ENVIRONMENTAL COMPLIANCE APPROVAL
NUMBER A-500-9100051052
Version: 1.0
Issue Date: February 4, 2022

Pursuant to section 20.3 of the Environmental Protection Act, Revised Statutes of Ontario (R.S.O.) 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

GREENLIFE RETIREMENT RESIDENCE TRENTON INC.

114 WHITES ROAD
QUINTE WEST ONTARIO
K8V 5P5

For the following site:

114 Whites Road , Trenton, QUINTE WEST, ONTARIO, CANADA, K8V 5P5

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

establishment, usage and operation of new non-municipal sewage works, for the treatment of sanitary sewage from a retirement home and disposal of effluent to the existing swale located on the south side of Carrington Lane, ultimately to Meyers Creek, via a Sewage Treatment Plant and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Tertiary

Details of Service Area:

- **Type of Occupancy:** Retirement Home
- **Type and Number of Units:** 137 beds

Design Capacity of Sewage Treatment Plant

Design Capacity with All Treatment Trains in Operation	**Proposed Works**
Maximum Daily Flow	61,650 L/d
Rated Capacity	51,000 L/d

Influent

Receiving Location	Types
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

Proposed Works:

Influent Flow Measurement and Sampling Point

- flow measurement device located at the discharge of the equalization tank;
- automatic composite sampler located at the equalization tank;

Primary Treatment System

- One (1) 25.6 m^3 working capacity primary clarifier;

Flow Equalization

- One (1) 23.2 m^3 working capacity flow equalization tank, equipped with high and low level alarms, two (2) air mixing blowers (one standby), two (2) submersible effluent pumps (one standby) each with a rated capacity of approximately 41 L/min at 10 m total dynamic head (TDH), discharging a maximum of 61,650 L/day;

Secondary Treatment Systems

- Biological Treatment
  - One (1) 19.43 m^3 working capacity pre-anoxic tank, equipped with a high level alarm and one (1) submersible mixer;
  - One (1) 35.40 m^3 working capacity aeration tank, equipped with a low level alarm, a fine bubble aeration system with two (2) air blowers (one standby) each rated at 84.7 m^3/h at 35.9 kPa with variable frequency drives (VFD), two (2) effluent pumps each with a rated capacity of approximately 89 L/min at 9.5 m TDH, two (2) fine filters, and one (1) pre-anoxic effluent return pump with a rated capacity of approximately 284 L/min at 10 m TDH;
  - Two (2) 1.9 m^3 working capacity membrane bioreactor tanks in parallel, each equipped with a high level alarm, one (1) permeate extraction pump with a rated capacity of 68,500 L/day, one clean-in-place system (common between membrane tanks), two (2) air scouring blowers (one duty, one common standby between membrane tanks), and four (4) submerged membrane modules, providing a minimum total membrane area of 111.6 m^2/tank;

Disinfection System

- Two (2) UV disinfection units (Viqua UVMax H or Equivalent Equipment) operating in series, each with a rated capacity of 132 L/min;

Sludge Storage

- One (1) 27.0 m^3 working capacity sludge storage tank, equipped with a high level alarm, a coarse bubble aeration system with two (2) air blowers (one standby), one (1) supernatant return pump with a rated capacity of approximately 98 L/min at 6 m TDH, discharging supernatant to the equalization tank described above;

Supplementary Treatment Systems

- Phosphorus Removal
    - One (1) 208 L capacity phosphorus removal chemical storage tank with secondary spill containment and one (1) metering pump rated at 0 - 2.2 L/h;
- Alkalinity Addition
    - One (1) 208 L capacity alkalinity addition chemical storage tank with secondary spill containment and one (1) metering pump rated at 0 - 2.2 L/h;
- Carbon Addition
    - One (1) 208 L capacity carbon addition chemical storage tank with secondary spill containment and one (1) metering pump rated at 0 - 2.2 L/h;

Final Effluent Flow Measurement and Sampling Point

- two (2) flow measurement devices, each located at the outlet of the membrane bioreactor tanks;
- automatic composite sampler at the outlet of the disinfection system;

Final Effluent Disposal Facilities

- 50 mm diameter effluent sewer from the disinfection system to the outfall chamber, discharging to the roadside ditch located along the south side of Carrington Lane, ultimately to Meyers Creek;

including all other mechanical system, electrical system, instrumentation and control system, standby power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only;

all in accordance with the submitted supporting documents listed in Schedule 1.

