AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 8850-DDNLJZ
Issue Date: March 28, 2025

Longford Reserve Limited
2 St. Clair Ave West, Suite 700
Toronto, Ontario
M4V 1L5

Site Location: Longford Reserve
2200 Miriam Drive
City of Kawartha Lakes

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:

Existing and Proposed upgraded seasonal subsurface disposal sewage works at the Longford Reserve property, for the collection, transmission, treatment and disposal of sanitary sewage servicing 36 seasonal cottages and a Main Camp comprising;

PROPOSED WORKS

Sewage System No. 1 serving 2185 Miriam Drive (Q = 5,800 L/day)
Sewage Works No. 1 serving an a seasonal bunkie and a seasonal Residential Cottage located at 2185 Miriam Drive, with a Maximum Daily Flow of 5,800 L/day, comprising;

- One Proposed two compartment septic tank with a capacity of 14,000 litres, located North East of an Existing Garage, receiving sewage flow by gravity and discharge the effluent by gravity, equipped with effluent filter, discharging the effluent to the proposed Eljen™ GSF dispersal bed, through a Proposed Pump Chamber;

- One (1) Pump Chamber, with a working volume of 1,200 L, receiving effluent from the Septic Tank, pumping the effluent to proposed Eljen™ GSF dispersal bed, through an effluent pump designed to dose 331 L per dose through a 50 mm diameter HDPE forcemains;

- Subsurface disposal system (Eljen™ GSF system)
  One (1) fully raised Eljen™ GSF system receiving sewage flow a Pump Chamber, at a maximum daily flow rate of 5,800 L/day, in a 330 mm thick 300 m^2 (15m x 20m) sand dispersal area arranged, in five (5) rows, each row having 13 Eljen GSF A-42 modules (each module is 1220 mm long x 600 mm wide x 180 mm high), with a total of 65 modules, equipped with Eljen™ sampling device, with a 75 mm diameter perforated PVC pipe centred over each module, constructed in specified system sand meeting requirement of Section 2.1.6 (BMEC #20-03-395) with minimum thickness of 150 mm below the modules, covering a minimum area of 300 m^2 overlaid on native soil with a T-time < 20 minutes per centimetre, and bottom of the specified system sand is 600 millimetres or more above the high ground water table;

Sewage System No. 2 serving 2200/2205B/2200 B/2205 B Miriam Drive (Q = 6,950 L/day)
Sewage Works No. 2 serving the following site facilities, with a combined Maximum Daily Flow of 6,950 L/day, comprising;

Main Office/Camp (2200 Miriam Drive) - 1,600 L/day
Hilltop Cottage (2205 Miriam Drive) - 2,000 L/day
The Pines Cottage (2200 B Miriam Drive) - 1,100 L/day
Chaplin Cottage (2205 B Miriam Drive) - 2,250 L/day

- one (1) in-ground one-compartment anaerobic digester (Waterloo Biofilter Anaerobic Digester - Model ADIPC-18000 or Equivalent Equipment) tank (2.6m x 5.1m) receiving raw sewage from the above mentioned three site facilities via gravity, having a minimum anaerobic digester volume of 14,000 L, complete with two (2) access risers to grade, a Waterloo Biofilter InnerTube pipe with a volume of 1,400 L and an internal pump chamber housing one (1) effluent pump time-dosing effluent evenly throughout the day not exceeding 3,500 L/day via a 50 mm diameter forcemain to a Waterloo Biofilter treatment unit;

- one (1) proposed 18,000 litre single compartment Waterloo Biofilter basket biofilter tank (2.6m x 5.1m) , located immediately downstream of the anaerobic digester, housing two (2) wire baskets filled with a minimum total of 9.8 cubic metres of biofilter foam cube medium and equipped with one (1) submersible effluent pump, float control and a high level alarm, discharging treated effluent via a 46m 50mm forcemain through time dosage of 360 L per dose, to a Proposed Leaching Bed Distribution Box;

