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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 8359-BGZKEN

Issue Date: January 31, 2020

Parkbridge Lifestyle Communities Inc.
690 River Road West
Wasaga Beach, Ontario
L9Z 2P1

Site Location: Goreski's Landing Resort
225 and 226 Platten Boulevard
Township of Scugog, Regional Municipality of Durham
L9L 1B4

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

upgrades to the existing sewage Works for the treatment and disposal of sanitary sewage with a Rated Capacity of 197,600 L/day serving a seasonal campground operating from May to October and consisting of existing three hundred forty four (344) recreational vehicle (RV) trailer sites, proposed one hundred seventy four (174) Park Model Units (PMUs) and existing four hundred six (406) marina slips located within the Goreski's Landing Resort, in the Township of Scugog, Regional Municipality of Durham, discharging to Lake Scugog, consisting of the following:

two (2) existing septic tanks, each complete with two (2) access covers and one (1) effluent filter (OBC approved) installed on the outlet pipe and discharging via the existing sewage pumping station/dosing chamber to the upgraded sewage pumping station (SPS 5-2);

one (1) existing concrete pumping station (SPS 5-2), collecting raw sewage from seventy nine (79) recreational vehicle (RV) trailer sites and thirty seven (37) Park Model Units (PMUs), housing two (2) submersible sewage pumps, each pump capable of handling approximately 3 L/s at a total dynamic head (TDH) of 11.2 m, complete with access cover, discharge piping and level control float switches, including a high-level float switch connected to an audible and visual alarm, discharging via a 50 mm diameter forcemain to a sewage pumping station (SPS 6-1);

one (1) existing septic tank, complete with two (2) access covers and one (1) effluent filter (OBC approved) installed on the outlet pipe and discharging to the upgraded sewage pumping station (SPS 3-1);

one (1) existing concrete pumping station (SPS 3-1), collecting raw sewage from sixty one (61) recreational vehicle (RV) trailer sites and thirty one (31) Park Model Units (PMUs), housing two (2) submersible sewage pumps, each pump capable of handling approximately 2.2 L/s at a total dynamic head (TDH) of 14.7 m, complete with access cover, discharge piping and level control float switches, including a high-level float switch connected to an audible and visual alarm, discharging via a 50 mm diameter forcemain to a septic tank located at the STP;

one (1) existing septic tank, complete with two (2) access covers and one (1) effluent filter (OBC approved) installed on the outlet pipe and discharging to a sewage pumping station (SPS 4-1);

one (1) 2.5 m diameter and 3.95 m deep reinforced concrete pumping station (SPS 4-1), collecting raw sewage from one hundred and fifty seven (157) recreational vehicle (RV) trailer sites and sixty eight (68) Park Model Units (PMUs), housing two (2) submersible sewage pumps, each pump capable of handling approximately 4.8 L/s at a total dynamic head (TDH) of 18.6 m, complete with a watertight access cover, discharge piping and level control float switches, including a high-level float switch connected to an audible and visual alarm, discharging via a 75 mm diameter forcemain to a septic tank located at the STP;

one (1) septic tank, complete with two (2) access covers and one (1) effluent filter (OBC approved) installed on the outlet pipe and discharging to a flow balancing pumping station located at the STP;

one (1) precast concrete flow balancing pumping station, housing two (2) submersible sewage pumps controlled by a time-dose pump control panel, each pump capable of handling approximately 2.9 L/s at a total dynamic head (TDH) of 5.8 m, complete with secured access hatches, vents, discharge piping and level control float switches, including a high-level float switch connected to an audible and visual alarm, discharging via two (2) 50 mm diameter forcemains and a chamber housing two (2) flowmeters, to each treatment train of a sewage treatment plant;

two (2) inter-connected precast concrete flow balancing tanks, each tank having a working capacity of 114,000 L, providing a total flow balancing capacity of 228,000 L, each tank complete with a 200 mm diameter inlet/outlet overflow pipe connected to the flow balancing pumping station;

a Tertiary Sewage Treatment Plant (utilizing a fluidized floating bed biofilm process) designed to provide treatment to a total daily design sanitary sewage flow of 197,600 L/day, consisting of two (2) parallel treatment trains,

each treatment train consisting of the following:

