

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 6674-CTQK3G
Issue Date: October 26, 2023

Fourthgen Holdings Ltd.
15014 9th Line Strouffville
Whitchurch-Stouffville, Ontario
L4A 3E7

Site Location: Sandaraska Trailer Park and Campground
156 Sandaraska Rd Lot 18 and 19, Concession 1, former Manvers Township
City of Kawartha Lakes, Ontario
L0A 1K0

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 facilities at the above site location and disposal of effluent to subsurface via a Sewage Treatment Plant (BNA iQ.MBBR™ Wastewater Treatment System) and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Secondary

Details of Service Area:

- **Type of Occupancy:** Commercial (seasonal recreational trailer park/campground, operated from May to October)
- **Type and Number of Units:**
 - fifty (50) equestrian trailer sites (to be serviced by the Proposed Works detailed below); and
 - up to one hundred and sixty nine (169) trailer sites and other on-site facilities (currently serviced by the Existing Works detailed further below).

Total Sitewide Maximum Daily Flow: 32,200 litres per day (L/d)

Design Capacity of Sewage Treatment Plant (BNA iQ.MBBR™ Wastewater Treatment System):

Design Capacity with All Treatment Trains in Operation	Upon Completion of Construction of All Proposed Works
Maximum Daily Flow	13,750 L/d

Influent:

Receiving Location	Type(s)
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

PROPOSED WORKS

Sewage Treatment Plant - Moving Bed Biofilm Reactor (BNA iQ.MBBR™) Wastewater Treatment System

Flow Equalization Tank (EQT)

- one (1) in-ground precast concrete Flow Equalization Tank (EQT), having an approximate working volume of approximately 13.6 cubic metres, equipped with a liquid level control system and two (2) sewage pumps (one duty, one standby), receiving raw sewage from the existing fifty (50) trailer sites identified above, discharging effluent to the Sludge Storage/Primary Clarifier Tank (SS/PC) described below via a forcemain;

Influent Sampling Point

- Sampling of Influent from the Flow Equalization Tank (EQT);

Primary Treatment System

- one (1) in-ground precast concrete Sludge Storage Tank (SS), having an approximate working volume of 15.4 cubic metres, receiving effluent from the Flow Equalization Tank (EQT) described above, nitrified effluent recycle flow from the Aerobic Bioreactor 2 (BR2) and sludge from the second clarifier (SC) described below, discharging effluent by gravity to the Primary Clarifier (PC) described below;
- one (1) in-ground precast concrete Primary Clarifier (PC), having a specified surface area of approximately 3.6 square metres and an approximate working volume of 7.3 cubic metres, receiving effluent from the Sludge Storage Tank (SS) described above, discharging effluent by gravity to the

the Aerobic Bioreactor 1 (BR1) described below;

- sludge accumulated in the Sludge Storage Tank (SS) and Primary Clarifier (PC) shall be periodically removed for off-site disposal at an approved receiving facility;

Secondary Treatment System

- two (2) in-ground moving bed biofilm reactor (MBBR) tanks for BOD5 removal and nitrification, operating in series as Aerobic Bioreactor 1 (BR1) and Aerobic Bioreactor 2 (BR2):
 - having an approximate working volume of 5.5 cubic metres and 5.3 cubic meters, respectively;
 - containing a combined volume of 4 cubic metres of engineered plastic carrier media providing 2,000 square metres of media surface area;
 - equipped with fine bubble diffusers installed longitudinally on one side of each reactor, six (6) blowers each rated at 10 normal cubic metres per hour (3 blowers per reactor), and one (1) effluent recirculation pump that discharges nitrified effluent recycle flow from BR2 to the Sludge Storage Tank (SS);
 - receiving effluent from the Primary Clarifier (PC) and discharging effluent to the Secondary Clarifier (SC) described below;
- one (1) Secondary Clarifier (SC), having a specified surface area of approximately 3.6 square metres with a double hopper bottom, an approximate working capacity of 3.7 cubic metres and overall dimensions of approximately 1.5 metres by 2.3 metres by 1.5 metres (H), equipped with a sewage return pump and a surface skimmer pump that discharge sludge into the Sludge Storage Tank (SS), receiving effluent from the Aerobic Bioreactors 1 and 2, discharging by gravity to the Anoxic Bioreactor (ABR) described below;