- one (1) proposed fully raised Type A dispersal bed, located immediately southeast of the anaerobic digester, having a 300 millimetre thick stone layer with an area of 144 square metres (12m x 12m), protected by permeable geo-textile fabric, and complete with ten (10) runs of 10.8m long 75 mm diameter perforated distribution piping spaced 1.2 metres apart, centre to centre, in the stone layer (108m in total); overlying a sand layer being minimum 600 millimetre thick directly underneath the stone layer and minimum 300 millimetre thick elsewhere, having an area of approximately 350 square metres (25 metres by 14 metres) and a percolation time (T) of 6 to 10 minutes per centimetres with less than 5% fine material, including a sand mantle extending minimum 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the bed will move laterally;

Sewage System No. 9 serving 2285 Miriam Drive (Q = 1,100 L/day)
Upgrades to the Existing Sewage Works No. 9 serving one-bedroom cottage and the 2-storey garage and loft at 2285 Miriam Drive, with a Maximum Daily Flow of 1,100 L/day, comprising;

- Two (2) Existing two compartment septic tanks, one receiving sewage flow from one-bedroom cottage and one receiving sewage flow from the 2-storey garage and loft each with a capacity of 3,600 litres, equipped with effluent filter, discharging the effluent to an Existing Pump Chamber;

- Two (2) Existing Pump Chambers, with a working volume of 386 L, one receiving effluent from the Septic Tank at the garage, pumping the effluent to proposed Eljen™ GSF dispersal bed, through an effluent pump designed to dose 95 L per dose through one (1) 50 mm diameter HDPE forcemain and one receiving effluent from the septic tank and the cottage, pumping to the Existing filter bed;

- Subsurface disposal system (Eljen™ GSF system)
  One (1) fully raised Eljen™ GSF system receiving sewage flow from Garage via a Pump Chamber, at a maximum daily flow rate of 1,100 L/day, in a 300mm thick, 138 m2 (15m x 9.2m) sand dispersal area arranged, in two (2) rows, each row having 6 Eljen GSF A-42 modules (each module is 1220 mm long x 600 mm wide x 180 mm high), with a total of 12 modules, equipped with Eljen™ sampling device, with a 75 mm diameter perforated PVC pipe centred over each module, constructed in specified system sand meeting requirement of Section 2.1.6 (BMEC #20-03-395) with minimum thickness of 150 millimetres below the modules, covering a minimum area of 138 square metres overlaid on native soil with a T-time < 50 minutes per centimetre, and bottom of the specified system sand is 600 millimetres or more above the high ground water table;

- Filter Bed
  one (1) Existing 22m^2 filter bed receiving effluent from the pump chamber at cottage;

Sewage System No. 25 serving 200 Warren's Road (Q = 2,800 L/day)
Upgrades to the Existing Sewage Works No. 25 serving the cottage and a two bedroom bunkie located at 200 Warren's Road (Logan Lake), with a Maximum Daily Flow of 2,800 L/day, comprising;

- One Proposed two compartment septic tank with a capacity of 5,600 litres, located next to the driveway, receiving sewage flow by gravity and discharge the effluent by gravity, equipped with secured access risers and effluent filter, discharging the effluent to the an existing leaching bed;

- One (1) Existing leaching bed comprising of 4 runs of 15m long distribution piping;

EXISTING WORKS

Sewage System No. 18: 90 Andrews Lake (David Bender)

On-site Sewage works rated at a maximum capacity of 2000 L/d to service an existing Cottage 1, located at 90 Andrews Lake, and consisting of the following:

Septic Tank

one (1) two-compartment precast concrete septic tank with a capacity of 4,000 L equipped with two (2) 40.64 cm dia access risers and an approved effluent filter collecting wastewater from the existing Cottage discharging via gravity to a proposed effluent dosing pump chamber as described below;

