

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9543-C7GQ34
Issue Date: January 31, 2022

The Greens at Renton Ltd.
969 Concession 14 R.R.4
Norfolk, Ontario
N3Y 4K3

Site Location: Greens at Renton Golf Course
969 Concession 14,
County of Norfolk,
N3Y 4K3

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, replacement, usage and operation of the sewage treatment works rated at 17,830 Litres per day, serving the Greens at Renton Golf Course, and application of the treated effluent for golf course irrigation, as follows:

Removal of existing conditions

- Removal of condition No. 1.2 of the Previous Approval, related to the sewage flow discharge;
- Removal of condition No. 1.3 of the Previous Approval, related to the golf course irrigation rate;

Existing Works

- One (1) 22,730 L capacity two compartment septic tank, discharging to a gravity flow splitter basin;
- A gravity flow splitter basin discharging into four (4) Whitewater Sewage Treatments units (Model No. DF150FF), each rated at 5,670 L/d and discharging into the existing onsite Irrigation Pond, having a storage capacity of approximately 54.5 million Litres, with an overflow pipe to Black Creek;

- Spray irrigation of the golf course with the Irrigation Pond contents;

all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

all in accordance with the **Schedule A**.

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

1. "Approval" means this entire Approval document and any Schedules to it, including the application and Supporting Documentation;
2. "BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;
3. "CBOD₅" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
4. "Director" means a person appointed by the Minister pursuant to Section 5 of the EPA for the purposes of Part II.I of the EPA;
5. "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;
6. "District Manager" means the District Manager of the Hamilton District;
7. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
8. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
9. "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;
10. "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;
11. "Owner" means The Greens at Renton Ltd., and its successors and assignees;
12. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
13. "Previous Approval" means Approval No. 7643-4K7QXM issued on May 24, 2000;
14. "Supporting Documentation" means the documents listed in Schedule A of this Approval;

15. "Works" means the approved sewage works, and includes Existing Works.

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

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.

2. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:
 - a. change of address of Owner;
 - b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act* , R.S.O. 1990, c.B17 shall be included in the notification 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.

3. RECORD DRAWINGS

1. The Owner shall continue to keep on site, a statement, certified by a Licensed Engineering Practitioner, that the Works were constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.
2. The Owner shall continue to keep on site 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.

4. EFFLUENT LIMITS

1. The Owner shall operate and maintain the Sewage Treatment Works such that compliance limits for the Final Effluent parameters listed in the Effluent Limits Table included in **Schedule B** are met. Non-compliance with respect to concentrations of the effluent parameters shall occur when the average of three (3) consecutive concentrations of any of the parameters exceeds its corresponding concentration in effluent limits.

5. MONITORING AND RECORDING

1. The Owner shall, upon issuance of this Approval, 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(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Influent Monitoring Table and Effluent Monitoring Table included in **Schedule C**.
 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:
 1. Influent flow to, and Effluent flow from the Sewage Treatment Works;
 2. the quantity of irrigation pond contents being spray irrigated;
4. The Owner shall ensure that flow of treated effluent discharged into the Sewage Treatment Works does not exceed 17,830 Litres per day;

5. 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:
 1. 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;
 2. 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
 3. the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.
6. The Owner shall, upon issuance of this Approval, carry out the following monitoring program:

1. TWO YEAR MONITORING PROGRAM TO CONFIRM POND'S STRATIFICATION AND OXYGEN DISTRIBUTION

- a. For a 2 year period, commencing the date of this approval, the Owner shall collect samples and analyze in accordance with the **Schedule D**, a Limited duration Irrigation Pond Monitoring Program;
- b. The data collected pursuant to subsection 6 (a) above, shall be used to subsequently prepare and submit a report to the District Manager, within 3 months of the completion of monitoring period. This report shall contain the following, at a minimum;
 - evaluation of vertical profile data of temperature and dissolved oxygen to confirm the pond's stratification in summer and full mixing during spring and fall turnovers;
 - examine if the pond's partial and full mixing has any impact on the quality of the pond contents (final effluent) measured in the samples collected in the pond near the outfall to Black Creek;
 - recommend if any additional treatment will be required to achieve effluent objectives or the pond's hydrodynamics, mixing, and oxidation/reducing environment are enough to achieve the effluent objectives.