Post-Secondary Treatment System

- one (1) in-ground MBBR Anoxic Bioreactor (ABR) for post-anoxic denitrification, having an approximate working volume of 2.9 cubic metres and containing a volume of 1.5 cubic metres of engineered plastic carrier media providing 750 square metres of media surface area, equipped with coarse bubble diffusers installed along one side of the reactor and two (2) blowers, receiving effluent from the Secondary Clarifier (SC), discharging by gravity to the Aerobic Bioreactor 3 (BR3) described below;
- one (1) in-ground MBBR Aerobic Bioreactor 3 (BR3) for post-secondary polishing, having an approximate working volume of 2.7 cubic metres and containing a volume of 1.0 cubic metres of engineered plastic carrier media providing 500 square metres of media surface area, equipped with fine bubble diffusers installed longitudinally on one side of the reactor and two (2) blowers each rated at 7.5 normal cubic metres per hour, receiving effluent from the Anoxic Bioreactor (ABR),

discharging by gravity to the Tertiary Clarifier (TC) described below;

- one (1) Tertiary Clarifier (TC), having a specified surface area of approximately 1.8 square metres with a hopper bottom, an approximate working capacity of 1.8 cubic metres and overall dimensions of approximately 1.0 metres by 1.9 metres by 1.5 metres (H), equipped with a sludge return pump that discharges sludge into the Sludge Storage Tank (SS), receiving effluent from the Aerobic Bioreactor 3, discharging by gravity to the Effluent Pump Tank (EPT) described below;

Effluent Pump Tank (EPT)

- one (1) Effluent Pump Tank (EPT), having an approximate working volume of 6.4 cubic metres, equipped with a liquid level control system with high level visual/audible alarms and two (2) submersible effluent pumps (one duty, one standby) each rated for an approximate design flow of 2.9 litres per second over a TDH of 4.8 metres, receiving effluent from the Tertiary Clarifier (TC) and discharging via two (2) approximately 37 metre long 50 millimetre diameter forcemains to the Type A dispersal bed described below;

Supplementary Treatment System

- one (1) 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 Anoxic Bioreactor (ABR);

Final Effluent Flow Measurement and Sampling Point

- Final Effluent flow measurement via an ultrasonic flow meter (Keyence Model FD-Q or Equivalent Equipment);
- Sampling of Final Effluent from the Effluent Pump Tank (EPT) prior to discharge to the Type A dispersal bed;

Final Effluent Disposal Facilities

Type A Dispersal Bed

Q = 13,750 litres per day

- one (1) partially raised Type A dispersal bed, consisting of two (2) cells located side by side, each having a stone layer with an area of 152 square metres (19.0 metres by 8.0 metres) and a thickness of 300 millimetres, protected by permeable geo-textile fabric, complete with eight (8) runs of 18.0 metre long 75 millimetre diameter perforated distribution piping spaced 1.0 metres apart, centre to centre, in the stone layer, overlying a sand layer having an area of 152 square metres (19.0 metres by 8.0 metres), a thickness of 300 millimetres and a percolation time (T) in the range of 6 to 10 minutes per centimetres;

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;

EXISTING WORKS

System Serving the Existing Trailer Dump Site

- existing in-ground sewage disposal system to service a dump station servicing up to 19 existing unserviced trailers sites (including 10 sites near the dump station and 9 sites from the Pine Alley section below) in accordance with Conditions 8.1 and 8.2, with a total daily design sewage flow of 3,600 litres per day, consisting of two (2) existing 4,500 litre pre-cast concrete holding tanks connected in series, with the second tank equipped with an effluent filter, discharging by gravity to a conventional absorption trench leaching bed consisting of six (6) runs of 25 metre long perforated distribution piping for a total pipe length of 150 metres;

Oakland Leaching Bed

- existing sewage disposal system servicing 28 existing trailer sites with a total daily design sewage flow of 2,800 litres per day, consisting of a 6,800 litre precast concrete two-compartment septic tank equipped with an effluent filter, discharging by gravity to an in-ground conventional absorption trench leaching bed with eight (8) runs of 18.3 metre long perforated distribution piping for a total pipe length of 146 metres, placed at a spacing of 1.6 metres.