Effluent Dosing Pump Chamber

one (1), single compartment prefabricated pump chamber with a total capacity of 303 L equipped with one (1) effluent submersible pump to pump maximum of 136 L per dose, 2 floats (pump on/off switch) and a visual audible pump alarm system, collecting effluent from the septic tank and dosing effluent via a 31.25mm dia polyethylene forcemain (approximately 30 m long) to the head of the filter bed distribution pipe;

Filter Bed

a filter bed consisting of four (4) runs of 100 mm dia PVC perforated piping, each run 5.755 m long, installed evenly on a 150 mm thick stone layer with a contact area of 27 m^2 (4 m x 6.7 m), placed over minimum of 750 mm deep filter medium, having a 250 mm thick extended contact area of 47.1 m^2 (5 m x 9.4 m), and complete with a minimum of 250 mm thick soil mantle with a percolation time of T = 20 min/cm, extending a minimum of 15 m beyond the outermost distribution pipe in any direction which effluent will move laterally in the soil away from the filter bed. The stone layer shall not be less than 900 mm above the high ground water table, rock or soil with a percolation time more than 50 minutes;

Sewage System No. 4: 2225 Miriam Drive (David McCreery) – Cottage 1 and garage

On-site Sewage works rated at a maximum capacity of 2825 L/d to service an existing Cottage 1 and garage, located at 2225 Miriam Drive, and consisting of the following:

Septic Tank

one (1) two-compartment precast concrete septic tank with a capacity of 5650 L equipped with two (2) 40.64 cm mm dia access risers and an approved effluent filter collecting wastewater from the existing Cottage and garage, discharging by gravity to the filter bed via an effluent distribution box;

Filter Bed

a filter bed consisting of four (4) runs of 100 mm dia PVC perforated piping, each run 6.6 m long, installed evenly on a 150 mm thick stone layer with a contact area of 38 m^2 (5 m x 7.6 m), placed over minimum of

750 mm deep filter medium, including a 250mm thick contact area of 38 m^2 (5 m x 7.6 m), and complete with a minimum of 250 mm thick soil mantle with a percolation time of T = 20 min/cm, extending a minimum of 15 m beyond the outermost distribution pipe in any direction which effluent will move laterally in the soil away from the filter bed. The stone layer shall not be less than 900 mm above the high ground water table, rock or soil with a percolation time more than 50 minutes;

Sewage System No. 5: 2225 Miriam Drive (David McCreery) – Cottage 2

On-site Sewage works rated at a maximum capacity of 1600 L/d to service an existing Cottage 2, located at 2225 Miriam Drive, and consisting of the following:

Septic Tank

one (1) two-compartment precast concrete septic tank with a capacity of 3,600 L equipped with two (2) 40.64 cm dia access risers and an approved effluent filter collecting wastewater from the existing Cottage discharging via gravity to a proposed effluent dosing pump chamber as described below;

Effluent Dosing Pump Chamber

one (1), single compartment prefabricated pump chamber with a total capacity of 303 L equipped with one (1) effluent submersible pump to pump maximum of 141 L per dose, floats (pump on/off switch) and a visual/audible pump alarm system, collecting effluent from the septic tank and dosing effluent via a 31.24 mm dia polyethylene forcemain (approximately 30 m long) to the head of the filter bed distribution pipe;

Filter Bed

a filter bed consisting of four (4) runs of 100 mm dia PVC perforated piping, each run 4.4 m long, installed evenly on a 150 mm thick stone layer with a contact area of 22 m^2 (4 m x 5.4 m), placed over minimum of 750 mm deep filter medium, including a 250 mm thick contact area of 22 m^2 (4 m x 5.4 m), and complete with a minimum of 250 mm thick soil mantle with a percolation time of T = 20 min/cm, extending a minimum of 15 m beyond the outermost distribution pipe in any direction which effluent will move laterally in the soil away from the filter bed. The stone layer shall not be less than 900 mm above the high ground water table, rock or soil with a percolation time more than 50 minutes;