DEFINITIONS

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

1. "Annual Average Daily Influent Flow" means the cumulative total sewage flow of Influent to the Sewage Treatment Plant during a calendar year divided by the number of days during which sewage was flowing to the Sewage Treatment Plant that year;
2. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
3. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
4. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

   "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the
5. EPA;

   "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Works is
6. geographically located;
7. "*E. coli*" refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen or chromogen, that produces fluorescence

under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 + 0.5 °C or 44.5 + 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well methods);

8. "EPA" means the *Environmental Protection Act,* R.S.O. 1990, c.E.19;
9. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
10. "Event" means an action or occurrence, at a given location within the Works that causes a Bypass or Overflow. An Event ends when there is no recurrence of Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Overflows and Bypasses are separate Events even when they occur concurrently;
11. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, that are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);
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. "Influent" means flows to the Sewage Treatment Plant from the collection system but excluding process return flows;
14. "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
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. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month;
17. "Monthly Geometric Mean Density" is the mean of all Single Sample Results of *E.coli* measurement in the samples taken during a calendar month;
18. "Normal Operating Condition" means the condition when all unit process(es), excluding Preliminary Treatment System, in a treatment train is operating within its design capacity;
19. "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;
20. “Owner” means 995496 ONTARIO INC, including any successors and assignees;
21. "OWRA" means the *Ontario Water Resources Act,* R.S.O. 1990, c. O.40, as amended;
22. "Peak Daily Flow Rate" (also referred to as Maximum Daily Flow 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;
23. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
24. "Rated Capacity" means the Annual Average Daily Influent Flow for which the Sewage Treatment Plant is designed to handle;
25. “Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;
26. “Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;

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

TERMS AND CONDITIONS

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

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 conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
    2. Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.
    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 sewage Works; or
        b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. **CHANGE OF OWNER AND OPERATING AGENCY**
    1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
        a. change of address of Owner;
        b. change of Owner, including address of new owner;
        c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c. B.17, as amended, shall be included in the notification;
        d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, as amended, 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 Operating Agency;
        b. change of Operating Agency, including address of 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 environmental compliance approval number.

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.

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 2.

    b. Final Effluent is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.

    c. Annual Average Daily Influent Flow is within the Rated Capacity of the Sewage Treatment Plant.

5. **COMPLIANCE LIMITS**

1. The Owner shall operate and maintain the Sewage Treatment Plant such that compliance limits for the Final Effluent parameters listed in the table(s) included in Schedule 3 are met.

2. The Owner shall operate and maintain the Sewage Treatment Plant such that the Final Effluent is disinfected continuously year-round.

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 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/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 and contingency plan, consisting of procedures and contingency plans, including notification to the District Manager, to reduce the risk of spills of pollutants and prevent, eliminate or ameliorate any adverse effects that result or may result from spills of pollutants;

g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.

3. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference at the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

4. The Owner shall ensure that the Operating Agency fulfills the requirements under O. Reg. 129/04, as amended for the Works, including the classification of facilities, licensing of operators and operating standards.

5. The Owner shall maintain a logbook to record the results of all inspections, repair and maintenance undertaken, calibrations, monitoring and spill response or contingency measures undertaken and shall make the logbook available for inspection by Ministry staff. The logbook shall include the following:

    a. the name of the operator making the entry; and

    b. the date and results of each inspection, repair, maintenance, calibration, monitoring, spill response and contingency measure.

6. The Owner shall, upon 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.

7. 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 Authority, whichever comes first.

8. The Owner shall install one (1) groundwater monitoring well at the northwest corner of the site.

9. The Owner shall conduct monthly visual inspections of the roadside ditch located on the east side of Whites Road (including photos and the approximate location of where complete infiltration occurs), downgradient of the Final Effluent outfall, for the presence and absence of surface water flow for the purpose of confirming complete infiltration within the ditch. This requirement may be modified by the District Manager after at least 2 years of operation.

10. The Owner shall have a valid written agreement with a hauler who is in possession of a Waste Management Systems Approval, for the treatment and disposal of the sludge generated from the Works, at all times during operation of the Works.

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. Upon request, the Owner shall make the Inspection Reports available to Ministry staff.

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 4 and record all results, as follows:

    a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.

b. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 2.b.

c. definitions for frequency:

i. Weekly means once every week;

ii. Monthly means once every month;

iii. Quarterly means once every three months;

d. a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week/month for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.

2. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager :

a. the Ministry's Procedure F-10-1, “Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;

b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;

c. the publication "Standard Methods for the Examination of Water and Wastewater", as amended; and

d. for any parameters not mentioned in the documents referenced in Paragraphs 2.a, 2.b and 2.c, the written approval of the District Manager shall be obtained prior to sampling.

