

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

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 6759-CGJJD7 Issue Date: May 29, 2023

Landings Campground Ltd.

1073 Witmer Road Wilmot, Ontario N0B 2H0

Site Location: Landings Campground Ltd.

1073 Witmer Road

Township of Wilmot, Regional Municipality of Waterloo

N0B 2H0

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:

amendment in the previous approved sewage Works for collection, treatment and subsurface sewage disposal, to service a proposed 132 seasonal camping sites, including 18 Park Model Units and 114 other sites, office expansion, a public washroom with showers, proposed laundry and a new attached three bedroom single family residence, all located at the Landings Campground, operated seasonally from May to October every year, with Maximum Daily Flow of 41,000 Litres per day and Monthly Average Daily Flow Rate of 20,500 Litres per day, comprising of the following:

PROPOSED WORKS

• Connecting the new residence's (new attached single-family residence to be constructed to replace the existing residence at the back of the main office building) sanitary sewer is to the existing adjacent 5,400 L solids-removal tank that is ultimately discharging to a proposed pump tank North East of the proposed laundry building and then further discharge to the flow equalization tank;

Replacement of previous approved Flow Equalization Tank (EQ) and Pumps

• one (1) 34,500 L one-compartment precast concrete flow equalization tank designated as EQ, collecting raw sewage from the site collection system from the 122 existing seasonal camping sites and 10 proposed seasonal camping sites (of which 18 sites are proposed to be Park Model Units), a public washroom with showers, proposed laundry and a single family residence, designed for a hydraulic retention time of approximately 17 hours, complete with two (2) alternating timer-controlled submersible vortex pumps time dosing sewage via a 50 mm diameter forcemain to a proposed RH20 Moving Bed Biofilm Reactor (MBBR) treatment system sludge storage tank SS1 over a 24-hour period at an approximate rate of 1,708 L/hr, complete with a watertight access cover and level regulators including a high liquid level audible and visual alarm system;

Replacement of the previous approved Moving Bed Biofilm Treatment System with a RH2O Moving Bed Biofilm Treatment System (Q = 41000 L/day)

Online Sludge Storage Tank (ON-SS)

• one (1) online 34,500 L one-compartment precast concrete primary sludge storageON-SS1 providing settling and storage of primary sludge, designed for a hydraulic retention time of 3.3 to 6.6 hours for settling and storage of the primary sewage, discharging via gravity to a primary clarifier (PC), complete with a watertight access cover;

Primary Clarification Chambers (PC)

• one (1) 22,500 L two-compartment precast concrete primary clarification chambers (PC), providing settling and storage of primary sludge, designed for a hydraulic retention time of 3.6 hour to 4.3 hours for settling and storage of the primary sewage, discharging via gravity to an anoxic pre-denitrification bioreactor chamber (PRE-DN);

Anoxic Pre-Denitrification Bioreactor Chamber (PRE-DN)

• one (1) 10,900 L one-compartment concrete aeration with a design hydraulic retention time of 1.7 hours, the tank is filled with specially designed plastic carrier media (Kaldness or equivalent) having a combined media carrier volume of 5,000 m³, equipped with a HP-200 linear blower, a Goulds model pump for nitrate analysis, discharging by gravity to an aerobic bioreactor (BR1);

Offline Primary Sludge Storage Tank (OFF-SS)

• one offline (1) 34,500 L two-compartment precast concrete primary sludge storage/primary clarification tank, designed with a retention time of 18.6 to 46.6 hours, designated as OFF-SS1 providing settling and storage of primary sludge, discharging via gravity to the online Sludge Stoerage Tank ON-SS;

Aerobic Bioreactor BR 1 (Carbon Reduction)

• one (1) three cahmbered Aerobic Tank having a total effective volume of 21,400 L, designed with a retention time of 4.1 hours, comprising three equally sized compartments, containing 7.02 m³ of specially designed carried media (Kaldness or equivalent) and twenty nine (29) fine bubble diffusers and discharging via gravity to the Nitrification Aerobic Reactor BR2;

Aerobic Bioreactor BR 2 (Nitrification)

• one (1) three chambered Aerobic Tank having a total effective volume of 21,400 L, designed with a retention time of 4.1 hours, comprising three equally sized compartments, containing 7.99 m³ of specially designed carried media (Kaldness or equivalent), and Twenty Nine (29) fine bubble diffusers, discharging via gravity to a Secondary Clarifier SCL; the tank BR2 is complete with a duplex recirculation pumps rated at 75 L/min under 4.5 m TDH, recirculating a portion of the wastewater from the last chamber to the sludge storage tank;

