ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0882-D8CJMD
Issue Date: August 29, 2024

2404676 Ontario Limited
9120 Leslie St, No. 208
Richmond Hill, Ontario
L4B 3J9

Site Location: 1040 Thorold Stone Road
City of Thorold, Regional Municipality of Niagara, Ontario
L2E 6S4

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 Works, for the treatment of sanitary sewage from the existing Phase 1 development and proposed Phase 2 development at Thorold Gateway Center and disposal of treated effluent to subsurface via a Sewage Treatment Plant (RH2O MBBR Treatment System) and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Secondary

Details of Service Area:

- **Type of Occupancy**: Commercial
- **Type and Number of Units:**
  - Existing Phase 1 Development
    - a gas bar with 12 nozzles (with a maximum of 11 nozzles used at the same time);
    - a restaurant with approximately 102 square metres and a maximum of 6 employees (8-hour shift); and
    - a convenience store with a washroom
  - Proposed Phase 2 Development

- Building A: a restaurant with a maximum of 46 seats; and
- Building B:
  - a restaurant with a maximum of 30 seats;
  - a restaurant with approximately 96 square metres and a maximum of 3 employees (8-hour shift); and
  - a restaurant with approximately 107 square metres and a maximum of 3 employees (8-hour shift)

Design Capacity of Sewage Treatment Plant:

Design Capacity with All Treatment Trains in Operation	Prior to Completion of Construction of All Proposed Works (Phase 1 under Building Permit)	Upon Completion of Construction of All Proposed Works (Phases 1 & 2)
Maximum Daily Flow	9,650 m^3/d	29,469 m^3/d

Influent

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

Proposed Works

Grease Interceptors

- eight (8) proposed grease interceptors each having a working capactiy of approximately 4,500 litres, with each pair (2 units) connected in series, receiving raw kitchen sewage from each of the four (4) proposed Phase 2 restaurants, and discharging by gravity to the existing equalization tank as described below under Existig Works;

Sewage Treatment Plant - RH2O Moving Bed Biofilm Reactor (MBBR) Treatment System

one (1) proposed RH2O MBBR treatment system with a maximum design capacity of 30,000 litres per day, consisting of the following proposed components and those described under Existing Works below:

Influent Flow Measurement and Sampling Point

- Inffluent flow measurement via a proposed flow meter at the existing equalization tank described below;

- sampling of Influent from the existing equalization tank described below;

Secondary Treatment System

- one (1) proposed in-ground precast concrete tank Bioreactor #2 for nitrification, having an approximate working volume of 12.6 cubic metres and equipped with approximately 6 cubic metres of engineered plastic carrier media providing approximately 3,000 square metres of media surface area, fine bubble diffusers, one (1) blower and one (1) recirculation pump that returns a portion of the effluent to the online sludge storage tank, discharging effluent to the proposed post-denitrification tank as described below;

- one (1) proposed in-ground precast concrete post-denitrification bioreactor tank, having an approximate working volume of 8.3 cubic metres and equipped with approximately 4 cubic metres of engineered plastic carrier media providing 2,000 square metres of media surface area, discharging effluent by gravity to the proposed tertiary polisher bioreactor as described below;

Post-Secondary Treatment System

- one (1) proposed in-ground tertiary polisher bioreactor for tertiary polishing (i.e., leftover BOD5 removal), having an approximate working volume of 4.9 cubic metres and containing a volume of 2 cubic metres of engineered plastic carrier media providing 1,000 square metres of media surface area, equipped with fine bubble diffusers and one (1) blower, and discharging by gravity to the final clarifier described below;

- one (1) proposed final clarifier, having a specified surface area of approximately 14.8 square metres with three (3) slopped wall hoppers, an effective working volume of approximately 13.5 cubic metres, equipped with one (1) sludge withdrawal pump and one (1) skimmer pump that discharge settled and floating sludge into the proposed offline sludge storage tank described below, and discharging effluent by gravity to the effluent pump tank described below;