3. The Owner shall monitor and record the flow rate and daily quantity using flow measuring devices or other methods of measurement as approved below calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flowrate of the following:

a. Influent flow to the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates/details of other methods (e.g. top water elevation of lagoons), or in lieu of an actual installation of equipment, adopt the flow measurements of the Final Effluent for the purpose of estimating Influent flows if the Influent and Final Effluent streams are considered not significantly different in flow rates and quantities;

b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations/pumping rates/details of other methods (e.g. level of lagoons), or in lieu of an actual installation of equipment, adopt the flow measurements of the Influent for the purpose of estimating Final Effluent flows if the Influent and Final Effluent streams are considered not significantly different in flow rates and quantities;

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), the Owner shall, within fifteen (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and Ontario Regulation 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 by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
    a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
    b. a summary and interpretation of all 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;
    c. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;
    d. a summary and interpretation of groundwater monitoring data including an interpretation of analytical results;
    e. a summary and interpretation of the surface water monitoring data including an interpretation of analytical results;
    f. a summary of the surface water visual inspections required by condition 6.9, including photos and a discussion on the approximate distance downstream where complete infiltration occurs;
    g. a summary of all operating issues encountered and corrective actions taken;
    h. 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;
    i. a summary of any effluent quality assurance or control measures undertaken;
    j. 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;
    k. a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in deterioration of Final Effluent quality;
    l. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
    m. a summary of any complaints received and any steps taken to address the complaints;
    n. 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;
    o. any other information the District Manager requires from time to time.

9. **RESPONSIBILITY AGREEMENT**

    1. The Owner shall enter into a duly signed Responsibility Agreement with the City of Quinte West prior to the construction of the Works approved herein in accordance with the Ministry Procedure D-5-2 entitled "Application of Municipal Responsibility for Communal Water and Sewage Services".

10. **CERTIFICATE OF REQUIREMENT**

    1. Pursuant to Section 197 of the EPA, no person having an interest in the Property,shall deal with the Property in any way without first giving a copy of this Approval to each person acquiring an interest in the Property as a result of the dealing.
    2. The Owner shall:

a. within sixty (60) days of the date of the issuance of this Approval, submit to the Director for their review, two copies of a completed Certificate of Requirement and a registerable description of the Property; and

b. within ten (10) calendar days of receiving the Certificate of Requirement authorized by the Director, register the Certificate of Requirement in the appropriate Land Registry Office on title to the Property and submit to the Director the duplicate registered copy immediately following registration.

3. For the purposes of this condition, Property shall mean the property located at 114 Whites Road, Trenton.

REASONS

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 there is a Responsibility Agreement in place between the Owner and the Municipality prior to construction of the Works so that, in the event that the Owner is unable to continue to provide sewage service, the Municipality may be able to assume ownership and operation of the Works.
10. Condition 10 is included in order to require the Owner to give notice of this Approval to potential future owners of the property before the property is dealt with.

APPEAL PROVISIONS

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 the service of this notice, require a hearing by the Tribunal. You must also provide notice to, the Minister of the Environment, Conservation and Parks in accordance with Section 47 of the *Environmental Bill of Rights, 1993* who 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:

I. 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;

II. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

I. The name of the appellant;

II. The address of the appellant;

III. The environmental compliance approval number;

IV. The date of the environmental compliance approval;

V. The name of the Director, and;

VI. 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 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 4th day of February, 2022

Fariha Pannu

Director

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

c: Kim Logan, GEMS
David Leo, CARRINGTON RETIREMENT RESIDENC

The following schedules are a part of this environmental compliance approval:

SCHEDULE 1

1. Environmental Compliance Approval Application for a Municipal and Private Sewage Works submitted and signed by David Leo, received on October 1, 2020, and all supporting documentation and information.
2. Drawing C101, dated April 29, 2021 and prepared by Jain Infrastructure Consultants Ltd.
3. Emails from Kim Logan, , Groundwater Environmental Management Services Inc., to Nick Zambito, Ministry, dated May 6, 2021, June 16, 2021, and November 2, 2021, including all attachments.
4. Emails from Dan Menard, Groundwater Environmental Management Services Inc., to Nick Zambito, Ministry, dated August 19, 2021, August 26, 2021, and November 2, 2021, including all attachments.
5. Email from Jessop Perazzo, Groundwater Environmental Management Services Inc., to Nick Zambito, Ministry, dated January 4, 2021, including all attachments.
6. Design Brief, dated December 23, 2021, including attachment, calculations and engineering drawings, prepared by Groundwater Environmental Management Services Inc.
7. Newterra Scope of Supply for the Carrington Retirement Residence, dated January 4, 2022, including calculations and engineering drawings, prepared by Newterra Ltd.