Secondary Clarifier (SCL)

• one (1) 7,900 L one-compartment concrete secondary clarifier tank complete with two sloped walled hoppers and a floating skimmer, housing one (1) surface skimmer pump, designed with a retention time of 3.2 hours, complete with three sludge return pumps, each rated at 75 L/min under a TDH of 4.5m, discharging via a forcemain to a secondary sludge storage tank, the SC tank discharging via gravity to Anoxic Post-Denitrification Bioreactor Tanks (Post-DN);

Anoxic Post-Denitrification Bioreactor Tanks (Post-DN)

• two (2) two chambered Aerobic Tanks, arranged in series, each having a total effective volume of 8,800 L, containing 8.99 m³ of specially designed carried media (Kaldness or equivalent), designed with a retention time of 9.74 hours, complete with a carbon injection system and time-operated coarse bubble diffusion in order to maintain an anoxic conditions, discharging via gravity to Aerobic Residual Carbon Reduction Bioreactor (BR3);

Aerobic Residual Carbon Reduction Bioreactor (BR3)

• one (1) two chambered Aerobic Tank having a total effective volume of 8,300 L, containing 3.00 m³ of specially designed carried media (Kaldness or equivalent), designed with a retention time of 4.9 hours, comprising two compartments, complete with ten (10) fine bubble diffusers and discharging via gravity to a Phosphorus Reactor Tank (P);

Phosphorus Reactor Tank (P)

• one (1) two chambered phosphorus reduction tank, having an overall volume of 4,000 L complete with coagulant dosing system and fine bubble aeration, designed with a retention time of 2.36 hours, and discharging via gravity to a Final Clarifer (FCL);

Final Clarifier Tank (FCL)

• one (1) 21,400 L one-compartment concrete tertiary clarification tank with three sloped walled hoppers, and skimmer and pump to return settled sludge to an offline sludge storage tank, designed with a retention time of 5.88 hours, the return sludge pumps are 5 in total each rated at 75 L/min under a TDH of 4.5 m; the effluent from the Final Clarifier is being discharged via gravity to the Effluent Pump Tank (FPT);

Final Effluent Pump Tank (FPT)

• one (1) 10,900 L one-compartment concrete final effluent pump tank, complete with two alternating demand controlled effluent pumps each rated at 225 L/min at 8.5 m TDH, dishcharging at a maximum flow rate of 41,000 L/day throug two forcemains to a sub surface Type A dispersal bed, through two distribution box;

1. Existing and Previous Approved Works

Replacement of Existing Holding Tank North West of Site 807

replacement of an existing holding tank with a new 9,000 litres concrete solids removal tank, serving sites No. 801 to 815 and 901 to 907 having two-compartments, located at the north west of site 807, receiving sewage and discharging to an existing solids removal pump tank located south west of site 401;

Existing Solids Removal/Pump Tank South West of Site 401

one (1) existing double chambered solids removal/pump tank with a total capacity of 13,500 litres, receiving sewage flow from sites No. 305, 401 to 406, 408 to 410, 701 to 710, 908 to 914, and from the new tank north west of site No. 807, equipped with one (1) 0.5 HP effluent submersible pump, rated at 80 Litres/minute under a TDH of 9 metres pumping the effluent via an existing 38 mm dia forcemain to the existing gravity sanitary sewers near site 407;

Existing Solids Removal/Pump Tank North of Site 308

one (1) existing double chambered solids removal/pump tank with a total capacity of 13,500 litres, receiving sewage flow from sites No. 302 to 304, 306 to 309 and 319 to 323, equipped with one (1) 0.5 HPeffluent submersible pump, rated at 80 Litres/minute under a TDH of 9 metres pumping the effluent via an existing 38 mm dia forcemain to the existing gravity sanitary sewers near site 311;

Two Existing Solids Removal Tanks East of Main Office

two (2) existing double chambered solids removal tanks with a total capacity of 5,400 litres, receiving sewage flow from the Main Office, washrooms, snack-bar, and an existing residence, discharging effluent via a 100mm diameter sewers to a proposed pump tank north east of the proposed laundry building;

Proposed Pump Tank North East of the Laundry Building

one (1) proposed pump tank with a total capacity of 4,141 litres, receiving sewage flow from the two solids removal tanks and a proposed laundry building, equipped with one (1) effluent submersible pump rated at 100 Litres/minute under a TDH of 4.5 metres, pumping the effluent via a 50 mm dia forcemain and downstream receiving sewers, which also receive sewage flow from sites No. 101 to 107, all directed to the proposed flow equalization tank;