Sewage System No. 3

Existing Class 4 sewage system located at 2215 Miriam Drive and comprising an Existing septic tank with a capacity of 3,600 L, Existing pump chamber of an unknown size; and Existing 4.3 m x 4.3 m eaching bed;

Sewage System No. 6

Existing Class 4 sewage system located at 2275 Miriam Drive and comprising an Existing septic tank with a capacity of 4,500 L; and Existing 4.9 m x 4.9 m leaching bed;

Sewage System No. 7

Existing Class 4 sewage system located 2283 Miriam Drive and comprising two (2) existing septic tanks with capacities of 3,600 L and 4,500 L, an Existing pump chamber and Existing 8 m x 18 m leaching bed;

Sewage System No. 8
Existing Class 4 sewage system located at 2277 Miriam Drive comprising an Existing septic tank with a capacity of 4,500 L; and Existing 6.8 m x 6.8 m leaching bed;

Sewage System No. 10
Existing Class 4 sewage system located at 2385 Miriam Drive comprising an Existing septic tank with a capacity of 9,000 L, an Existing pump chamber and two (2) existing 6.1 m x 6.1 m leaching beds;

Sewage System No. 11
Existing Class 4 sewage system located at 300 Browns Lake comprising an Existing septic tank with a capacity of 3,600 L, an Existing pump chamber of unknown size, and an Existing 6.4 m x 5.5 m leaching bed;

Sewage System No. 12
Existing Class 4 sewage system location at 280 Browns Lake comprising an Existing septic tank with capacity of 3,785 L, an Existing pump chamber of unknown size and an Existing leaching 6 m x 4.4 m bed;

Sewage System No. 13
Existing Class 4 sewage system located at 240 Andrews Lake - North comprising an Existing septic tank with capacity of 3,600 L and an Existing 6 m x 14 m leaching bed:

Sewage System No. 14
Existing Class 4 sewage system located at 240 Andrews Lake - South comprising an Existing septic tank with a capacity of 3,200 L, and an Existing 3 m x 5 m leaching bed;

Sewage System No. 15
Existing Class 4 sewage system located at 170 Andrews Lake comprising an Existing septic tank with a capacity of 4,000 L, an Existing pump chamber and an Existing 33 m^2 leaching bed;

Sewage System No. 16
Existing Class 4 sewage system located at 150 Browns Lake comprising an Existing septic tank with a capacity of 3,600 L; and an Existing 6.1 m x 6.1 m leaching bed;

Sewage System No. 17
Existing Class 4 sewage system located at 100 Browns Lake comprising an Existing septic tank with a capacity of 3,600 L, an Existing pump chamber and an Existing 21 m^2 leaching bed;

Sewage System No. 19
Existing Class 4 sewage system located at 30 Andrews Lake comprising an Existing septic tank with a capacity of 4,500 L, and an Existing 6 runs x 13.4 m leaching bed;

Sewage System No. 20
Existing Class 1 sewage system and Class 4 sewage system located at 50 Warren's Road / Logan Lake comprising an Existing septic tank with a capacity of 4,500 L; and an Existing 6.1 m x 4.6 m leaching bed;

Sewage System No. 21
Existing Class 4 sewage system located at 100 Warren's Road / Logan Lake comprising an Existing septic tank with a capacity of 3,200 L, and an Existing 4 runs x 15 m leaching bed;

Sewage System No. 22
Existing Class 1, Class 2, and Class 3 sewage systems located at 140 Warren's Road / Logan Lake;

Sewage System No. 23
Existing Class 1, Class 2, and Class 3 sewage systems, and Class 4 sewage system located at 170 Warren's Road / Logan Lake comprising an Existing septic tank with a capacity of 3,975 L; and an Existing 10 m x 40 m leaching bed;