- one (1) 68,000 L partitioned primary clarifier/sludge storage tank, discharging to the bioreactor tanks;
- two (2) 40,000 L bioreactor tanks (Bioreactors #1a, #2a, #1b and #2b), connected in series, containing a combined volume of 53 m³ of specially designed plastic carrier media having a specific surface area of 500 m²/m³, each bioreactor tank equipped with fine bubble aeration diffusers, Bioreactors #2a and #2b housing a recirculation pump discharging to the primary sludge storage tanks and discharging to a common flocculation tank;
- one (1) common 4,000 L flocculation tank equipped with coarse bubble aeration diffusers, discharging to a common final clarifier tank;
- one (1) common 30,000 L final clarifier tank, equipped with three (3) sludge pumps discharging the settled sludge and a scum pump discharging floating scum to the off-line sludge storage tank, discharging via an effluent weir to a secondary pumping tank;
- one (1) common off-line sludge storage tank equipped with a decant line to direct supernatant to the primary sludge storage tanks;
- one (1) common 43,000 L secondary effluent pump tank, housing two (2) 0.6 HP submersible secondary effluent pumps, each pump discharging via a forcemain complete with a static in-line mixer to mix a coagulant injected upstream of a filtration system on a flow pace basis to the tertiary filter tank;

one (1) continuous backwash granular media filter having a design filtering capacity of 135.5 L/min, a filtration surface area of 1.1 m² and a 2 m deep sand bed, with backwash water discharging via a 100 mm diameter filter reject pipe to the off-line sludge storage tank and the filtered effluent discharging to the 52,000 L effluent pump tank, housing two (2) submersible effluent pumps (alternating stand-by/duty), each pump capable of handling approximately 3.2 L/min at a total dynamic head (TDH) of 18.3 m, discharging through UV units to Lake Scugog;

two (2) UV disinfection units, each unit rated at 95 L/min with a UV transmissivity of greater than or equal to 75%;

an approximately 900 m long 75 mm diameter effluent forcemain from the effluent pump tank to Lake Scugog, discharging through a submerged outfall located to the north of the marina entrance and extending approximately 200 m offshore;

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 Supporting Documentation listed in Schedule A.

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

1. "Annual Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year, calculated and reported as per the methodology specified in Schedule C;
2. "Annual Total Effluent Loading" means the value obtained by multiplying the Annual Average Effluent Concentration of a contaminant by the cumulative total Final Effluent discharged during the same calendar year;
3. "Approval" means this entire Approval document and any Schedules to it, including the application and Supporting Documentation;
4. "BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;
5. "Bypass" means diversion of sewage around one or more treatment processes, excluding Preliminary Treatment System, within the Sewage Treatment Plant with the diverted sewage flows being returned to the Sewage Treatment Plant treatment train upstream of the Final Effluent sampling point(s) and discharged via the approved effluent disposal facilities;
6. "CBOD₅" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
7. "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;
8. "District Manager" means the District Manager of the York-Durham District Office;
9. "*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);
10. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

11. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;
12. "Event" means an action or occurrence, at a given location within the Sewage Treatment Plant that causes a Plant Bypass or Plant Overflow. An Event ends when there is no recurrence of a Bypass or Overflow in the 12-hour period following the last Bypass or Overflow. Two Events are separated by at least 12 hours during which there has been no recurrence of a Bypass or Overflow;
13. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
14. "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);
15. "Geometric Mean Density" is the n th root of the product of multiplication of the results of n number of samples over the period specified;
16. "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;
17. "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;
18. "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;
19. "Monthly Average Daily Effluent 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;
20. "Monthly Average Daily Effluent Loading" means the value obtained by multiplying the Monthly Average Effluent Concentration of a contaminant by the Monthly Average Daily Effluent Flow over the same calendar month;
21. "Overflow" means a discharge to the environment from the Works at designed location other than the approved effluent disposal facilities or via the effluent disposal facilities downstream of the Final Effluent sampling point;
22. "Owner" means Parkbridge Lifestyle Communities Inc. and its successors and assignees;
23. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;

24. "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;
25. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
26. "Rated Capacity" means design daily sanitary sewage flow for which the Works are approved to handle;
27. "Supporting Documentation" means the documents listed in Schedule A of this Approval;
28. "Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed and Existing Works.