Effluent Pump Tank

- one (1) proposed effluent pump tank, having an approximate working volume of 22.5 cubic metres, equipped with six (6) submersible effluent pumps (three duty, three standby) each rated at a design flow rate of 260 litres per minute over a total dynamic head (TDH) of approximately 3.0 metres and a liquid level control system with high level visual/audible alarms, and discharging via forcemains to the Type A dispersal beds described below;

Supplementary Treatment System - Carbon Addition

- one (1) proposed carbon dosing system for denitrification, consisting of one (1) chemical storage tank with secondary containment and one (1) chemical dosing pump, dosing carbon material into the post-denitrification bioreactor tank automated by a nitrate sensor;

Final Effluent Flow Measurement and Sampling Point

- Final Effluent flow measurement via pumping rates from the effluent pump tank;
- sampling of Final Effluent from the effluent pump tank prior to discharge to the Type A dispersal beds;

Sludge Management System

- one (1) proposed in-ground precast concrete offline sludge storage tank, having an approximate working volume of 34.5 cubic metres, receiving sludge from the existing intermediate clarifier and proposed final clarifier described below and above, with supernatant from the tank discharging by gravity to the existing online sludge storage tank described below;

Final Effluent Disposal Facilities

Type A Dispersal Bed 1A **Q = 3,828 litres per day**

- one (1) raised Type A dispersal bed located within the north central portion of the property, consisting of a stone layer with an area of 95 square metres (19.0 metres by 5.0 metres), a thickness of 300 millimetres and protected by permeable geo-textile fabric, overlying a sand layer having an area of 479 square metres (22 metres by 22 metres) and a minimum thickness of 300 millimetres, complete with four (4) runs of 18 metre long 75 millimetre diameter perforated distribution piping spaced 1.0 metres apart, centre to centre, in the stone layer, and a 300 millimetre thick sand mantle extending a minimum of 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the filter bed will move laterally;

Type A Dispersal Bed 1B **Q = 4,048 litres per day**

- one (1) raised Type A dispersal bed located within the north central portion of the property (immediately east of Bed 1A), consisting of a stone layer with an area of 95 square metres (19.0 metres by 5.0 metres), a thickness of 300 millimetres and protected by permeable geo-textile fabric, overlying a sand layer having an area of 506 square metres (22 metres by 23 metres) and a minimum thickness of 300 millimetres, complete with four (4) runs of 18 metre long 75 millimetre diameter perforated distribution piping spaced 1.0 metres apart, centre to centre, in the stone layer, and a 300 millimetre thick sand mantle extending a minimum of 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the filter bed will move laterally;

Type A Dispersal Bed 2A **Q = 5,659 litres per day**

- one (1) raised Type A dispersal bed located to the west of the convenience store, consisting of a stone layer with an area of 130 square metres (14.5 metres by 9.0 metres), a thickness of 300 millimetres and protected by permeable geo-textile fabric, overlying a sand layer having an area of 707 square metres (45 metres by 16 metres) and a minimum thickness of 300 millimetres, complete with eight (8) runs of 10 metre long 75 millimetre diameter perforated distribution piping spaced 1.0 metres apart, centre to

centre, in the stone layer, and a 300 millimetre thick sand mantle extending a minimum of 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the filter bed will move laterally;

Type A Dispersal Bed 2B **Q = 7,168 litres per day**

- one (1) raised Type A dispersal bed located to the west of the convenience store (immediately east of Bed 2A), consisting of a stone layer with an area of 240 square metres (30.0 metres by 8.0 metres), a thickness of 300 millimetres and protected by permeable geo-textile fabric, overlying a sand layer having an area of 479 square metres (32 metres by 28 metres) and a minimum thickness of 300 millimetres, complete with eight (8) runs of 29 metre long 75 millimetre diameter perforated distribution piping spaced 1.0 metres apart, centre to centre, in the stone layer, and a 300 millimetre thick sand mantle extending a minimum of 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the filter bed will move laterally;