Two Existing Solids Removal Tanks North East of Site 501

one (1) existing single chambered solids removal tank with a total capacity of 4,500 litres discharing to a second double chambered solids removal tank with a total capacity of 5,400 litres, installed in series, receiving sewage flow from sites No. 501, 502, 608 to 615, and 915 to 926 discharging the effluent via a 100 mm diameter sewer to the proposed flow equalization tank;

Existing Solids removal Tank North of Site 108

one (1) double chambered existing septic tank with a total capacity of 13,500 litres, receiving sewage flow from sites No. 108 to 111, 203 to 207, 210 to 215, 310 to 318, 601 to 607, and the two 13,500 litres solids removal pump tanks discharging the effluent via a 100 mm diameter sewer to the proposed flow equalization tank;

Flow Equalization tank (EQT) and Pumps (EQP) (now being replaced as per Proposed Works)

one (1) 30,300 L one-compartment precast concrete flow equalization tank designated as EQT (Porter's model 7000GA-S, or equivalent), collecting raw sewage from the site collection system from the 122 existing seasonal camping sites (including 4 Park Model Units), and 23 proposed seasonal camping sites, a public washroom with showers, proposed laundry and a single family residence, designed for a hydraulic retention time of approximately 17 hours, complete with two (2) alternating timer-controlled submersible vortex pumps designated as EQP (BJM SV400 or equivalent) time dosing sewage via a 50 mm diameter forcemain to a proposed Moving Bed Biofilm Reactor (MBBR) treatment system sludge storage tank SS1 over a 24-hour period at an approximate rate of 1,710 L/hr, complete with a watertight access cover and level regulators including a high liquid level audible and visual alarm system;

2. Previous Approved Works (Now being replaced with an RH2O Moving Bed Biofilm Treatment System)

Moving Bed Biofilm Treatment System

Primary Sludge Storage/Primary Clarification Tank (SS1)

• one (1) 30,300 L two-compartment precast concrete primary sludge storage/primary clarification tank designated as SS1 (Porter's model 6500GA-P, or equivalent) providing settling and storage of primary sludge, designed for a hydraulic retention time of 2 hours for settling and storage of the primary sewage, discharging to a primary clarifier (PC), complete with a watertight access cover;

Aerobic Bioreactors (BR1 and BR2)

• two (2) approximately 15,900 L and 15,100 L, one-compartment concrete aeration tanks (BR1 and BR2) installed in series (Babcock model 15900L-S, or equivalent) containing a combined volume of 11.4 m³ of specially designed plastic carrier media (Kaldness or equivalent) having a combined media carrier surface area of 5,100 m², each bioreactor tank equipped with fourteen (14) fine bubble diffusers, effluent from BR1 discharging by gravity to BR2, and effluent from BR2 discharging by gravity to a Secondary Clarifier (SC); BR 2 is also equipped with a recirculation pump to return part of the mixed liquor up to 4 times of the design flow to the Sludge Storage tank SS1 to facilitate pre-anoxic denitrification;

Secondary Clarifier (SC)

• one (1) 6,100 L one-compartment concrete secondary clarifier tank (Porter's model 2000GB-S, or equivalent) complete with sloped walls and a floating skimmer, housing one (1) surface skimmer pump (Goulds Model LSP0311F or equivalent) discharging via a forcemain to a secondary sludge storage tank and two (2) submersible sludge return pumps (Goulds Model LSP0311F or equivalent) discharging via a forcemain to a secondary sludge storage tank, the SC tank discharging via gravity to an Intermediate Pump Tank (IPT);

Intermediate Pump Tank (IPT)

• one (1) 9,300 L one-compartment concrete Intermediate Pump Tank (Porter's model 2000GB-S, or equivalent) complete with duplex effluent pumps (SEP1 and SEP 2) to time dose the denitrification filter (NXF1);

Nitrex Tertiary Denitrification Filter (NXF)

• One (1) Nitrex Filter System, consisting of one (1) tank NXF (Porter's model 14300GA-S, or equivalent), having an effective working volume of 67,200 L approximately, and filled with 60 m³ of reactive wood chip media, receiving flow from the Intermediate Pump Tank (IPT) for post-anoxic denitrification, and discharging the denitrified effluent by gravity to the Polishing Bioreactor/Floc Reactor Tank for further removal of CBOD5 and TSS and phosphorus reduction;

Polishing Bioreactor/Floc Reactor Tank (BR3 and PR)