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

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the 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 in the schedule referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
4. Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
5. The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

6. 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. EXPIRY OF APPROVAL

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

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of Owner;
 - b. change of address of the 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 to the District Manager;
 - 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 Informations Act*, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager;
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.

4. CONSTRUCTION

1. The Owner shall ensure that the construction of the Works is supervised by a

Professional Engineer, as defined in the *Professional Engineers Act*.

2. The Owner shall ensure that the moving bed bioreactor (MBBR) Tertiary Sewage Treatment Plant, the tertiary sand filter and the UV disinfection units are installed in accordance with the Manufacturer's Installation Manual.
3. Upon construction of the Works, the Owner shall prepare a statement, certified by a Professional Engineer, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.
4. Upon construction of the Works, 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. **BYPASSES**

1. Any Bypass is prohibited, except:
 - a. an emergency Bypass when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of a treatment process or when an unforeseen flow condition exceeds the design capacity of a treatment process that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not bypassed;
 - b. a planned Bypass that is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the District Manager in writing at least fifteen (15) days prior to the occurrence of Bypass, including an estimated quantity and duration of the Bypass, an assessment of the impact on the quality of the Final Effluent and the mitigation measures if necessary, and the District Manager has given written consent of the Bypass;
2. Notwithstanding the exceptions given in Paragraph 1, the Operating Agency shall undertake everything practicable to maximize the flow through the downstream treatment process(es) prior to bypassing.
3. At the beginning of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:

- a. the type of the Bypass as indicated in Paragraph 1 and the reason(s) for the Bypass;
 - b. the date and time of the beginning of the Bypass;
 - c. the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed;
 - d. the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.
4. Upon confirmation of the end of a Bypass Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
- a. the date and time of the end of the Bypass;
 - b. the estimated or measured volume of Bypass.
5. For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in Compliance Limits condition, except for *E. coli*, toxicity to Rainbow Trout and *Daphnia magna*, total residual chlorine / bisulphite residual, dissolved oxygen, pH, temperature and unionized ammonia, following the same protocol specified in the Monitoring and Recording condition as for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition, except when the Event occurs on a scheduled monitoring day.
6. The Owner shall submit a summary report of the Bypass Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary reports shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5) and either a statement of compliance or a summary of the non-compliance notifications submitted as required under Paragraph 1 of Condition 10. If there is no Bypass Event during a quarter, a statement of no occurrence of Bypass is deemed sufficient.
7. The Owner shall develop a notification procedure in consultation with the District Manager and SAC and notify the public and downstream water users that may be adversely impacted by any Bypass Event.

6. OVERFLOW

1. Any Overflow is prohibited, except:
 - a. an emergency Overflow in an emergency situation when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of the Works or when an unforeseen flow condition exceeds the design capacity of the Works that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not overflowed;
 - b. a planned Overflow that is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the District Manager in writing at least fifteen (15) days prior to the occurrence of Overflow, including an estimated quantity and duration of the Overflow, an assessment of the impact on the environment and the mitigation measures if necessary, and the District Manager has given written consent of the Overflow.
2. Notwithstanding the exceptions given in Paragraph 1, the Operating Agency shall undertake everything practicable to maximize the flow through the downstream treatment process(es) and Bypass(es) prior to overflowing.
3. At the beginning of an Overflow Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:
 - a. the type of the Overflow as indicated in Paragraph 1 and the reason(s) for the Overflow;
 - b. the date and time of the beginning of the Overflow;
 - c. the point of the Overflow from the Works, the treatment process(es) gone through prior to the Overflow, the disinfection status of the Overflow and whether the Overflow is discharged through the effluent disposal facilities or an alternate location;
 - d. the effort(s) done to maximize the flow through the downstream treatment process(es) and Bypass(es) and the reason(s) why the Overflow was not avoided.
4. Upon confirmation of the end of an Overflow Event, the Owner shall immediately notify the Spills Action Centre (SAC) and the local Medical Officer of Health. This notice shall include, at a minimum, the following information:

- a. the date and time of the end of the Overflow;
- b. the estimated or measured volume of the Overflow.

5. For any Overflow Event:

- a. in the Sewage Treatment Plant, the Owner shall collect grab sample(s) of the Overflow, one near the beginning of the Event and one every eight (8) hours for the duration of the Event, and have them analyzed at least for CBOD5, total suspended solids, total phosphorus, total ammonia nitrogen, nitrate as N, nitrite as N, total Kjeldahl nitrogen, E. coli except that raw sewage and primary treated effluent Overflow shall be analyzed for BOD5, total suspended solids, total phosphorus and total Kjeldahl nitrogen only.

6. The Owner shall submit a summary report of the Overflow Event(s) to the District Manager on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15. The summary report shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5). If there is no Overflow Event during a quarter, a statement of no occurrence of Overflow is deemed sufficient.

7. The Owner shall develop a notification procedure in consultation with the District Manager and SAC and notify the public and downstream water users that may be adversely impacted by any Overflow Event.

7. MONITORING AND RECORDING

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

1. All samples and measurements taken for the purposes 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, at the sampling frequency and using the sample type specified for each parameter listed in the Influent Monitoring Table included in **Schedule B**.
3. Samples shall be collected at the sampling point, at the sampling frequency and using the sample type specified for each parameter listed in the Effluent Monitoring Table included in **Schedule B**.
4. The Owner shall install and maintain a flow measuring device(s), to measure the discharge rate of effluent pumped and discharged from the sewage Works on a

daily basis during the discharging period, with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flowrate for the entire design range of the flow measuring device(s).

5. The Owner shall ensure that flow of treated effluent discharged to Lake Scugog does not exceed 197,600 L/day.
6. 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" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; 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.
7. 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. EFFLUENT OBJECTIVES

1. The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named as effluent parameters in the Effluent Objectives Table listed in **Schedule B** are not exceeded in the effluent being discharged to Lake Scugog.
2. For the purposes of subsection (1):
 - a. The Monthly Average Effluent Concentration of a parameter named in Column 1 of Effluent Objectives Table listed in **Schedule B** should be compared to the corresponding concentration set out in Column 2 of Effluent Objectives Table listed in **Schedule B**.
3. The Owner shall use best efforts to:
 - a. maintain the pH of the effluent from the Works within the range of 6.0 to 8.5,

inclusive, at all times;

- b. operate the Works within the Rated Capacity of the Works; and
- c. ensure that the effluent from the Works 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 Lake Scugog.

9. EFFLUENT LIMITS

1. The Owner shall design, construct, operate and maintain the Works such that the concentrations and loading of the materials named as effluent parameters in the Effluent Limits Table and Effluent Loading Limit Table in **Schedule B** are not exceeded in the effluent being discharged to Lake Scugog.
2. For the purposes of determining compliance with and enforcing subsection (1):
 - a. The Monthly Average Effluent Concentration of a parameter 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**.
 - b. The Monthly Average Daily Effluent Loading Limit of a parameter named in Column 1 of Effluent Loading Limit Table listed in **Schedule B** shall not exceed the corresponding maximum loading set out in Column 2 of Effluent Loading Limit Table listed in **Schedule B**.
 - c. Notwithstanding subsection (1), the Owner shall operate and maintain the Works such that the pH of the effluent is maintained between 6.0 to 8.5, inclusive at all times and the effluent is continuously disinfected so that the monthly Geometric Mean Density of *E. Coli* does not exceed 100 CFU per 100 millilitres of effluent discharged from the Works.

