- one (1) in-ground MBBR Anoxic Bioreactor Chamber for tertiary denitrification, having an approximate working volume of 7.5 cubic metres and containing a volume of 3.0 cubic metres of plastic carrier media providing 1,500 square metres of media surface area, equipped with six (6) coarse bubble diffusers and one (1) blower with one (1) shelf spare blower, receiving effluent from the Secondary Clarifier, discharging via gravity to the Aerobic Bioreactor 3 described below;
- one (1) in-ground MBBR Aerobic Bioreactor 3 Chamber for tertiary polishing, having an approximate working volume of 7.3 cubic metres and containing a volume of 2.4 cubic metres of plastic carrier media providing 1,200 square metres of media surface area, fitted with six (6) fine bubble diffusers and one (1) regenerative air compressor each to deliver 30 normal cubic metres per hour air to the diffusers and one (1) shelf spare blower, receiving effluent from the Anoxic Bioreactor (ABR), discharging via gravity to the Tertiary Clarifier described below;
- one (1) Tertiary Clarifier Chamber, having an approximate working volume of 5.6 cubic metres, a specified surface area of approximately 3.6 square metres with a sloped wall double hopper, equipped with two (2) submersible sludge return pumps to send settled solids and a surface skimmer pump to return surface solids into the Sludge Storage Tank, receiving effluent from the Aerobic

Bioreactor 3, discharging via gravity to the Effluent Pump Tank described below;

#### **Effluent Pump Tank (EPT)**

• one (1) Effluent Pump Tank, having an approximate working volume of 13.6 cubic metres, equipped with a high level audible alarm and two (2) timer-controlled Liberty 290-2 (or Equivalent Equipment) 0.75 hp effluent pumps, with a total dynamic head (TDH) of approximately 8.5 to 9.5 m, receiving effluent from the Tertiary Clarifier and discharging via two (2) 50 millimetre diameter forcemains, a distribution box and a split header to two (2) Type A leaching beds described below;

#### **Supplementary Treatment System**

#### **Carbon Addition**

• one (1) carbon dosing system for denitrification, consisting two (2) chemical dosing pumps located in the control building, dosing carbon material (MicroC-2000 or approved alternate) into the Anoxic Bioreactor Chamber and Sludge Storage Tank;

#### **Alkalinity Addition**

• one (1) provisional alkalinity dosing system for denitrification, consisting one (1) chemical dosing pump located in the control building, dosing soda ash (or approved equivalent) in the outlet of the recirculation forcemain into the Sludge Storage Tank;

#### Final Effluent Flow Measurement and Sampling Point

- Final Effluent flow measurement device in the precast Controls Building downstream of the Effluent Pump Tank (EPT);
- Sampling of Final Effluent from the Effluent Pump Tank (EPT) prior to discharge to the Type A dispersal bed;

#### **Final Effluent Disposal Facilities**

#### Type A Dispersal Bed

Q = 37,300 litres per day

Two (2) raised Type A dispersal beds, each bed is 1,440 square metres for a total of 2,880 square metres described as follows:

• Located close to the southwest corner of the property boundary, consisting of a stone layer with an area of 380 square metres (38 metres by 10 metres), a minimum thickness of 300 millimetres and protected by permeable geo-textile fabric and being at least 600 millimetre above high groundwater table, rock or soil with a percolation time of 1 minute per centimetre or less or greater than 50 minutes per centimetre, overlying a minimum 300\* millimetre thick sand layer with a percolation time of 6 to 10 minutes per centimetre and less than 5% fines passing through a No. 200 sieve, and a sand mantle extending a minimum of 15 metres beyond the perimeter of the distribution piping in any direction in which the effluent entering the soil will move horizontally, consisting of two (2) piping arrangements each containing ten (10) runs of 17 metre long (340 metres in total) 75 millimetre diameter perforated distribution piping spaced 1.0 metre apart, centre to centre, in the stone layer;

(\*The minimum 300 millimetre thick sand layer shall have a total contact area of 1,440 square metres and cover each bed.)

