

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0582-CZEMNY
Issue Date: February 29, 2024

Hastings and Prince Edward District School Board
156 Ann Street
Belleville, Ontario
K8N 3L3

Site Location: Foxboro Public School
658 Ashley Street
Village of Foxboro, City of Belleville, County of Hastings
K0K 2B0

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:

upgrades to the existing Works for the treatment of sanitary sewage and subsurface disposal of treated effluent from the expended/re-developed Foxboro Public School for up to six hundred eight three (683) students and ten (10) support staff, located at the above site location, rated at a Maximum Daily Flow of 21,000 litres per day (L/day) with a balanced flow of 15,000 L/day, consisting of the following:

PROPOSED WORKS

PRE-TREATMENT SYSTEM

- one (1) 45,000 L one-compartment concrete flow equalization tank, located north of the school building, receiving raw sewage from the school building, having a minimum working capacity of 30,000 L, housing two (2) alternating submersible grinder pumps (Barnes Razor Model ZSGV2092L or Equivalent Equipment), complete with watertight access covers, a vent pipe or a vented lid complete with a carbon filter, discharge piping and liquid level float switches, including a high liquid level audible and visual alarm system, discharging via a 50 mm diameter forcemain complete with a flow meter (Keyence Model FD-Q or Equivalent Equipment) located in the control building, time dosing raw sewage over a 24-hour period at a maximum rate of 625 L/hour with approximately ninety six (96) cycles per day of an approximate volume of 156 L/cycle for a total effluent flow of 15,000 L/day, to a sludge storage tank;

PRIMARY TREATMENT SYSTEM

- one (1) one-compartment concrete sludge storage tank located west of the school building, receiving raw sewage from the 45,000 L flow equalization tank, having a minimum working capacity of 22,750 L, discharging via a 150 mm diameter pipe to a primary clarifier tank;
- one (1) one-compartment concrete primary clarifier tank located west of the school building, receiving effluent from the 22,750 L sludge storage tank, having a minimum working capacity of 9,200 L, discharging via a 150 mm diameter pipe to a moving bed biofilm bioreactor (Bioreactor #1);

SECONDARY TREATMENT SYSTEM

a moving bed biofilm reactor (iQ.MBBR) tertiary treatment system (Tertiary Sewage Treatment Plant) utilizing a fluidized floating bed biofilm process, located west of the school building, designed to provide treatment to a balanced over a 24-hour period daily design sewage flow of 15,000 L/day, consisting of the following:

- two (2) one-compartment moving bed biofilm bioreactors (Bioreactors #1 and #2), Bioreactor #1 receiving effluent from the 9,200 L primary clarifier tank and Bioreactor #2 receiving effluent from Bioreactor #1, Bioreactor #1 having a minimum working capacity of 7,000 L and Bioreactor #2 having a minimum working capacity of 6,500 L, the bioreactors (Bioreactors #1 and #2) containing a combined volume of approximately 4.8 m³ of specially designed plastic carrier media having an approximate specific surface area of 2,400 m² (500 m²/m³), each bioreactor equipped with eleven (11) fine bubble diffusers, Bioreactor #2 housing one (1) recirculation pump (Goulds Model LSP0311F or Equivalent Equipment) discharging to the 22,750 L sludge storage tank, Bioreactor #2 discharging via a 150 mm diameter pipe to a secondary clarifier compartment of a secondary clarifier/anoxic bioreactor tank;
- one (1) 9,100 L two-compartment secondary clarifier/anoxic bioreactor tank, the secondary clarifier compartment receiving effluent from Bioreactor #2, the secondary clarifier compartment having a minimum working capacity of 3,200 L and the anoxic bioreactor compartment having a minimum working capacity of 3,400 L, the secondary clarifier compartment complete with one (1) sloped wall double hopper and housing two (2) submersible sludge return pumps (Goulds Model LSP0311F or Equivalent Equipment) and one (1) floating skimmer pump (Goulds Model LSP0311F or Equivalent Equipment), all pumps discharging to the 22,750 L sludge storage tank, the anoxic bioreactor compartment containing a volume of approximately 1.4 m³ of specially designed plastic carrier media having an approximate specific surface area of 700 m² (500 m²/m³), equipped with four (4) coarse bubble diffusers (Tideflex Model TFA-0.75 or Equivalent Equipment), the anoxic bioreactor compartment discharging via a 150 mm diameter pipe to a moving bed biofilm bioreactor (Bioreactor #3) compartment of a bioreactor (Bioreactor #3)/tertiary clarifier tank;
- one (1) 9,100 L two-compartment moving bed biofilm bioreactor (Bioreactor #3)/tertiary clarifier tank, the Bioreactor #3 compartment receiving effluent from the anoxic bioreactor compartment of the secondary clarifier/anoxic bioreactor tank, the Bioreactor #3 compartment having a minimum working capacity of 3,200 L and the tertiary clarifier compartment having a minimum working capacity of 2,700 L, the Bioreactor #3 compartment containing a volume of approximately 1.2 m³ of specially designed plastic