Type A Dispersal Bed 3 **Q = 8,769 litres per day**

- one (1) raised Type A dispersal bed located along the west property boundary, consisting of a stone layer with an area of 180 square metres (16.4 metres by 11.0 metres), a thickness of 300 millimetres and protected by permeable geo-textile fabric, overlying a sand layer having an area of 1,096 square metres (76 metres by 14 metres) and a minimum thickness of 300 millimetres, complete with fourteen (14) runs of 8 metre long 75 millimetre diameter perforated distribution piping spaced 1.0 metres apart, centre to centre, in the stone layer, and a 300 millimetre thick sand mantle extending a minimum of 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the filter bed will move laterally;

Existing Works

Components of the existing treatment system previously approved, installed and operated under the OBC to be retrofitted and incorporated into the proposed Sewage Treatment Plant, as follows:

Grease Interceptors

- two (2) existing 4,500 litre grease interceptors connected in series, receiving raw kitchen sewage from the Phase 1 restaurant located south of the gas bar, and discharging to the existing equalization tank as described below;

Equalization Tank

- one (1) existing in-ground precast concrete flow equalization tank located to the east of the existing Phase 1 restaurant, having an approximate working volume of 34.5 cubic metres, equipped with two (2) submersible pumps (one duty, one standby) each with a design flow rate of 148.8 litres per minute over a TDH of approximately 4.2 metres and a liquid level control system with a high level visual/audible alarm, receiving sewage from the proposed and existing development described above (via proposed and existing grease interceptors for restaurants), and discharging effluent to the

existing online sludge storage/ tank described below via a forcemain;

Primary Treatment System

- one (1) existing in-ground 2-compartment precast concrete online sludge storage/primary clarifier tank, consisting of a sludge storage section with an approximate working volume of 34.5 cubic metres and a primary clarifier section with an approximate working volume of 13.2 cubic metres, receiving effluent from the existing flow equalization tank and nitrified effluent recycle flow from the proposed Bioreactor #2 described above, and discharging by gravity to the existing Bioreactor #1 described below;

- sludge accumulated in the online sludge storage tank shall be periodically removed for off-site disposal at an approved receiving facility;

Secondary Treatment System

- two (2) existing in-ground precast concrete tanks in series, collectively known as Bioreactor #1 for BOD5 removal, with **each** tank having an approximate working volume of 22.5 cubic metres and equipped with approximately 10 cubic metres of engineered plastic carrier media providing approximately 5,000 square metres of media surface area, fine bubble diffusers and one (1) blower, discharging effluent to the existing intermediate clarifiers as described below;

- two (2) existing intermediate clarifiers, **each** having a specified surface area of approximately 5.8 square metres with a hopper bottom, an effective working volume of approximately 5.3 cubic metres, equipped with one (1) sludge return pump and one (1) skimmer pump that discharge settled and floating sludge into the proposed offline sludge storage tank, and discharging by gravity to the proposed Bioreactor #2 as described above;

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 A**.

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

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;

2. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;

3. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in

an unfiltered sample;

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

5. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;

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

7. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;

8. "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);

9. "Grab Sample" or "Grab" 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;

10. "Influent" means flows to the Sewage Treatment Plant from the collection system;

11. "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;

12. "Maximum Daily 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;

13. "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;

14. "Monthly Geometric Mean Density" is the mean of all Single Sample Results of *E.coli* measurement in the samples taken during a calendar month, calculated and reported as per the methodology specified in Schedule F;

15. "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;

16. "OBC" means the Ontario Building Code, Ontario Regulation 332/12 (Building Code) as amended to January 1, 2015, made under the *Building Code Act,* 1992 , S.O. 1992, c. 23;

17. "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;

18. "Owner" means 2404676 Ontario Limited, including any successors and assignees;

19. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40;

20. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;

21. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;

22. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;

23. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;

24. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;

25. "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;

26. "Works" means the approved sewage works, and includes Proposed Works and Existing Works and modifications made under Limited Operational Flexibility.

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 AND OPERATING AGENCY

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:

    a. change of address of Owner;

    b. change of Owner, including address of new owner;

    c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17* shall be included in the notification;

    d. change of name of the corporation and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* shall be included in the notification.