10. OPERATIONS AND MAINTENANCE

1. The Owner shall exercise due diligence in ensuring 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 operator staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
2. The Owner shall prepare an operations manual within six (6) months of the

introduction of sewage to the Works, that includes, but not necessarily limited to, the following information:

- a. operating procedures for routine operation of all the Works;
 - b. inspection programs, including frequency of inspection, for all the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for all the Works; copies of maintenance contracts for any routine inspections & pump-outs should be included for all the tanks and treatment units;
 - d. procedures for the inspection and calibration of monitoring equipment;
 - e. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the District Manager; and
 - f. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
3. The Owner shall maintain the operations manual current and retain a copy at the location of 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 each manufacturer for the treatment process/technology. The maintenance agreements must be retained at the site and kept current for the operational life of the Works.
 5. The Owner shall ensure that all septic tanks are pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filters are cleaned out at minimum once a year or more often if required.
 6. The Owner shall ensure that adequate steps are taken to ensure that the area of the Works are protected from all forms of vehicle traffic.
 7. The Owner shall maintain a logbook to record the results of Operation and Maintenance activities specified in the above subclauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.
 8. The Owner shall employ for the overall operation of the Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.

11. REPORTING

1. One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.
2. Ten (10) days prior to the date of a planned Bypass being conducted pursuant to Condition 5 and as soon as possible for an unplanned Bypass, the Owner shall notify the District Manager (in writing) of the pending start date, in addition to an assessment of the potential adverse effects on the environment and the duration of the Bypass.
3. The Owner shall report to the District Manager or designate, any exceedence of any parameter specified in Condition 9 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.
4. In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
5. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
6. The Owner shall prepare and submit a performance report, on an annual basis, 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 8;
 - b. a summary and interpretation of all monitoring data and a comparison to the Effluent Limits outlined in Condition 9, including an overview of the success and adequacy of the Works, and a Contingency Plan in the event of not compliance with the Effluent Limits;
 - c. a review and assessment of performance of sewage Works, including all treatment units;
 - d. a summary and interpretation of all daily flow data discharged to Lake Scugog;

- e. a tabulation of the volume of sludge generated in the reporting period, 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;
- f. a description of any operating problems encountered and corrective actions taken at all sewage Works located at the property;
- g. a record of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property' including but not limited to: records of maintenance inspections for the treatment system, records of septic tank effluent filters cleaning, records of septic tank pump-outs, records of sludge pump-outs accumulated from the treatment system;
- h. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- i. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- j. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- k. a summary of all Bypass Events, Overflow Events, spill and abnormal discharge events; and
- l. any other information the District Manager requires from time to time.

12. 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 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which Approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval of the existence of this Approval.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 regarding Bypasses is included to indicate that Bypass is prohibited, except in circumstances where the failure to Bypass could result in greater damage to the environment than the Bypass itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass Events.
6. Condition 6 regarding Overflows is included to indicate that Overflow of untreated or partially treated sewage to the receiver is prohibited, except in circumstances where the failure to Overflow could result in greater damage to the environment than the Overflow itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency

of Overflow Events.

7. Condition 7 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 Lake Scugog.

8. Condition 8 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.

9. Condition 9 is imposed to ensure that the effluent discharged from the Works to Lake Scugog meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.

10. Condition 10 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturers for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such information is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Work.

11. Condition 11 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

12. Condition 12 is included to ensure that any components of un-used sewage Works are properly decommissioned.

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

Schedule A

1. Environmental Compliance Approval Application submitted by Jason R. Covey, B.Sc.(Eng.), P.Eng., Senior Engineer, Project Manager, C.C. Tatham & Associated Ltd., dated July 10, 2018 and received on November 20, 2018.

2. The design report titled "Goreski's Landing Resort, Township of Scugog, Sewage Works Upgrades, Design Brief" dated November 14, 2018, specifications and engineering drawings, all prepared by C.C. Tatham & Associated Ltd.
3. All additional documentation provided by C.C. Tatham & Associated Ltd.