carrier media having an approximate specific surface area of 600 m^2 ($500 \text{ m}^2/\text{m}^3$), equipped with four (4) fine bubble diffusers and discharging by gravity to the tertiary clarifier compartment, the tertiary clarifier compartment complete with one (1) sloped wall double hopper and housing two (2) submersible sludge return pumps (Goulds Model LSP0311F or Equivalent Equipment) discharging to the 22,750 L sludge storage tank, effluent from the tertiary clarifier compartment discharging via a 150 mm diameter pipe to a final pumping tank;

SUPPLEMENTARY TREATMENT SYSTEM

Carbon Addition

- one (1) carbon dosing system consisting of one (1) 680 L storage tank and two (2) chemical dosing pumps (ProMinent Model CNPb-1601 or Equivalent Equipment) located in the control building, dosing MicroC-2000 (or Equivalent) to the sludge storage tank and the anoxic bioreactor compartment of the secondary clarifier/anoxic bioreactor tank via two (2) chemical lines, dosing proportional to influent flow based on alternating submersible grinder pumps (equalization pumps) operational cycles;

SUBSURFACE DISPOSAL SYSTEM

- one (1) concrete final pumping tank located west of the school building, receiving effluent from the tertiary clarifier compartment of the moving bed biofilm bioreactor (Bioreactor #3)/tertiary clarifier tank, having a minimum working capacity of 7,000 L, housing two (2) alternating time-controlled submersible effluent pumps (BJM Model J400 or Equivalent Equipment), each pump rated at 125 L/min at a total dynamic head (TDH) of 8 m, complete with watertight access covers, discharge piping and liquid level float switches, including a high liquid level audible and visual alarm system, discharging via a 50 mm diameter forcemain complete with a flow meter (Keyence Model FD-Q or Equivalent Equipment) located in the control building, time dosing effluent over a 24-hour period with approximately twelve (12) cycles per day of an approximate volume of 1,250 L/cycle for a total effluent flow of 15,000 L/day to a raised Type A dispersal bed;
- one (1) 54 m by 38 m raised Type A dispersal bed located north of the school building, receiving effluent via the 50 mm diameter forcemain and one (1) concrete distribution box with four (4) outlets from the 7,000 L final pumping tank, designed for a daily design sanitary sewage flow of 15,000 L/day, having a top clean washed hard stone area of 352 m^2 (8 m by 44 m and a minimum 300 mm thick layer of clean washed hard stone meeting OBC specifications) and a total imported sand fill contact base area of $2,052 \text{ m}^2$ (38 m by 54 m and a minimum 300 mm thick layer of imported sand fill having a percolation time of 6 min/cm to 10 min/cm and meeting OBC specifications), and distribution piping installed in two (2) cells, each cell having eight (8) 19 m long runs, spaced at 1.0 m centre to centre, for the total length of 152 m of 75 mm diameter perforated distribution piping (per cell) installed in the minimum 300 mm thick clean washed hard stone layer covered with permeable geo-textile fabric/filter cloth, having a minimum separation distance of 600 mm between the bottom of the clean washed hard stone layer and the high groundwater table, rock or soil with a percolation rate (T) greater than 50 min/cm, the clean washed hard stone layer overlying a minimum 300 mm thick layer of imported sand fill having a percolation time of 6 min/cm to 10 min/cm, including a minimum 300 mm thick imported sand fill mantle extending 25 m beyond the outermost distribution pipes in the direction which effluent will move laterally in the soil away from the dispersal bed, all in accordance

with the OBC requirements;

