ENVIRONMENTAL COMPLIANCE APPROVAL
NUMBER A-500-2240562032
Version: 1.0
Issue Date: September 17, 2024

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

7475 MCLEAN ROAD EAST INC.

2201 BRISTOL CIRCLE 600
OAKVILLE ONTARIO
L6H 0J8

For the following site:

7475 McLean Road East, Puslinch, PUSLINCH, ONTARIO, CANADA, N1H 6H9

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:

the establishment, usage and operation of Proposed Works for the treatment of sanitary sewage from two (2) proposed buildings for warehousing/industrial purposes, and disposal of treated effluent to two (2) proposed on-site subsurface sewage disposal systems, rated at a total Maximum Daily Flow of 99,000 litres per day, consisting of the following:

PROPOSED WORKS

Waterloo Biofilter Treatment System No. 1 **Qmax = 49,500 litres per day**

one (1) proposed Waterloo Biofilter treatment system, located towards the north end of the site and rated at a maximum treatment capacity of 49,500 litres per day, to service Industrial Building #1 located within the west portion of the site, consisting of the following:

- three (3) proposed 45,400 litre Anaerobic Digesters #1, #2 and #3 (AD#1, AD#2 and AD#3), connected in series and equipped with an innertube on the inlet of each anaerobic digester tank, two (2) effluent filters on the outlet of AD#1, a baffle in AD#2 and four (4) effluent filters on the outlet of AD#3, receiving raw sewage from the building, and discharging by gravity to the proposed biofilter dosing tank as described below;

- one (1) proposed 45,500 litre biofilter dosing tank, equipped with two (2) submersible effluent pumps operating on an alternating timer, complete with the provision of liquid bacterial additive addition (as required), receiving AD#3 effluent and dosing to the proposed basket biofilter tanks as described below;
- three (3) proposed 50,000 litre basket biofilter tanks connected by bottom drains, each equipped with three (3) baskets each filled with 10.3 cubic metres of biofilter medium (92.7 cubic metres in total), complete with air fans and passive venting, receiving effluent from the biofilter dosing tank and discharging by gravity to the proposed closed loop basket biofilter tank as described below;
- one (1) proposed 50,000 litre closed loop basket biofilter tank, equipped with three (3) baskets each filled with 10.3 cubic metres of biofilter medium (30.9 cubic metres in total), two (2) submersible effluent pumps operating on separate timers, and two (2) submersible effluent pumps operating on an alternating timer, with the first simplex pump dosing a maximum of 22,500 litres per day of effluent to the three baskets inside the tank, the second simplex pump recirculating a portion of the effluent to the inlet of AD#2, and the duplex pumps dosing the effluent to the proposed WaterNox-LS tank as described below, complete with an air fan and passive venting;

- two (2) proposed 28,786 litre WaterNox-LS tanks in-parallel, both filled with denitrifying medium and equipped with a buffering medium at the top to maintain pH balancing, receiving effluent from the closed loop basket biofilter tank and discharging by gravity to the proposed polishing basket biofilter tank as described below;
- one (1) proposed 50,000 litre polishing basket biofilter tank, equipped with three (3) baskets each filled with 10.3 cubic metres of biofilter medium (30.9 cubic metres in total), two (2) submersible effluent pumps operating on separate timers, and two (2) submersible effluent pumps operating on an alternating demand, with the first simplex pump dosing a maximum of 22,500 litres per day of effluent to the three baskets, the second simplex pump dosing a maximum of 22,500 litres per day of effluent to a proposed 22,500 litre closed loop WaterNox-LS tank as described below, and the duplex pumps dosing the Final Effluent to the proposed Type A dispersal bed as described below, complete with an air fan and passive venting;
- one (1) proposed 22,500 litre closed loop WaterNox-LS tank filled with denitrifying medium, receiving effluent from the polishing basket biofilter tank and discharging by gravity back to the polishing basket biofilter tank; and
- one (1) chemical addition system housed in an above-ground control room/building, equipped with two (2) chemical metering pumps dosing a liquid alkalinity chemical to the inlet of the anaerobic digester tanks and a bacterial additive to the inlet of the biofilter dosing tank.