2. The Owner shall notify the District Manager, in writing, of any of the following changes within **thirty (30) days** of the change occurring:

    a. change of address of the Operating Agency;

    b. change of the Operating Agency, including address of the new Operating Agency.

3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.

4. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

3. CONSTRUCTION OF PROPOSED WORKS

1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within **five (5) years** of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Works not in operation. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

2. Upon completion of construction of the Proposed Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Proposed Works is constructed in accordance with this Approval.

3. **One (1) week** prior to the commencement of the operation of the Proposed Works, the Owner shall

notify the District Manager (in writing) of the pending start-up date.

4. Within **one (1) year** of completion of construction of the Proposed Works, a set of record drawings of the Works shall be prepared or updated. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.

5. The Owner shall ensure that the treatment technologies are installed in accordance with the manufacturer's installation manual.

6. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.

7. The Owner shall ensure that an imported soil that is required for construction of any subsurface disposal bed as per this Approval is tested and verified by the Licensed Engineering Practitioner for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.

4. 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 C are met.

5. CONTINGENCY PLAN

1. The Owner shall implement and follow the contingency plan referenced as Item 9 in **Schedule A** upon commencement of operation of the Proposed Works.

6. OPERATION AND MAINTENANCE

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and relevant regulations made under the OWRA, process controls and alarms and the use of process chemicals and other substances used in the Works.

2. The Owner shall prepare an operations manual for the Works within **six (6) months** of completion of construction of the Proposed Works, that includes, but not necessarily limited to, the following information:

    a. operating procedures for the Works under Normal Operating Conditions;

    b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;

c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;

d. procedures for the inspection and calibration of monitoring equipment;

e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition;

f. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Spills Action Centre (SAC) and District Manager;

g. procedures for receiving, responding and recording public complaints, including recording any 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 completion of 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 grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.

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

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

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

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

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

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

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

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

10. The Owner shall ensure that the sludge storage tanks of the RH2O treatment system be inspected **at least twice per year**, and the sewage sludge accumulated in the these storage tanks be periodically withdrawn at the frequency required to maintain efficiency of the treatment system.

11. 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.

12. The Owner shall ensure all onsite grease interceptors be cleaned out **at least twice per year**, or more frequently as determined by the Works operator, for removal of fats, oil and grease from the kitchen wastewater.

13. The Owner shall ensure that flow of effluent discharged into the subsurface disposal bed does not exceed **29,469 litres per day**.

14. The Owner shall retain for a minimum of **five (5) years** from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.

7. MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in **Schedule C** and record all results, as follows:

    a. all samples and measurements are to be taken at a time and in a location characteristic of the quality

and quantity of the sewage stream over the time period being monitored.

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

c. definitions for frequency:

i. Bi-weekly means once every two weeks;

ii. Monthly means once every month;

iii. Annually means once every year;

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 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;

b. Final Effluent discharged from the Sewage Treatment Plant estimated by pumping rates;

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 specified in Condition 4, and in writing within **seven (7) days** of non-compliance.

2. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges) made under the EPA, the Owner shall, within **fifteen (15) days** of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.

3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

4. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager in an electronic format by **March 31** of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:

    a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;

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

    c. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;

    d. a copy of daily nitrogen sensor readings in Excel format;

    e. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;

    f. a summary of all operating issues encountered and corrective actions taken;

    g. 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;

    h. a summary of any effluent quality assurance or control measures undertaken;

    i. 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;

j. 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;

k. a summary of any complaints received and any steps taken to address the complaints;

l. a summary of all situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;

m. 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 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 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 compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.

5. Condition 5 regarding the contingency plan is included to ensure that the Owner will implement the contingency plan upon commencement of operation of the Works, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

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.

Schedule A

1. Application for Environmental Compliance Approval dated and received on July 17, 2023, submitted by 2404676 Ontario Limited. for the proposed RH2O treatment system and subsurface disposal system, including the design report, final plans, specifications and other supporting information.