EXISTING WORKS

the existing subsurface disposal works servicing the Foxboro Public School for the collection, transmission, treatment and disposal of domestic sewage for a future school population of up to 545 students, having a Rated Capacity of 16,340 L/d and consisting of the following:

- one (1) 2,300 L one-compartment greywater tank;
- one (1) 42,300 L two-compartment septic tank; (to be replaced by PROPOSED WORKS)
- one (1) 10,900 pump tank equipped with two (2) submersible pumps, discharging via a forcemain to the subsurface disposal bed; (to be replaced by PROPOSED WORKS)
- one (1) raised subsurface disposal bed constructed on imported sand fill with a percolation time of approximately 10 min/cm, consisting of two (2) cells each containing twenty-three (23) runs of 30 m long perforated distribution pipes, including a 15 m sand mantle immediately downstream of the disposal bed; (to be replaced by PROPOSED WORKS)

all other controls, electrical equipment, instrumentation, piping, pumps, valves 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. "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 document and any schedules attached to it, and the application;
3. "BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;
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.I of the EPA;

7. "District Manager" means the District Manager of the Kingston District Office;
8. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
9. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;
10. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
11. "Final Effluent" means effluent that is discharged to the environment from the moving bed biofilm reactor (iQ.MBBR) tertiary treatment system (Final Pumping Tank) upstream from the raised Type A dispersal bed, that is required to meet the effluent objectives stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point;
12. "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;
13. "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;
14. "Maximum Daily Flow" means the largest volume of flow to be received during a one-day period for which the Works is designed to handle;
15. "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;
16. "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;
17. "Owner" means Hastings and Prince Edward District School Board and its successors and assignees;
18. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
19. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
20. "Works" means the approved 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.

2. EXPIRY OF APPROVAL

1. This Approval will cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:
 - a. change of 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.B17 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 Informations Act* , R.S.O. 1990, c. C39 shall be included in the notification.
2. In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

4. CONSTRUCTION OF PROPOSED WORKS

1. The Owner shall ensure that the construction of the Works is supervised by a Licensed Engineering Practitioner.
2. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.
3. The Owner shall ensure that the moving bed biofilm reactor (iQ.MBBR) tertiary treatment system is installed in accordance with the manufacturer's installation manual.
4. The Owner shall ensure that an imported soil that is required for construction of the raised Type A dispersal bed as per this Approval is tested and verified by a Licensed Engineering Practitioner for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.
5. Within **six (6) months** of the Works being Commissioned, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.
6. Within **six (6) months** of the Works being Commissioned, the Owner shall prepare a set of as-built drawings showing the Works "as constructed". "As-built" drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the site for the operational life of the Works and shall be made available for inspection by Ministry staff.

5. MONITORING AND RECORDING

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

1. All samples and measurements taken for the purpose of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
2. For the purposes of this condition, the following definition apply:
 - a. Quarterly means once every three months.
3. Samples shall be collected at the sampling point, at the sampling frequency and using the sample type specified for each parameter listed in the Influent Monitoring Table included in **Schedule B**.

4. Samples shall be collected at the sampling point, at the sampling frequency and using the sample type specified for each parameter listed in the Effluent Monitoring Table included in **Schedule B**.
5. Samples shall be collected at the sampling points, at the sampling frequency and using the sample type specified for each parameter listed in the Groundwater Monitoring Table included in **Schedule B**.
6. Prior to the startup of the Proposed Works, background groundwater quality must be established by collecting groundwater samples and having them analyzed for the parameters listed in the Groundwater Monitoring Table included in **Schedule B**.
7. The Owner shall employ measurement devices to accurately measure quantity of effluent being discharged to the raised Type A dispersal bed, including but not limited to water/wastewater flow meters, event counters, running time clocks, or electronically controlled dosing, and shall record the daily volume of effluent being discharged to the raised Type A dispersal bed.
8. The Owner shall ensure that the flow of treated effluent discharged into the raised Type A dispersal bed does not exceed 15,000 L/day.
9. 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 from time to time by more recently published editions;
 - b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended; and
 - c. the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.
10. 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.