Subsurface Sewage Disposal Bed No. 1 **Qmax = 49,500 litres per day**

- one (1) Type A dispersal bed, designed and operated at a Maximum Daily Flow of 49,500 litres per day, having a stone layer with an area of 1,014 square metres (78.0 metres by 13.0 metres) and a thickness of 300 millimetres, protected by permeable geo-textile fabric, complete with six (6) distribution cells each consisting of twelve (12) runs of 12.2 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 2,520 square metres (84.0 metres by 30.0 metres), a thickness of minimum 300 millimetres and a percolation time (T) in the range of 6 to 10 minutes per centimetres, extending minimum 15 metres beyond the far end of the distribution piping in the direction that effluent entering soil will move horizontally;

including all other controls, electrical equipment, instrumentation, nitrate, nitrite and ammonia sensors, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned Works;

Waterloo Biofilter Treatment System No. 2 **Qmax = 49,500 litres per day**

one (1) proposed Waterloo Biofilter treatment system, located towards the north end of the site and rated at a maximum treatment capacity of 49,500 litres per day, to service Industrial Building #2 located within the east portion of the site, consisting of the following:

- three (3) proposed 45,400 litre Anaerobic Digesters #1, #2 and #3 (AD#1, AD#2 and AD#3), connected in series and equipped with an innertube on the inlet of each anaerobic digester tank, two (2) effluent filters on the outlet of AD#1, a baffle in AD#2 and four (4) effluent filters on the outlet of AD#3, receiving raw sewage from the building, and discharging by gravity to the proposed biofilter dosing tank as described below;
- one (1) proposed 45,500 litre biofilter dosing tank, equipped with two (2) submersible effluent pumps operating on an alternating timer, complete with the provision of liquid bacterial additive addition (as required), receiving AD#3 effluent and dosing to the proposed basket biofilter tanks as described below;
- three (3) proposed 50,000 litre basket biofilter tanks connected by bottom drains, each equipped with three (3) baskets each filled with 10.3 cubic metres of biofilter medium (92.7 cubic metres in total), complete with air fans and passive venting, receiving effluent from the biofilter dosing tank and discharging by gravity to the proposed closed loop basket biofilter tank as described below;
- one (1) proposed 50,000 litre closed loop basket biofilter tank, equipped with three (3) baskets each filled with 10.3 cubic metres of biofilter medium (30.9 cubic metres in total), two (2) submersible effluent pumps operating on separate timers, and two (2) submersible effluent pumps operating on an alternating timer, with the first simplex pump dosing a maximum of 22,500 litres per day of effluent to the three baskets inside the tank, the second simplex pump recirculating a portion of the effluent to the inlet of AD#2, and the duplex pumps dosing the effluent to the proposed WaterNox-LS tank as described below, complete with an air fan and passive venting;

- two (2) proposed 28,786 litre WaterNox-LS tanks in-parallel, both filled with denitrifying medium and equipped with a buffering medium at the top to maintain pH balancing, receiving effluent from the closed loop basket biofilter tank and discharging by gravity to the proposed polishing basket biofilter tank as described below;
- one (1) proposed 50,000 litre polishing basket biofilter tank, equipped with three (3) baskets each filled with 10.3 cubic metres of biofilter medium (30.9 cubic metres in total), two (2) submersible effluent pumps operating on separate timers, and two (2) submersible effluent pumps operating on an alternating demand, with the first simplex pump dosing a maximum of 22,500 litres per day of effluent to the three baskets, the second simplex pump dosing a maximum of 22,500 litres per day of effluent to a proposed 22,500 litre closed loop WaterNox-LS tank as described below, and the duplex pumps dosing the Final Effluent to the proposed Type A dispersal bed as described below, complete with an air fan and passive venting; and
- one (1) proposed 22,500 litre closed loop WaterNox-LS tank filled with denitrifying medium, receiving effluent from the polishing basket biofilter tank and discharging by gravity back to the polishing basket biofilter tank;
- one (1) chemical addition system housed in an above-ground control room/building, equipped with two (2) chemical metering pumps dosing a liquid alkalinity chemical to the inlet of the anaerobic digester tanks and a bacterial additive to the inlet of the biofilter dosing tank.