SCHEDULE B

Influent Monitoring Table

Sampling Location	The flow balancing pumping station
Frequency	Monthly (once every month) during the months of May, June, July, August, September and October
Sample Type	Grab
Parameters	BOD ₅ Total Suspended Solids (TSS) Total Kjeldahl Nitrogen (TKN) Total Phosphorus (TP)

Effluent Monitoring Table

Sampling Location	Effluent discharged from the UV disinfection units
Frequency	Weekly (once each week) during the months of May, June, July, August, September and October
Sample Type	Grab
Parameters	CBOD ₅ Total Suspended Solids (TSS) Total Phosphorus (TP) Total Ammonia Nitrogen (TAN) E. coli pH (field) Temperature (field)

Effluent Objectives Table

Effluent Parameter (effluent discharged from the UV disinfection units)	Monthly Average Effluent Concentration Objective (milligrams per litre unless otherwise indicated)
CBOD ₅	< 10
Total Suspended Solids	< 10
Total Phosphorous	0.1

Total Ammonia Nitrogen (TAN)	< 2 (June to September) < 4 (May and October)
E. coli	< 100 organisms/100 mL (monthly geometric mean density)
pH of the effluent maintained between 6.0 to 8.5, inclusive, at all times	

Effluent Limits Table

Effluent Parameter (effluent discharged from the UV disinfection units)	Monthly Average Effluent Concentration Limit (milligrams per litre unless otherwise indicated)
CBOD 5	10
Total Suspended Solids	10
Total Phosphorous	0.12
Total Ammonia Nitrogen (TAN)	2 (June to September) 4 (May and October)
E. coli	100 organisms/100 mL (monthly geometric mean density)
pH of the effluent maintained between 6.0 to 8.5, inclusive, at all times	

Effluent Loading Limit Table

Effluent Parameter (effluent discharged from the UV disinfection units)	Annual Total Effluent Loading Limit (kilogram per operating period)
Total Phosphorous	3.5 kg per operating period (150 days)

Schedule C

Methodology for Calculating and Reporting

Monthly Average Effluent Concentration, Annual Average Effluent Concentration and Monthly Geometric Mean Density

1. Monthly Average Effluent Concentration

Step 1: Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month and proceed as follows depending on the result of the calculation:

- a. If the arithmetic mean does not exceed the compliance limit for the contaminant, then report and use this arithmetic mean as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval;
- b. If the arithmetic mean exceeds the compliance limit for the contaminant and there was no Bypass Event during the calendar month, then report and use this arithmetic mean as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval;
- c. If the arithmetic mean exceeds the compliance limit for the contaminant and there was Bypass Event(s) during the calendar month, then proceed to Step 2;
- d. If the arithmetic mean does not exceed the compliance limit for the contaminant and there was Bypass Event(s) during the calendar month, the Owner may still elect to proceed to Step 2 calculation of the flow-weighted arithmetic mean.

Step 2: Calculate the flow-weighted arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month and proceed depending on the result of the calculation:

- a. Group No Bypass Days (**NBPD**) data and Bypass Days (**BPD**) data during a calendar month separately;
- b. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all NBPD during a calendar month and record it as **Monthly Average NBPD Effluent Concentration**;
- c. Obtain the “**Total Monthly NBPD Flow**” which is the total amount of Final Effluent discharged on all NBPD during the calendar month;
- d. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all BPD during a calendar month and record it as **Monthly Average**

BPD Effluent Concentration;

e. Obtain the “**Total Monthly BPD Flow**” which is the total amount of Final Effluent discharged on all BPD during the calendar month;

f. Calculate the flow-weighted arithmetic mean using the following formula:

$$\frac{[(\text{Monthly Average NBPD Effluent Concentration} \times \text{Total Monthly NBPD Flow}) + (\text{Monthly Average BPD Effluent Concentration} \times \text{Total Monthly BPD Flow})] \div (\text{Total Monthly NBPD Flow} + \text{Total Monthly BPD Flow})$$

It should be noted that in this method, if there are no Bypass Event for the month, the calculated result would be the same as the non-flow-weighted arithmetic mean method;

g. Report and use the lesser of the flow-weighted arithmetic mean obtained in Step 2 and the arithmetic mean obtained in Step 1 as the Monthly Average Effluent Concentration for this parameter where applicable in this Approval.