Sewage System No. 24
Existing Class 1, Class 2, and Class 3 sewage systems, and Class 4 sewage system located at 190 Warren's Road / Logan Lake comprising an Existing septic tank with a capacity of 3,600 L, and an Existing 7.3 m x 3 m leaching bed;

Sewage System No. 26
Existing Class 1 sewage system and Class 4 sewage system located at 210 Warren's Road / Logan Lake comprising an Existing septic tank with a capacity of 3,600 L, and an Existing 6.7 m x 4.6 m leaching bed;

Sewage System No. 27
Existing Class 1, Class 2, and Class 3 sewage systems located at 80 Logan Lake;

Sewage System No. 28
Existing Class 1, Class 2, and Class 3 sewage systems located at Island A Logan Lake;

Sewage System No. 29
Existing Class 1, Class 2, and Class 3 sewage systems located at 220 Logan Lake;

Sewage System No. 30
Existing Class 1, Class 2, and Class 3 sewage systems located at 250 Logan Lake;

Sewage System No. 31
Existing Class 1, Class 2, and Class 3 sewage systems located at 280 Logan Lake;

Sewage System No. 32
Existing Class 1, Class 2, and Class 3 sewage systems located at 350 Logan Lake;

Sewage System No. 33
Existing Class 1, Class 2, and Class 3 sewage systems located at 450 Logan Lake;

Sewage System No. 34
Existing Class 1, Class 2, and Class 3 sewage systems located at 490 Logan Lake;

Sewage System No. 35
Existing Class 1, Class 2, and Class 3 sewage systems located at 520 Logan Lake;

Sewage System No. 36
Existing Class 1, Class 2, and Class 3 sewage systems located at 580 Logan Lake;

Sewage System No. 37
Existing Class 1, Class 2, and Class 3 sewage systems located at 610 Logan Lake;

all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works, all in accordance with Schedule A.

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

"Approval" means this entire document and any schedules attached to it, and the application;

"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;

"District Manager" means the District Manager of the Peterborough District;

"EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19, as amended;

"Licensed Installer" means a person who holds a licence under Article 2.12.3.1 of the Ontario Building Code.

"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;

"OBC" means the Ontario Building Code;

"Owner" means Longford Reserve Limited, and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c.O40, as amended.

"Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed Works and Previous 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.

2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than five (5) years, the Owner shall submit an application for extension at least **twelve (12) months** prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes **within 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 Information 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

1. The Owner shall ensure that the construction of the Works is supervised by a Licensed Installer or 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 any 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 or Licensed Installer for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.

4. Within **six (6) months** of the Works being Commissioned, the Owner shall prepare a statement, certified by a Licensed Installer or 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.

5. 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 (Sewage Works No. 1, 2 and 9)

The Owner shall, upon commencement of operation of the 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. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Effluent Monitoring Table included in **Schedule B**.

3. 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.

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.

6. EFFLUENT OBJECTIVES (Sewage Works No. 1, 2 and 9)

1. The Owner shall design and undertake everything practicable to operate the Works No. 1, 2 and 9 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 2 of Effluent Objectives Table listed in **Schedule B**.

7. OPERATIONS, MAINTENANCE AND RECORDING

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.

2. The Owner shall ensure that the Eljen GSF and Waterloo Biofilter treatment systems are at minimum inspected annually by authorized personnel, and maintained in accordance with the manufacturer's recommendations including minimal yearly effluent sampling for CBOD5 and Total Suspended Solids to ensure that it meets the design objectives of 10 mg/L for both CBOD5 and Total Suspended Solids in a grab effluent sample before discharge to the subsurface disposal bed.

3. The Owner shall ensure that the septic tank is pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filter is cleaned out at minimum once a year (or more often if required).

4. 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.

5. The Owner shall visually inspect the general area where Works are located for break-out once every month during the operating season.

6. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:

    a. sewage discharge to that subsurface disposal system shall be discontinued;

    b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;

    c. submit a written report to the District Manager within **one (1) week** of the break-out;

    d. access to the break-out area shall be restricted until remedial actions are complete;

    e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and

    f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.

7. The Owner shall maintain a logbook to record the results of operation and maintenance activities specified in the above sub-clauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.

8. **For Sewage Works 2,** the Owner shall employ measurement devices to accurately measure or estimate the quantity of effluent being discharged to each individual subsurface disposal bed, including but not limited to water/wastewater flow meters, event counters, running time clocks, or electronically controlled dosing, and shall record the daily volume of effluent being discharged to the subsurface disposal bed.

9. The Owner shall ensure that the flow of treated effluent discharged into each of the respective subsurface disposal bed does not exceed the capacity of the respective receiving subsurface disposal bed.

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 operation and maintenance activities required by this Approval.

8. REPORTING (Sewage Works 1, 2 and 9)

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. 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 and submit a performance report, on an annual basis, during initial three (3) years of the operation of Sewage Works No. 1, 2 and 9 respectively, within **ninety (90) days** following the end of each operational season 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 No. 6.

    b. a review and assessment of the performance of the Works, including all treatment units and subsurface disposal beds;

    c. a description of any operating problems encountered and corrective actions taken for all Works located at the property;

d. a record of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property including but not limited to: records of maintenance inspections for the treatment system, records of septic tank effluent filters cleaning, records of septic tank pump-outs, records of sludge pump-outs accumulated from the treatment system, records of visual inspections of all subsurface disposal systems;

e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;

f. a summary and interpretation of all daily flow data and results achieved in not exceeding the Maximum Daily Flow discharged into each one of the subsurface disposal system;

g. a summary of any complaints received during the reporting period and any steps taken to address the complaints;

h. a summary of all spill or abnormal discharge events;

i. any other information the District Manager requires from time to time;

9. 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.

10. SPECIAL CONDITION

1. The Owner shall upon failure of any of the Existing Works, notify the District Manager, in writing, of the failed Works and the planned installation schedule.

2. The Owner shall design the replacement sewage works for any Existing Class 4 sewage Works as per the guidance included in the **Schedule C.**

3. The Owner shall ensure that replacement of any failed existing sewage Work is constructed in accordance with the requirements of condition 4 of this Approval.

4. The Owner shall, within five (5) years from the date of issuance of this Approval, submit an application to amend this Approval to include all replaced septic systems.

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 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 added 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 included to require that the Works be properly operated, maintained, and equipped such that the environment is protected.

8. Condition 8 is included to ensure the Ministry is given prior notice of the pending start up date of the Works and all reportable spills are properly dealt with, documented and reported.

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 10, 2024 and received on June 21, 2024.

Schedule B

Effluent Objectives Table for Sewage Works 1 and 9

Sampling Locations: Eljen GSF system sampling port

Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
CBOD5	20
Total Suspended Solids	20

Effluent Objectives Table for Sewage Works 2

Sampling Locations: Effluent pump chamber of basket biofilter tank

Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
CBOD5	10
Total Suspended Solids	10

Effluent Monitoring Table for Sewage Works 1, 2 and 9

Sampling Locations	Sewage Works 1: Eljen GSF system sampling port Sewage Works 2: Effluent pump chamber of basket biofilter tank Sewage Works 9: Eljen GSF system sampling port
Frequency	Once a month during the period of May to September starting commencement of the operation of Sewage Works No. 2 during first 3 years* Twice during the operating period of June to August starting with commencement of the operation of Sewage Works No. 1 and 9, during first 3 years
Sample Type	Grab
Parameters	$CBOD_5$ Total Suspended Solids (TSS)

* the sampling frequency shall be reduced to twice during an operating season after initial three (3) years if there is no non-conformance of sampling results with the Effluent Objectives during the first 3 years.