7. OPERATIONS AND MAINTENANCE

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
2. The Owner shall ensure that the effluent spray irrigation system is only operated during frost free periods between April 1 and November 15. Should it be necessary to operate the system prior to April 1 or after November 15 of any year, the Owner shall obtain a prior written approval for such an extended operation from the District Manager on a case-by-case basis.
3. The Owner shall ensure that the effluent spray irrigation system is operated in a manner that precludes the sprayed effluent ponding, run-off, and aerosol drift beyond the limits of the approved spray irrigation field(s) at all times.
4. The Owner should ensure that no effluent application to the spray irrigation fields takes place during rainfall, when the ground is saturated, and when the wind velocity exceeds 15 km/hour.
5. The Owner shall prepare an operations manual within **six (6) months** of the issuance of this Approval, 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 Spills Action Centre (SAC) and District Manager; and
 - f. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.

6. 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.
7. The Owner shall, issuance of this Approval, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology or its authorized agent. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.

10. 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 and submit a performance report, on an annual basis, within **ninety (90) days** following the end of each operational season to the District Manager, for a period of **three (3) years**. 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. After the first **three (3) successive Annual Reports**, the subsequent Reports shall be submitted every **three (3) years**. The reports shall contain, but shall not be limited to, the following information:
 - a. a summary and interpretation of all monitoring data and a comparison to the Effluent Limits including an overview of the success and adequacy of the Works, and a Contingency Plan in the event of not in compliance with the Effluent Limits.
 - b. a review and assessment of performance of sewage works, including all treatment units;
 - c. a description of any operating problems encountered and corrective actions taken at all sewage Works located at the property;

- d. a record of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property' including but not limited to: records of maintenance inspections for the treatment system, records of septic tank effluent filters cleaning, records of septic tank pump-outs, records of sludge pump-outs accumulated from the treatment system, records of visual inspections of all disposal systems;
- e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- f. a summary and interpretation of all daily flow data and results achieved in not exceeding the maximum daily sewage flow discharged to and from the Treatment Works and irrigation pond;
- g. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- h. a summary of all spill or abnormal discharge events;
- i. any other information the District Manager requires from time to time;

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
2. Condition 2 is included to ensure that 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.
3. Condition 3 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.
4. Condition 4 is imposed to ensure that the effluent discharged from the Works to the irrigation pond meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver

5. Condition 5 and 6 are included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.
6. Condition 7 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such information is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.
7. Condition 8 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.

Schedule A

1. Application for Environmental Compliance Approval dated April 21, 2021 and received on July 27, 2021.

Schedule B

Irrigation Pond Effluent Limits Table

Effluent Parameter (tested on samples collected in the pond near overflow outfall to Black Creek)	Concentration (milligrams per litre unless otherwise indicated)
CBOD ₅	10
Total Suspended Solids	10
Total Ammonia Nitrogen (TAN)	5
Nitrate-Nitrogen	5
Total Phosphorus	1
E. Coli	200 CFU/100 mL*
pH	6.5 - 9.5

*If the MPN method is utilized for *E. coli* analysis the objective shall be 200 MPN/100 mL

Schedule C

Septic Tank Influent Monitoring Table

Sampling Location	In 22,000 L Septic Tank
Frequency	Once Every Four Months during operating season
Sample Type	Grab
Parameters	TBOD ₅ Total Suspended Solids Total Kjeldahl Nitrogen (TKN) Total Ammonia Nitrogen (TAN) Total Phosphorus (TP)

Irrigation Pond Monitoring Table

Sampling Location	in the Pond near the overflow/outfall location
Frequency	Once every two months
Sample Type	Grab
Parameters	CBOD ₅ Total Suspended Solids (TSS) Total Phosphorus (TP) Total Ammonia Nitrogen (TAN) Nitrate Nitrogen Total Kjeldahl Nitrogen (TKN) pH Temperature E. Coli Dissolved oxygen Unionized Ammonia (calculated) Hydrogen Sulfide (if odour present)

Schedule D

Limited Duration Irrigation Pond Monitoring Table

Sampling Location	At the deepest location of the Irrigation pond
Frequency	One in spring turnover, one during summer stratification, and one in fall turnover
Sample Type	Profile (every 0.2 m starting from the surface to the bottom of the pond)
Parameters	Temperature in Centigrade, Dissolved Oxygen in mg/L

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 7643-4K7QXM issued on May 24, 2000.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

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

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

This Notice must be served upon:

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

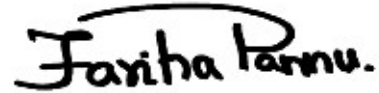
AND

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**

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, 2022



Fariha Pannu, P.Eng.

Director

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

KH/

c: District Manager, MECP Hamilton District.

Anne Egan, R.J. Burnside & Associates Limited