2. Annual Average Effluent Concentration

Step 1: Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year and proceed as follows depending on the result of the calculation:

a. If the arithmetic mean does not exceed the compliance limit for the contaminant, then report and use this arithmetic mean as the Annual Average Effluent Concentration for this parameter where applicable in this Approval;

b. If the arithmetic mean exceeds the compliance limit for the contaminant and there was no Bypass Event during the calendar year, then report and use this arithmetic mean as the Annual Average Effluent Concentration for this parameter where applicable in this Approval;

c. If the arithmetic mean exceeds the compliance limit for the contaminant

and there was Bypass Event(s) during the calendar year, then proceed to Step 2;

d. If the arithmetic mean does not exceed the compliance limit for the contaminant and there was Bypass Event(s) during the calendar year, the Owner may still elect to proceed to Step 2 calculation of the flow-weighted arithmetic mean.

Step 2: Calculate the flow-weighted arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar year and proceed depending on the result of the calculation:

a. Group No Bypass Days (**NBPD**) data and Bypass Days (**BPD**) data during a calendar year separately;

b. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all NBPD during a calendar year and record it as **Annual Average NBPD Effluent Concentration**;

c. Obtain the “**Total Annual NBPD Flow**” which is the total amount of Final Effluent discharged on all NBPD during the calendar year;

d. Calculate the arithmetic mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured on all BPD during a calendar year and record it as **Annual Average BPD Effluent Concentration**;

e. Obtain the “**Total Annual BPD Flow**” which is the total amount of Final Effluent discharged on all BPD during the calendar year;

f. Calculate the flow-weighted arithmetic mean using the following formula:

$$\frac{[(\text{Annual Average NBPD Effluent Concentration} \times \text{Total Annual NBPD Flow}) + (\text{Annual Average BPD Effluent Concentration} \times \text{Total Annual BPD Flow})] \div (\text{Total Annual NBPD Flow} + \text{Total Annual BPD Flow})$$

It should be noted that in this method, if there are no Bypass Event for the calendar year, the calculated result would be the same as the non-flow-weighted arithmetic mean method;

g. Report and use the lesser of the flow-weighted arithmetic mean obtained in Step 2 and the arithmetic mean obtained in Step 1 as the Annual Average Effluent Concentration for this parameter where applicable in this Approval.

3. Monthly Geometric Mean Density

Geometric mean is defined as the n^{th} root of the product of n numbers. In the context of calculating Monthly Geometric Mean Density for *E. coli*, the following formula shall be used:

$$\sqrt[n]{x_1 x_2 x_3 \cdots x_n}$$

in which,

" n " is the number of samples collected during the calendar month; and

" x " is the value of each Single Sample Result.

For example, four weekly grab samples were collected and tested for *E. coli* during the calendar month. The *E. coli* densities in the Final Effluent were found below:

Sample Number	<i>E. coli</i> Densities* (CFU/100 mL)
1	10
2	100
3	300
4	50

The Geometric Mean Density for these data:

$$\sqrt[4]{10 \times 100 \times 300 \times 50} = 62$$

*If a particular result is zero (0), then a value of one (1) will be substituted into the calculation of the Monthly Geometric Mean Density. If the MPN method is utilized for *E. coli* analysis, values in the table shall be MPN/100 mL.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review 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 shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

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 Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.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 31st day of January,
2020

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

KC/

c: District Manager, MECP York-Durham District Office

Jason R. Covey, B.Sc.(Eng.), P.Eng., Senior Engineer, Project Manager, C.C. Tatham &
Associated Ltd.

Carol Coleman, Director of Community Services, Township of Scugog