Subsurface Sewage Disposal Bed No. 2 **Qmax = 49,500 litres per day**

- one (1) Type A dispersal bed, designed and operated at a Maximum Daily Flow of 49,500 litres per day, having a stone layer with an area of 1,014 square metres (78.0 metres by 13.0 metres) and a thickness of 300 millimetres, protected by permeable geo-textile fabric, complete with six (6) distribution cells each consisting of twelve (12) runs of 12.2 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 2,520 square metres (84.0 metres by 30.0 metres), a thickness of minimum 300 millimetres and a percolation time (T) in the range of 6 to 10 minutes per centimetres, extending minimum 15 metres beyond the far end of the distribution piping in the direction that effluent entering soil will move horizontally;

including all other controls, electrical equipment, instrumentation, nitrate, nitrite and ammonia sensors, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned Works;

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

DEFINITIONS

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

1. "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. "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 Works at the Final Effluent sampling point(s);

8. "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;
9. "Influent" means flows to the Works from the collection system but excluding process return flows;
10. "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;
11. "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;
12. "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;
13. "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;
14. "Operating Agency" means the 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;
15. "Owner" means 7475 Mclean Road East Inc., including any successors and assignees;
16. "OWRA" means the *Ontario Water Resources Act,* R.S.O. 1990, c. O.40, as amended;
17. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
18. "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;
19. "Works" means the approved sewage works, and includes Proposed Works.

TERMS AND CONDITIONS

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

1. **GENERAL PROVISIONS**
    1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
    2. Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.
    3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
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; or

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. C39 shall be included in the notification.

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

    a. change of address of Operating Agency;

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

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

4. 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 Waterloo Biofilter treatment systems 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 Works in accordance with the Final Effluent parameters design objectives listed in the table(s) included in **Schedule 2.**

5. **COMPLIANCE LIMITS**

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

6. **PROPOSAL FOR GROUNDWATER COMPLIANCE LIMIT**

1. Within **180 days** after the issuance of this Approval, the Owner shall submit to the Director for approval, a proposal for groundwater compliance limit at the property boundary via an amendment application. The proposal shall include, at a minimum, the following information:

a. a report summarizing background groundwater quality at the site from the two downgradient wells and one upgradient well, which are to be constructed and sampled as per the groundwater monitoring conditions included this Approval;

b. The report shall be prepared by a qualified person who is a registered professional geoscientist (P. Geo) and/or registered professional engineer (P. Eng.) with relevant hydrogeological expertise;

c. The qualified person shall propose a compliance limit for nitrate at the property boundary considering background concentrations in accordance with the ministry's Guideline B-7, Incorporation of the Reasonable Use Concept into Groundwater Management (MOEE, 1994); and

d. The qualified person shall also provide comment on whether a groundwater compliance limit for total ammonia nitrogen (TAN) and nitrite are required.

7. **CONTINGENCY PLAN**

1. The Owner shall implement the contingency plan referenced as Item 6 in **Schedule 1** upon commencement of operation of the Proposed Works.

8. **OPERATION AND MAINTENANCE**

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

2. The Owner shall prepare 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 contingency plan to address non-compliance with the effluent limits.

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

h. 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:

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

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

6. The Owner shall, upon the construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.

7. The Owner shall ensure that 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 sewage 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 system 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 anaerobic digester tanks be inspected **at least twice per year** by a qualified person, and the sewage sludge accumulated in the anaerobic digester tanks be periodically withdrawn at the frequency required to maintain efficiency of the treatment system. The effluent filters in the anaerobic digester tanks shall be cleaned out at least once every six (6) months, when the tank is pumped out, or as determined by the Operating Authority, whichever comes first.

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 and/or non-compliant effluent generated from the Works, at all times during operation of the Works.

12. The Owner shall ensure that flow of treated effluent discharged into **each** Type A dispersal bed does not exceed **49,500 litres per day**.