Schedule C

Replacement of any failed existing Class 4 sewage Works

Replacement of any existing and approved sewage system with daily sewage flow of 1,600 litres per day as follows:

Septic Tank

- one (1) two-compartment ***septic tank*** having a capacity of approximately 3,600 litres fitted with an approved effluent filter on the outlet pipe, collecting wastewater from the cottage site and discharging effluent to an effluent pump chamber, filter bed or leaching bed as described below.

Effluent Pump Chamber

- where effluent discharge is not possible by gravity, one (1) ***effluent pump chamber*** shall be provided. The effluent pump chamber shall have a minimum capacity of 360 litres and be equipped with an audible and visual high-level alarm system and an effluent pump controlled by an on / off float switch. The effluent pump shall be sized and configured to dose the filter bed or leaching bed described below at a minimum rate of 75% of the distribution piping volume over a period not exceeding 15 minutes.

One (1) filter bed **or** leaching bed as follows:

Filter Bed

- one (1) 15 square metre fill-based filter bed consisting of the following components:

    1. 75 millimetre diameter perforated pipes installed in a continuous 15 metre square by 300 mm thick stone layer and evenly spaced over the surface of the filter medium with a maximum centre line spacing of 1.2 metres, underlain by a minimum of 750 mm filter media and a contact area consisting of minimum 250 millimetre layer of filter media extending from the base of the filter bed and sized based on the following formula:

        A = (Q * T) / 850

        Where:

        A = Contact area in square metres,

        Q = Daily design flow in litres per day, and

T = percolation rate of native soil in minutes per centimetre

Filter media shall conform to Ontario Building Code sentence 8.7.5.3(3).

2. Loading area consisting of a minimum 250 millimetre layer of leaching bed fill, conforming to Ontario Building Code Sentence 8.7.4.2(2), placed under the filter bed and contact area and extending a minimum of 15 m beyond the stone layer in any direction in which the effluent entering the soil will move horizontally.

   The minimum size of the loading area shall be as follows:

   - 110 metres squared where the T time of the native soil is 15 to 20 minutes per centimetre, or
   - 138 metres squared where the T time of the native soil is 20 to 35 minutes per centimetre, or
   - 184 metres squared where the T time of the native soil is 35 to 50 minutes per centimetre, or
   - 275 metres squared where the T time of the native soil is greater than 50 minutes per centimetre.

Leaching Bed

- one (1) leaching bed consisting of distribution piping laid in absorption trenches.

  The total length of distribution piping shall be determined by the following formula:

  L = 1,600 litres per day * (T / 200)

  Where:

  L = length of distribution piping in metres, and

  T = design percolation rate in minutes per centimetre.

  Construction of the absorption trenches shall conform to Ontario Building Code Section 8.7.3.2.- Absorption Trenches.

  Where absorption trenches are constructed in leaching bed fill, the absorption trenches shall be constructed in accordance with Ontario Building Code Section 8.7.4.

Fill Based Absorption Trenches and a loading area shall be provided.

The loading area shall consist of a minimum 250 millimetre layer of leaching bed fill, conforming to Ontario Building Code Sentence 8.7.4.2(2), placed under the leaching bed and extending a minimum of 15 m beyond the outer most distribution pipe in any direction in which the effluent entering the soil will move horizontally.

The minimum size of the loading area shall be as follows:

- 160 metres squared where the T time of the native soil is 15 to 20 minutes per centimetre, or
- 200 metres squared where the T time of the native soil is 20 to 35 minutes per centimetre, or
- 267 metres squared where the T time of the native soil is 35 to 50 minutes per centimetre, or
- 400 metres squared where the T time of the native soil is greater than 50 minutes per centimetre.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6503-AHCMJ9 issued on February 2, 2017.

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 28th day of March, 2025

Fariha Pannu.

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

KH/
c: District Manager, MECP Peterborough District.
Jason Covey, P.Eng., Tatham Engineering Limited