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. "Annual 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 year;
- 2. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
- 3. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
- 4. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 5. "Commissioned" means the construction is complete and the system has been tested, inspected, and is

- ready for operation consistent with the design intent;
- 6. "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;
- 7. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
- 8. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 9. "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);
- 10. "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;
- 11. "Influent" means flows to the Sewage Treatment Plant from the collection system and but excluding process return flows;
- 12. "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;
- 13. "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;
- 14. "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;
- 15. "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;
- 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 1000200051 Ontario Inc., 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 groundwater or effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;
- 27. "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. Within six (6) months of the Works being Commissioned, 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.** 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.
- 4. Within **six (6) months** of the Works being Commissioned, 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.
- 5. The Owner shall ensure that the treatment technologies are installed in accordance with the manufacturer's installation manual.
- 6. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.
- 7. 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 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 B** 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 completion of construction of the Proposed 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 ensure that the Operating Agency fulfills the requirements under O. Reg. 129/04, as amended for the Works, including the classification of facilities, licensing of operators and operating standards.
- 5. 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.
- 6. 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.
- 7. 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.

- 8. The Owner shall visually inspect the general area where Works are located for break-out **once every month** during the operating season.
- 9. 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.
- 10. The Owner shall ensure that the sludge tank be inspected **at least twice per year**, and the sewage sludge accumulated in the sludge tank be periodically withdrawn at the frequency required to maintain efficiency of the treatment system.
- 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 that flow of effluent discharged into the subsurface disposal bed does not exceed 37,300 litres per day.
- 13. 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 C** and record all results, as follows:
  - a. all samples and measurements are to be taken at a time and in a location characteristic of the quality

and quantity of the sewage stream over the time period being monitored.

- b. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 2.b.
- c. definitions for frequency:
  - i. Bi-weekly means once every two weeks;
  - ii. Monthly means once every month;
  - iii. Annually means once every year;
- d. a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.
- 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 flow to the Sewage Treatment Plant by continuous flow measuring devices and instrumentations where possible or pumping rates as an alternative.
  - b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations where possible or pumping rates as an alternative.
- 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 Influent and Final Effluent 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;
- 1. a summary of all other 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 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.

## Schedule A

1.	Application for Environmental Compliance Approval dated October 26, 2023 and received on November 3,
	2023 for the proposed sewage treatment system and Type A dispersal bed, including the design report, final
	plans and specifications;

## Schedule B

# **Final Effluent Design Objectives**

# **Concentration Objectives**

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise
		indicated)
Total Nitrogen	Annual Average Effluent Concentration	5

## **Effluent Limits Table**

Effluent Parameter	Averaging Calculator	Concentration Limit (milligrams per litre unless otherwise indicated)
CBOD5	Monthly Average	10
	Effluent	
	Concentration	
Total Suspended Solids	Monthly Average	10
	Effluent	
	Concentration	
Total Nitrogen	Single Sample	7
	Result	

#### Schedule C

### **Monitoring Program**

Influent - Influent sampling point

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

**Note\*** Monthly during the operating period of the site for the first two (2) years after issuance of the Approval, quarterly thereafter contingent upon acceptance in writing by 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 - Final Effluent sampling point

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Biweekly*
Total Suspended Solids	Grab	Biweekly*
Alkalinity	Grab	Monthly*
Nitrate	Grab	Monthly*
Nitrite	Grab	Monthly*
Total Kjeldahl Nitrogen	Grab	Monthly*
Total Inorganic Nitrogen (TIN)	Grab	Monthly*
Total Ammonia Nitrogen	Grab	Monthly*
pH**	Grab/Probe/Analyzer	Monthly*

**Note\*** Monthly during the operating period of the site for the first two (2) years after issuance of the Approval, quarterly thereafter contingent upon acceptance in writing by the District Manager.

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

# ${\bf Sludge/Biosolids} - {\bf Sludge\ Storage\ Tank\ (SS)}$

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate 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;
- 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.

and

#### 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 and 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 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 26th day of February, 2024



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

AK/

c: District Manager, MECP Barrie Michael Varty, EnVision Consultants Ltd.