6. EFFLUENT OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Proposed Works in accordance with the Final Effluent parameters design objectives listed in the table included in **Schedule B**.

2. For the purposes of subsection 1:
 - a. The concentrations of CBOD₅ and TSS named in Column 1 of Effluent Objectives Table listed in **Schedule B**, as measured at each monitoring event, should be compared to the corresponding concentration set out in Column 3 of Effluent Objectives Table listed in **Schedule B**.
 - b. The Annual Average Concentration of Total Inorganic Nitrogen (TIN) named in Column 1 of Effluent Objectives Table listed in **Schedule B**, should be compared to the corresponding concentration set out in Column 3 of Effluent Objectives Table listed in **Schedule B**.

7. EFFLUENT LIMITS

1. The Owner shall design, construct, operate and maintain the Proposed Works such that the concentration of the material named as effluent parameter in the Effluent Limits Table in **Schedule B** are not exceeded in the effluent from the Works.
2. For the purposes of determining compliance with and enforcing subsection (1):
 - a. The Annual Average Concentration of Nitrate-Nitrogen named in Column 1 of the Effluent Limit Table listed in **Schedule B** shall not exceed the corresponding maximum concentration set out in Column 3 of the Effluent Limits Table listed in **Schedule B**.

8. OPERATIONS 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 Proposed Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for routine operation of all the Works;
 - b. inspection programs, including frequency of inspection, for all the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for all the Works; copies of maintenance contracts for any routine inspections and 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 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, upon completion of 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 grass-cutting is maintained regularly over the raised Type A dispersal bed, and that adequate steps are taken to ensure that the area of the underground Works is protected from vehicle traffic.
6. The Owner shall visually inspect the general area where Works are located for break-out once every month.
7. In the event a break-out is observed from the raised Type A dispersal bed, the Owner shall do the following:
 - a. sewage discharge to the raised Type A dispersal 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.
8. The Owner shall employ for the overall operation of the Proposed Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the

Proposed Works.

9. 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 operations and maintenance activities required by this Approval.

9. REPORTING

1. **One week** prior to the start up of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start up date.
2. The Owner shall report to the District Manager orally **as soon as possible** any non-compliance with the compliance limits specified in subsection 2 of Condition 7, and in writing within **seven (7) days** of non-compliance.
3. 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.
4. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
5. The Owner shall prepare and submit a performance report, on an annual basis, within **ninety (90) days** (November 29th) following the end of each school year (September 1st to August 31st) to the District Manager. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - a. a summary and description of efforts made and results achieved in meeting the effluent objectives of Condition 6;
 - b. a summary and interpretation of all monitoring data and a comparison to the effluent limit of Condition 7, including an overview of the success and adequacy of the Works, and a contingency plan in the event of non-compliance with the effluent limit.
 - c. a summary and interpretation of groundwater monitoring data;
 - d. a summary and interpretation of groundwater monitoring data including shallow groundwater flow direction, interpretation of analytical results and comparison with the compliance limit of 2.5 milligrams per litre for Nitrate-Nitrogen concentration in accordance with the

Reasonable Use Policy;

- e. a review and assessment of the performance of the Works, including all treatment units and the raised Type A dispersal bed;
- f. a description of any operating problems encountered and corrective actions taken at all Works located at the property;
- g. 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 sludge pump-outs accumulated from the treatment system and records of visual inspections of the raised Type A dispersal bed;
- h. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- i. a summary and interpretation of all daily flow data and results achieved in not exceeding the Maximum Daily Flow discharged to the raised Type A dispersal bed;
- j. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- k. a summary of all spill or abnormal discharge events;
- l. any other information the District Manager requires from time to time;