• one (1) custom partitioned tank with two (2) chambers for aerobic MBBR polishing and flocculation having a total effective volume of 8,900 L (Porter's model 2000GB-P, or equivalent), partitioned to two (2) chambers BR3 and PR each having a volume of 6,200 L and 2,700 L respectively, containing 2.2 m³ of specially designed carried media (Kaldness or equivalent) and seven (7) fine bubble diffusers in the first chamber and four (4) coarse bubble diffusers in the second chamber and one (1) PAC storage container in a control building complete with a fill level indicator, and a flow-paced chemical pump dosing PAC into PR for phosphorus removal, with chemical sludge removed from the Tertiary Clarification Tank Final Clarifier via sludge return pump to the Secondary Sludge Storage Tank and discharging effluent by gravity to a tertiary clarification tank;

Tertiary Clarification Tank (TC)

• one (1) 6,100 L one-compartment concrete tertiary clarification tank (Porter's model 2000GB-S, or equivalent) complete with sloped walls and a floating skimmer, housing one (1) surface skimmer pump (Goulds Model LSP0311F or equivalent) discharging via a forcemain to a secondary sludge storage tank and two (2) submersible sludge return pumps (Goulds Model LSP0311F or equivalent) discharging via a forcemain to a secondary sludge storage tank, and discharging effluent by gravity to a final effluent pump tank;

Secondary Sludge Storage Tank (SS2)

• One (1) 30,300 L one-compartment precast concrete secondary sludge storage tank designated as SS2 (Porter's model 6500GA-S, or equivalent) receiving sewage flow from Tertiary Clarifier (TC) and Secondary Clarifier (SC) providing settling and storage of secondary sludge, designed for a hydraulic retention time of 2 hours for settling and storage of the secondary sewage, discharging by gravity to Secondary Sludge Tank (SS1);

Aeration Equipment, Dosing system and Control panels

• a control building equipped with PAC container, air blowers for BR1, BR2, (each rated at 70 Nm³/h) BR3 (rated at 8.75 Nm³/h) and PR (rated at 8.75 Nm³/h), and control panels;

Final Effluent Pump Tank (EPT)

• one (1) 9,800 L one-compartment concrete final effluent pump tank (Porter's model 2300GA-S, or equivalent), designed for a hydraulic time of 6 hours, complete with two alternating demand controlled effluent pumps (Liberty Model 280 or equivalent)each rated at 85 litres per minute at 4.5 m TDH, discharging via two forcemains to a proposed sub surface disposal bed, through two distribution box;

3. Previous Approved Works

Subsurface Sewage Disposal System (Q = 41000 L/day)

• One (1) Type A Dispersal Bed consisting of four (4) equally sized effluent distribution piping systems, three having nine (9) 18.0 m long 100 mm diameter and one having eleven (11) 14.0 m long distribution pipes installed 1.0 m apart centre to centre within an approximately 822 m² 300 mm thick stone layer (expanded to 1,019 m² ground perimeter) constructed over an imported sand fill layer with a percolation rate of 6-10 min/cm with a contact area of approximately 3,075 m², and a thickness ranging from 300 mm to 600 mm lying over a native soil with percolation rate of 30 min/cm;

all other monitoring and control systems, air compressors, electrical equipment, mechanical components, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage Works, all in accordance with the **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 Guelph District Office.
- 6. Manager" means the District Manager of the appropriate local district office of the Ministry
- 7. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
- 8. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
- 9. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, including all Bypasses, 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" 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 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 Daily 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. "Monthly Average 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
- 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 Landings Campground Ltd., including any successors and assignees;
- 20. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40;
- 21. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed:
- 22. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;
- 23. "Works" means the approved sewage works, and includes Proposed Works, Existing Works.

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

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

- 1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
- 3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 4. The issuance of, and compliance with the conditions of this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the Works;

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. **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 **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.
- 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 following objectives:
 - a. Final Effluent parameters design objectives listed in the table(s) included in **Schedule B.**
 - 2. For the purposes of subsection (1):
 - a. The Monthly Average Concentration of CBOD₅, TSS and TAN and Nitrate-Nitrogen named in Column 1 of Effluent Objectives Table (Table 1) listed in **Schedule B**, should be compared to the corresponding concentration set out in Column 2 of Effluent Objectives Table listed in **Schedule B**.
 - c. Maximum Daily Flow and Monthly Average Daily Flow to all of the sewage works does not exceed 41,000 Litres per day and 20,500 Litres per day, respectively.