Pine Alley Leaching Bed

- existing in-ground sewage disposal system servicing 11 existing trailer sites (excluding the additional 9 sites serviced by the "System Serving the Existing Trailer Dump Site" as described above), with a total daily design sewage flow of 1,100 litres per day, consisting of a 4,500 litre precast concrete two-compartment septic tank equipped with an effluent filter, discharging by gravity to an in-ground conventional absorption trench leaching bed with five (5) runs of 20 metre long perforated distribution piping for a total pipe length of 100 metres, placed at a spacing of 1.6 metres;

Whispering Pine Leaching Bed

- existing in-ground sewage disposal system servicing 33 existing trailer sites, with a total daily design sewage flow of 3,300 litres per day, consisting of a 6,800 litre precast concrete two-compartment septic tank equipped with an effluent filter, discharging by gravity to an in-ground conventional absorption trench leaching bed with eight (8) runs of 18.3 metre long perforated distribution piping for a total pipe length of 146 metres, placed at a spacing of 1.6 metres;

The Pit Leaching Bed

- existing in-ground sewage disposal system to service 66 existing trailer sites, with a total daily design sewage flow of 6,600 litres per day, consisting of a 13,500 litre precast concrete two-compartment septic tank equipped with an effluent filter, a 2,250 litre precast concrete pump tank equipped with a 0.4 hp pump and an audio visual alarm system, discharging 700 litres per cycle to an in-ground conventional

absorption trench leaching bed with eight (8) runs of 25 metre long perforated distribution piping for a total pipe length of 200 metres, placed at a spacing of 1.6 metres;

System Servicing the Existing Comfort Station and Swimming Pool

- existing in-ground sewage disposal system, approved by the Health Unit under Approval No. 31-5-74, servicing the existing comfort station and swimming pool, with a total daily design sewage flow of 10,000 litres per day, consisting of two (2) 22,500 litre each precast concrete septic tanks placed in series, a 3,800 litre precast concrete pump tank discharging to an in-ground conventional absorption trench leaching bed arranged as three cells, each with 150 metres of distribution pipe for a total of 450 metres;

System Servicing the Existing Modular Home

- existing in-ground sewage disposal system servicing a three bedroom house, with a total daily design sewage flow of 1,600 litres per day, consisting of a 3,600 litre precast concrete two-compartment septic tank, discharging by gravity to a conventional absorption trench leaching bed with a total distribution pipe length of 50 metres, arranged as five (5) runs of 10 metre long perforated distribution piping, placed at a spacing of 1.5 metres;

System Servicing the Existing House and Store

- existing in-ground sewage disposal system servicing a three bedroom house and a store with approximately 80 square metres of floor space, with a total daily design sewage flow of 2,000 litres per day, consisting of a 3,600 litre precast concrete two-compartment septic tank, discharging by gravity to a conventional absorption trench leaching bed with a total distribution pipe length of 138.4 metres arranged as eight (8) runs of 17.3 metre long perforated distribution piping, placed at a spacing of 1.5 metres;

System Servicing Trailer Leaching Bed (End of Loop 2)

- existing in-ground filter bed sewage disposal system servicing 12 trailer sites with the addition of four additional existing trailer sites for a total daily design sewage flow of 1200 litres per day, consisting of a 3,600 litre precast concrete two-compartment septic tank, discharging by gravity to a 98.4 square metre filter bed;

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 submitted supporting documents 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;
2. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
 3. "BOD₅" (also known as TBOD₅) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
 4. "CBOD₅" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
 5. "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;
 6. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
 7. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
 8. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
 9. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
 10. "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);
 11. "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;
 12. "Influent" means flows to the Sewage Treatment Plant from the collection system;
 13. "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;
 14. "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;
 15. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
 16. "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;

17. "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;
18. "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;
19. "Owner" means Fourthgen Holdings Ltd., including any successors and assignees;
20. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
21. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant;
22. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;
23. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
24. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;
25. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;
26. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;
27. "Works" means the approved sewage works, and includes Proposed Works 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 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. DESIGN OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the Final Effluent parameters design objectives listed in the table(s) included in **Schedule B**.

5. 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/update the operations manual for the Works within **six (6) months** of completion of construction of the Proposed Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for the Works under Normal Operating Conditions;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;

- d. procedures for the inspection and calibration of monitoring equipment;
 - e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition;
 - f. a spill prevention 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 septic tanks and the Sludge Storage Tank (SS) be inspected **at least twice per year** by a qualified person, and the sewage sludge accumulated in the septic tanks be periodically withdrawn at the frequency required to maintain efficiency of the treatment system. The effluent filters in septic tanks shall be cleaned out at least once every six (6) months, when the tank is pumped out, or as determined by the Operating Agency, whichever comes first.
 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 that flow of effluent discharged into the Type A dispersal bed does not exceed **13,750 litres per day**.
 13. 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.