10. DECOMMISSIONING OF UN-USED WORKS

1. The Owner shall properly abandon any portion of unused Existing Works, as directed below, and upon completion of decommissioning, report in writing to the District Manager:
 - a. any sewage pipes leading from building structures to unused Works components shall be disconnected and capped;
 - b. any unused septic tanks, holding tanks and pump chambers shall be completely emptied of its content by a licensed hauler and either be removed, crushed and backfilled, or be filled with granular material;
 - c. if the area of the existing leaching bed is going to be used for the purposes of construction of a replacement bed or other structure, all distribution pipes and surrounding material must be removed by a licensed hauler and disposed off site at an approved waste disposal site; otherwise the existing leaching bed may be abandoned in place after disconnecting, if there are no other plans to use the area for other purposes.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval of the existence of this Approval.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is 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 specified in the Approval and that the Works does not cause any impairment to the groundwater.
6. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
7. Condition 7 is imposed to ensure that the effluent discharged from the Works to the groundwater meets the Ministry's effluent quality requirements thus minimizing environmental impact on the groundwater.
8. Condition 8 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such information is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.

9. Condition 9 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
10. Condition 10 is included to ensure that any components of un-used Works are properly decommissioned.

Schedule A forms part of this Approval and contains a list of supporting documentation/information received, reviewed and relied upon in the issuance of this Approval.

SCHEDULE A

1. Environmental Compliance Approval Application submitted by Paisley McDowell, P.Eng., Project Manager – Rural Servicing, EnVision Consultants Ltd., dated May 1, 2023 and received on March 13, 2023, including all supporting information.
2. The design report titled "On-Site Sewage System Design and Water Resource Impact Study" dated February 17, 2023 and prepared by EnVision Consultants Ltd.
3. All other information and documentation provided by EnVision Consultants Ltd.
4. Environmental Compliance Approval Application submitted by Tanya Kizovski of WSP Canada Inc. received on December 18, 2014, including report on the existing wastewater disposal system prepared by WSP Canada Inc.

SCHEDULE B

Influent Monitoring Table

Sampling Location	Flow Equalization Tank
Frequency	Quarterly (once every three months)
Sample Type	Grab
Parameters	BOD ₅ , Total Suspended Solids (TSS), Total Kjeldahl Nitrogen (TKN), Total Ammonia Nitrogen, pH, Alkalinity

Effluent Monitoring Table

Sampling Location	Effluent discharged from the moving bed biofilm reactor (iQ.MBBR) tertiary treatment system (Final Pumping Tank) upstream from the raised Type A dispersal bed
Frequency	Quarterly (once every three months)
Sample Type	Grab
Parameters	CBOD ₅ , Total Suspended Solids (TSS), Total Inorganic Nitrogen, Total Ammonia Nitrogen, Nitrite-Nitrogen, Nitrate-Nitrogen, pH, Alkalinity

Groundwater Monitoring Table

Sampling Location	Monitoring Wells: MW-1, MW-2, MW-3
Frequency	Quarterly (once every three months)
Sample Type	Grab
Parameters	Total Ammonia Nitrogen, Nitrite-Nitrogen, Nitrate-Nitrogen
Groundwater Monitoring	Water Level

Effluent Objectives Table

Effluent discharged from the moving bed biofilm reactor (iQ.MBBR) tertiary treatment system (Final Pumping Tank) upstream from the raised Type A dispersal bed

Final Effluent Parameter	Averaging Calculator	Effluent Concentration Objective (maximum unless otherwise indicated)
<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
CBOD ₅	Single Sample Result	10 mg/L
Total Suspended Solids	Single Sample Result	10 mg/L
Total Inorganic Nitrogen (TIN)	Annual Average Effluent Concentration	4.5 mg/L

Effluent Limit Table Monitoring

Downstream from the raised Type A dispersal bed

Central Monitoring Well (MW-2)

Final Effluent Parameter	Averaging Calculator	Effluent Concentration Limit (maximum unless otherwise indicated)
<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
Nitrate-Nitrogen	Single Sample Result	2.5 mg/L

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 5413-9XJLEH issued on July 7, 2015.

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**

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 29th day of February, 2024



Fariha Pannu, P.Eng.

Director

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

KC/

c: District Manager, MECP Kingston District Office

Area Manager, MECP Belleville Area Office

Paisley McDowell, P.Eng., Project Manager – Rural Servicing, EnVision Consultants Ltd.