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 (Table 2) included in **Schedule B** are met.
- 2. For the purposes of determining compliance with and enforcing subsection (1):
 - a. The concentration of CBOD₅ TSS and TIN named in Column 1 of Effluent Limits Table listed in **Schedule B** shall not exceed the corresponding maximum concentration set out in Column 2 of Effluent Limits Table listed in **Schedule B**.

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 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 the 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.
- 5. 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.
- 6. The Owner shall visually inspect the general area where Works are located for break-out once every month during the operating season.
- 7. 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.
- 8. The Owner shall not replace the existing travel trailers with park model units without an amendment approval from the Ministry.
- 9. The Owner shall ensure that the septic tanks be inspected at least twice per year by a qualified person, 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 ensure the grease interceptors be cleaned out **at least once per year**, or more frequently as determined by the Works operator, for removal of fats, oil and grease from the kitchen wastewater;
- 12. The Owner shall ensure that Maximum Daily Flow and Average Daily Flow discharged into the subsurface disposal bed does not exceed does not exceed 41,000 Litres per day and Average Daily Flow Rate of 20,500 Litres per day respectively.
- 13. Upon request, the Owner shall make the Inspection Reports available to Ministry staff.
- 14. The Owner shall maintain a minimum 200 square metre vacant reserve area free from any structure, stockpile of materials or underground utilities, located beyond the south end of the Type A Dispersal bed, as a contingency measure for future design, approval and construction of an additional or replacement subsurface disposal bed.
- 15. 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.
- 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 employ measurement devices to accurately measure quantity of effluent being discharged to each individual subsurface disposal system, 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 system.
- 4. The Owner shall retain for a minimum of **five (5) years** from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

8. REPORTING

- 1. The Owner shall report to the District Manager orally **as soon as possible** any non-compliance with the compliance limits, and in writing within **seven (7) days** of non-compliance.
- 2. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges) made under the EPA, the Owner shall, within **fifteen** (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.
- 3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

- 4. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager 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 flow 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, Monthly Average Daily Flow and Balanced 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 description of efforts made and results achieved in meeting the Design Objectives Condition;
 - j. a summary of any complaints received and any steps taken to address the complaints;
 - k. 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;
 - 1. any other information the District Manager requires from time to time.

9. DECOMMISSIONING OF UN-USED SEWAGE WORKS

- 1. The Owner shall properly abandon any portion of unused existing sewage 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 sewage 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 regarding general provisions is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted.
- 2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 3. Condition 3 regarding construction of Proposed Works/record drawings is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
- 4. Condition 4 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
- 5. Condition 5 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
- 6. Condition 6 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.
- 7. Condition 7 regarding monitoring and recording is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and compliance limits.

8.	Condition 8 regarding reporting is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for this Approval.		
9.	Condition 9 is included to ensure that any components of un-used Works are properly decommissioned.		

Schedule A

1.	Application for Environmental Compliance Approval dated June 8, 2022 and received on June 29, 2022.

Schedule B

Table 1 - Effluent Objectives sampled on discharge from the final Effluent Pump Tank (EPT)		
Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)	
CBOD ₅	10	
TSS	10	
Total Inorganic Nitrogen	2.5	
Total Phosphorus	0.5	

Table 2 - Effluent Limits		
sampled on discharge from the final Effluent Pump Tank (EP		
Effluent Parameter	Concentration Limits	
	(milligrams per litre unless otherwise	
	indicated)	
CBOD _s	20	
TSS	20	
Total Inorganic Nitrogen	2.5	

Schedule C

Raw Sewage Monitoring Table

Sampling Location	Flow Equalization Tank (EQT)
Frequency	three times during the operating Season (May - October)*
Sample Type	Grab
Parameters	BOD ₅ , Total Suspended Solids (TSS), Total Phosphorus, Total Kjeldahl Nitrogen
	(TKN)

^{*}period during the sampling events to be spread evenly

Final Effluent Monitoring Table

Sampling Location	Effluent discharged from the final effluent pump tank (EPT)
Frequency	Quarterly (four times per year)*
Sample Type	Grab
Effluent	CBOD, Total Suspended Solids (TSS), Total Phosphorus, Total Kjeldahl
Parameters	Nitrogen (TKN), Total Ammonia Nitrogen (TAN), Nitrite Nitrogen, Nitrate
	Nitrogen, pH, Temperature (ambient and wastewater)

^{*}period during the sampling events to be spread evenly

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6384-BGCKWU issued on November 27, 2019.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("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 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

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 May, 2023



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

KH/

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