SCHEDULE 2

Final Effluent Design Objectives

Concentration Objectives

Final Effluent Parameter	**Averaging Calculator**	**Objective** (milligrams per litre unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	5.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	1.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.05 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	1.0 mg/L
E. coli	Monthly Geometric Mean Density	*2.2 CFU/100 mL
pH	Single Sample Result	6.5 - 8.5 inclusive
Nitrate as Nitrogen	Monthly Average Effluent Concentration	5.0 mg/L
Unionized Ammonia	Monthly Average Effluent Concentration	0.08 mg/L

*If the MPN method is utilized for *E.coli* analysis the objective shall be 2.2 MPN/100 mL

SCHEDULE 3

Final Effluent Compliance Limits

Concentration Limits

Final Effluent Parameter	**Averaging Calculator**	Limit (milligrams per litre unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	5.0 mg/L
Total Suspended Solids	Monthly Average Effluent Concentration	5.0 mg/L
Total Phosphorus	Monthly Average Effluent Concentration	0.1 mg/L
Total Ammonia Nitrogen	Monthly Average Effluent Concentration	1.0 mg/L
E. coli	Monthly Geometric Mean Density	*2.2 CFU/100 mL
pH	Single Sample Result	6.5 - 8.5 inclusive
Nitrate as Nitrogen	Monthly Average Effluent Concentration	10.0 mg/L
Unionized Ammonia	Monthly Average Effluent Concentration	0.1 mg/L

*If the MPN method is utilized for *E.coli* analysis the objective shall be 2.2 MPN/100 mL

SCHEDULE 4

Monitoring Program

Influent - Influent sampling point

Parameters	Sample Type	Minimum Frequency
BOD5	24 hour composite	Monthly
Total Suspended Solids	24 hour composite	Monthly
Total Phosphorus	24 hour composite	Monthly
Total Kjeldahl Nitrogen	24 hour composite	Monthly

Final Effluent - Final Effluent sampling point

Parameters	Sample Type	Minimum Frequency
CBOD5	24 hour composite	Weekly
Total Suspended Solids	24 hour composite	Weekly
Total Phosphorus	24 hour composite	Weekly
Total Ammonia Nitrogen	24 hour composite	Weekly
Total Kjeldahl Nitrogen	24 hour composite	Weekly
Nitrate as Nitrogen	24 hour composite	Weekly
Nitrite as Nitrogen	24 hour composite	Weekly
E. coli	Grab	Weekly
Dissolved Oxygen	Grab/Probe/Analyzer	Weekly
pH*	Grab/Probe/Analyzer	Weekly
Temperature*	Grab/Probe/Analyzer	Weekly
Unionized Ammonia**	As Calculated	Weekly

*pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.
**The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

Sludge– storage tank

Parameters	Sample Type	Minimum Frequency

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

Groundwater - Groundwater monitoring well

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorus	Grab	Monthly
Total Ammonia Nitrogen	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly
Nitrate as Nitrogen	Grab	Monthly
Nitrite as Nitrogen	Grab	Monthly
E. coli	Grab	Monthly
Dissolved Oxygen	Grab/Probe/Analyzer	Monthly
pH*	Grab/Probe/Analyzer	Monthly
Temperature*	Grab/Probe/Analyzer	Monthly
Unionized Ammonia**	As Calculated	Monthly

*pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.
**The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

Surface Water - Surface Water monitoring stations (upstream of the discharge point in the Carrington Lane swale and 20 m

downstream of the discharge point in the Whites Road roadside ditch)***

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorus	Grab	Monthly
Total Ammonia Nitrogen	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly
Nitrate as Nitrogen	Grab	Monthly
Nitrite as Nitrogen	Grab	Monthly
E. coli	Grab	Monthly
Dissolved Oxygen	Grab/Probe/Analyzer	Monthly
pH*	Grab/Probe/Analyzer	Monthly
Temperature*	Grab/Probe/Analyzer	Monthly
Unionized Ammonia**	As Calculated	Monthly

*pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.
**The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.
***Surface water samples are to be collected at both surface water locations if there is a significant amount of surface water flow observed in the downstream Whites Road roadside ditch under condition 6.9.