6. 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. Monthly means once every month;
 - ii. 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.
 - e. The measurement frequencies specified in **Schedule C** in respect to any parameter may, after **three (3) years** of monitoring in accordance with this Condition, be modified by the Director in writing.
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 estimated by Final Effluent flow measurements specified below;
 - b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations;
 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.

7. REPORTING

1. 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.

2. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
3. 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 Type A dispersal bed;
 - c. a summary and interpretation of all Final Effluent monitoring data, including concentrations, flow rates, and a comparison to the design objectives in this Approval, including an overview of the success and adequacy of the Works;
 - d. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;
 - e. a summary of all operating issues encountered and corrective actions taken;
 - f. 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;
 - g. a summary of any effluent quality assurance or control measures undertaken;
 - h. 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;
 - i. a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in deterioration of Final Effluent quality;
 - 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 emergencies, other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
- m. any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works;
- n. any other information the District Manager requires from time to time.

8. SPECIAL CONDITIONS

1. The Owner shall ensure that the "System Serving the Existing Trailer Dump Site" under Existing Works only receives sewage from a maximum of 13 trailer sites on each day.
2. The Owner shall keep a daily record of the number of trailer sites serviced by the "System Serving the Existing Trailer Dump Site".

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 design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
5. Condition 5 regarding 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.

6. Condition 6 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.
7. Condition 7 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.
8. Condition 8 regarding special conditions is included to ensure the daily sewage flows received by the existing "System Serving the Existing Trailer Dump Site" under Existing Works do not exceed the system's design capacity.

Schedule A

1. Application for Environmental Compliance Approval dated January 21, 2022 and received on May 20, 2022, submitted by WSP Canada Inc. on behalf of Fourthgen Holdings Ltd. for the proposed MBBR wastewater treatment system and subsurface disposal bed, including the design report, final plans, specifications and other supporting information.
2. Drawing Titled "Site Plan, On-Site Sewage Treatment and Disposal System Design" dated April 10, 2023 and stamped by R.A. Passmore, P.Eng. on August 16, 2023, prepared by WSP Canada Inc.
3. Drawing Titled "Cross Sections and Details, On-Site Sewage Treatment and Disposal System Design" dated April 10, 2023 and stamped by R.A. Passmore, P.Eng. on August 16, 2023, prepared by WSP Canada Inc.
4. Revised design sheet, calculation summary, plan view system drawing and technical comments enclosed in email correspondence dated July 12 & 13, 2023, prepared by Miles MacCormack, P.Eng. of Bergmann North America Inc.

Schedule B

Final Effluent Design Objectives

(Sewage Treatment Plant - BNA iQ.MBBR™ Wastewater Treatment System)

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise indicated)
CBOD ₅	Annual Average Effluent Concentration	10
Total Suspended Solids	Annual Average Effluent Concentration	10
Nitrate as Nitrogen	Annual Average Effluent Concentration	2.5
pH	Single Sample Result	between 6.5 - 8.5 inclusive

Schedule C

Monitoring Program

Influent - Influent Sampling Point (Page 2)

Parameters	Sample Type	Minimum Frequency
BOD ₅	Grab	Three (3) times per year (spring, summer and fall) during the operating season
Total Suspended Solids	Grab	
Total Kjeldahl Nitrogen	Grab	
Total Ammonia Nitrogen	Grab	
pH	Grab	
Alkalinity	Grab	

Final Effluent - Final Effluent Sampling Point (Page 4)

Parameters	Sample Type	Minimum Frequency
CBOD ₅	Grab	Monthly during the operating season
Total Suspended Solids	Grab	
Nitrate Nitrogen	Grab	
Nitrite Nitrogen	Grab	
Total Kjeldahl Nitrogen	Grab	
Total Ammonia Nitrogen	Grab	
pH	Grab	
Alkalinity	Grab	

Schedule C (Cont'd)

Sludge/Biosolids – Sludge Storage Tank (SS) of MBBR Treatment System

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

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 5856-763P2S issued on September 4, 2007.

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

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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

and

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

and

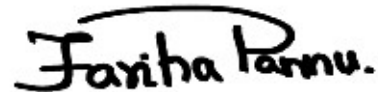
The Director appointed for the purposes of
Part II.1 of the *Environmental Protection Act*
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

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

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

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

DATED AT TORONTO this 26th day of October, 2023



Fariha Pannu, P.Eng.

Director

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

SW/

c: District Manager, MECP Peterborough District Office
Imad Aouli, WSP Canada Inc.