13. The Owner shall maintain vacant reserve areas free from any structure, stockpile of materials or underground utilities, located near the Waterloo Biofilter treatment systems per Item 3 of **Schedule 1,** as a contingency measure for future design, approval and construction of additional treatment components or a replacement treatment system.

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.

9. **MONITORING AND RECORDING**

1. The Owner shall, upon commencement of operation of the Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in **Schedule 4** and record all results, as follows:

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

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

c. definitions for frequency:

i. Bi-weekly means once every two weeks;

ii. Monthly means once every month;

iii. Quarterly means once every three months;

iv. Semi-annually means once every six months;

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 record the daily nitrite, nitrate and ammonia sensor readings from the Waterloo Biofilter treatment systems and make the data available to Ministry staff upon request.

4. 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 pumping rates;

b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations;

5. 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.

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. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

a. a summary and 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 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 incidents that triggered the contingency plan referenced in Condition 7 and associated actions taken in accordance with the contingency plan;

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 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;

k. 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;

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

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

n. any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works;

o. any other information the District Manager requires from time to time.

5. **Five (5) years** after commencement of operation of the Works, the Owner shall submit to the District Manager for approval, a report containing a summary and interpretation of groundwater monitoring data including shallow groundwater flow direction, interpretation of groundwater quality analytical results, subject to the following:

    a. The report shall be prepared by a qualified person who is a registered professional geoscientist (P.Geo) and/or registered professional engineer (P. Eng) with relevant hydrogeological expertise.

    b. In the report, the qualified person shall provide comment on whether the Reasonable Use Guideline has been met at the property boundary in accordance the ministry's Guideline B-7, Incorporation of the Reasonable Use Concept into Groundwater Management (MOEE, 1994).

    c. The report shall also include a summary of the treatment system's performance with respect to meeting effluent limits, and recommendations on future groundwater monitoring, as necessary.

    d. No modifications shall be made to the groundwater monitoring unless approved by the Director via an amendment to this Approval.

REASONS

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

1. Condition 1 regarding general provisions is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted.

2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.

3. Condition 3 regarding construction of Proposed Works/record drawings is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.

4. Condition 4 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.

5. Condition 5 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.

6. Condition 6 regarding the proposal for groundwater compliance limit is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's Reasonable Use Concept.

7. Condition 7 regarding the contingency plan is included to ensure that the Owner will implement and follow 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.

8. Condition 8 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.

9. Condition 9 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.

10. Condition 10 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.

APPEAL PROVISIONS

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

I. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;

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

The Notice should also include:

I. The name of the appellant;

II. The address of the appellant;

III. The environmental compliance approval number;

IV. The date of the environmental compliance approval;

V. The name of the Director, and;

VI. The municipality or municipalities within which the project is to be engaged in.

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

This Notice must be served upon:

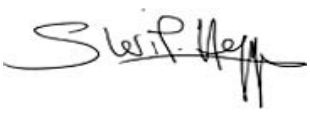
Registrar* Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5 OLT.Registrar@ontario.ca	and	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3	and	The Director appointed for the purposes of Part II.1 of the *Environmental Protection Act* Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

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

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

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

Dated at Toronto this 17th day of September, 2024



Sherif Hegazy

Director

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

c: John C. Goldspink
Jessica Doherty, CF Crozier & Associates

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

SCHEDULE 1

1. Application for Environmental Compliance Approval submitted by 7475 Mclean Road East Inc. received on August 24, 2023 for the proposed Waterloo Biofilter treatment system and Type A dispersal beds, including the design report, final plans and specifications.
2. Letter re. Response to Comments, Sewage Works ECA Application (1000240561), 7475 McLean Road East, Township of Puslinch, 7475 McLean Road East Inc., dated May 14, 2024 and prepared by C.F. Crozier & Associates Inc.
3. Letter re. Response to Comments, Sewage Works ECA Application (1000240561), 7475 McLean Road East, Township of Puslinch, 7475 McLean Road East Inc., dated June 4, 2024 and prepared by C.F. Crozier & Associates Inc.
4. Letter re. Response to Comments, Sewage Works ECA Application (1000240561), 7475 McLean Road East, Township of Puslinch, 7475 McLean Road East Inc., dated June 11, 2024 and prepared by C.F. Crozier & Associates Inc.
5. Waterloo Biofilter System Sizing - 7475 McLean Road (Rev. 1), prepared by Waterloo Biofilter Systems Inc. and shared by C.F. Crozier & Associates Inc. via email on August 20, 2024.
6. **Contingency Plan (Attachment A), dated September 5, 2024 and prepared by Katherine Rentsch, P.Eng. of C.F. Crozier & Associates Inc.**