2. Revised quote letter (3220-SR-R2) for the proposed RH2O treatment system, dated May 8, 2024 and prepared by RH2O North America Inc.

3. Addition and Reconstruction of Existing Sewage Disposal Bed for Proposed Phase 2 Development at Thorold Gateway Center, Thorold, Ontario (Rev. 03), dated May 15, 2023 and prepared by n Engineering Inc.

4. Response letter re: n1366 | 1040 Thorold Stone Road - Environmental Compliance Approval Reference Number 9336-CU3BX8, dated May 15, 2024 and prepared by n Engineering Inc.

5. Response letter re: n1366 | 1040 Thorold Stone Road - Environmental Compliance Approval Reference Number 9336-CU3BX8, dated June 5, 2024 and prepared by n Engineering Inc.

6. Engineering drawings titled Sewage Diposal Bed Plan (SD1), revised June 5, 2024 and prepared by n Engineering Inc.

7. Engineering drawings titled Sections and Details (SD2), revised June 5, 2024 and prepared by n Engineering Inc.

8. Supplementary memo re: n1366 | 1040 Thorold Stone Road - Environmental Compliance Approval Reference Number 9336-CU3BX8, dated August 9, 2024 and prepared by n Engineering Inc.

9. **Contingency Plan for Septic System, 1040 Thorold Stone Road, Thorold, ON (Rev. 6.0), dated August 27, 2024 and prepared by n Engineering Inc.**

10. Letter re: Process Warranty for wastewater treatment upgrades for 1040 Thorold Stone Road, dated August 22, 2024 and prepared by RH2O North Americia Inc.

Schedule B

Final Effluent Compliance Limits

Final Effluent Parameter	**Averaging Calculator**	**Limit** (milligrams per litre unless otherwise indicated)
CBOD5	● Four (4) Sample Rolling Average during initial twelve (12) months of operation (based on biweekly sampling), and ● Single Sample Result thereafter (based on monthly sampling)	10
Total Suspended Solids		10
Total Inorganic Nitrogen (TIN)		3.5
Total Ammonia Nitrogen (TAN)		1
pH	Single Sample Result	between 6.0 - 9.5 inclusive

Schedule C

Monitoring Program

Influent - Influent sampling point (see Page 2)

Parameters	Sample Type	Minimum Frequency
BOD5	Grab	Quarterly
Total Suspended Solids	Grab	Quarterly
Total Kjeldahl Nitrogen	Grab	Quarterly

Final Effluent - Final Effluent sampling point (see Page 4)

Parameters	Sample Type	Minimum Frequency
CBOD5	8-hour composite	Bi-weekly during initial twelve (12) months of operation, and monthly thereafter
Total Suspended Solids	8-hour composite	
Total Ammonia Nitrogen (TAN)	8-hour composite	
Nitrate as Nitrogen	8-hour composite	
Nitrite as Nitrogen	8-hour composite	
Total Inorganic Nitrogen (TIN)	8-hour composite	
Total Kjeldahl Nitrogen (TKN)	8-hour composite	
pH	Grab/Probe/Analyzer	

Schedule C (Cont'd)

Sludge/Biosolids – Sludge Storage Tank

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate Nitrogen	Grab	Annually
Metal Scan - Arsenic - Cadmium - Cobalt - Chromium - Copper - Lead - Mercury - Molybdenum - Nickel - Potassium - Selenium - Zinc	Grab	Annually

In accordance with Section 139 of the *Environmental Protection Act,* you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights,* 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

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

The Notice should also include:

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

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

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

and

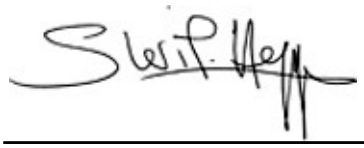
The Director appointed for the purposes of
Part II.1 of the *Environmental Protection Act*
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca**

This instrument is subject to Section 38 of the *Environmental Bill of Rights,* 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act.*

DATED AT TORONTO this 29th day of August, 2024



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

SW/
c: District Manager, MECP Niagara District Office
Abu Ziauddin, P.Eng., n Engineering Inc.