SCHEDULE 2

Table 1 - Effluent Objectives

Effluent Parameter (tested on the outlet from the final Waterloo Biofilter treatment unit)	**Averaging Calculator**	**Concentration Objective (milligrams per litre unless otherwise indicated)**
CBOD5	Three-month rolling average* during the initial twelve (12) months of operation, and Single Sample Result thereafter	10
Total Suspended Solids (TSS)		10
Total Ammonia Nitrogen (TAN)		1.5
Nitrate-Nitrogen		3.0
pH	Single Sample Result	6.5 - 8.5 inclusive
* minimum six (6) samples required. See example in Schedule 3.		

SCHEDULE 3

Table 2 - Effluent Limits

Effluent Parameter (tested on the outlet from the final Waterloo Biofilter treatment unit)	**Averaging Calculator**	**Concentration Limit (milligrams per litre unless otherwise indicated)**
$CBOD_5$	Three-month rolling average* during the initial twelve (12) months of operation, and Single Sample Result thereafter	10
Total Suspended Solids		10
Total Inorganic Nitrogen (TIN)		4.5
pH	Single Sample Result	6.0 - 9.5 inclusive
* minimum six (6) samples required. See example below.		

Understanding Rolling Average
A three-month rolling average is an average value based on the three most recent months of sampling data. The average "rolls along" with the most recent data.

Sampling Period	Jan Sample 1	Jan S2	Feb S1	Feb S2	Mar S1	Mar S2	Apr S1	Apr S2	May S1	May S2
P1 - March	3	12	8	6	11	14				
P2 - April			8	6	11	14	7	5		
P3 - May					11	14	7	5	19	10

For example, from the table above:

- the three-month rolling average for March reporting (P1) is (3+12+8+6+11+14)/6 = 9
- the three-month rolling average for April reporting (P2) is (8+6+11+14+7+5)/6 = 8.5
- the three-month rolling average for May reporting (P3) is (11+14+7+5+19+10)/6 = 11

SCHEDULE 4

Table 3 - Influent Monitoring

Sampling Location	Outlet of Anaerobic Digester Tank #1
Frequency	Quarterly
Sample Type	Grab
Parameters	BOD5 Total Suspended Solids (TSS) Total Kjeldahl Nitrogen (TKN) Total Ammonia Nitrogen (TAN) Alkalinity

Table 4 - Effluent Monitoring Table

Sampling Location	On discharge from the Waterloo Biofilter treatment systems upstream from subsurface disposal beds
Frequency	Bi-weekly during the initial twelve (12) months of operation, and monthly thereafter
Sample Type	8-hour composite
Parameters	CBOD5 Total Suspended Solids (TSS) Total Ammonia Nitrogen (TAN) Nitrate-Nitrogen Nitrite-Nitrogen Total Kjedhal Nitrogen (TKN) pH

Table 5 - Groundwater Monitoring Table

Sampling Location	**- One (1) monitoring well located upgradient of the proposed Type A dispersal beds (background)** **- Two (2) monitoring wells located at downgradient of the attenuation zone at the southwest property boundary**
Frequency	Semi-annually*
Sample Type	Grab
Parameters	Nitrate-Nitrogen Nitrite-Nitrogen Total Ammonia Nitrogen (TAN) Total Suspended Solids (TSS) Total Phosphorus (TP) Dissolved Phosphorus Water Level
*Minimum of sixty (60) months from commencement of operation of the Proposed Works. The Owner may request modifications to the groundwater monitoring program thereafter.	