

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3596-C34LKX
 Issue Date: August 10, 2021

1160453 Ontario Limited
 1150 Vittoria Road, Vittoria,
 Ontario, N0E 1W0

Site Location: 144 Kendall Road, Vittoria,
 Norfolk County,
 Ontario, N0E 1W0.

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:

a non-municipal industrial sewage Works rated at an annual Average Daily Flow rate of 40 cu.m., servicing a Seasonal Worker Bunkhouse Residence of the approximately 200 workers / employees, consisting of tertiary treatment system to discharge effluent into a subsurface disposal bed, consisting of the following:

Classification of Sewage Treatment Plant: Tertiary

Details of Service Area:

- **Type of Occupancy:** Bunkhouse Development
- **Type and Number of Units:**
 - Newly constructed bunkhouses, accommodating a total of 200 persons

Design Capacity of Sewage Treatment Plant:

Design Capacity with all Treatment Trains in Operation	Upon Completion of Construction of All Proposed Works
Maximum Daily Flow	40,000 litres per day

Influent and Imported Sewage

In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

PROPOSED WORKS:

Primary Treatment:

Grease Interceptor OG4: one (1) 1,700 L capacity three compartment tank, to receive kitchen wastewater from the Bunkhouses to discharge supernatant effluent via a 150 mm diameter sanitary sewer into a flow equalization Tank No.1 as follows:

Flow Equalization Tank No. 1 (EQT): one (1) 62,800 L capacity tank, equipped with duplex pumps, discharging into a primary clarifier Tank No. 2 as follows:

Primary Sedimentation Clarifier / Sludge Storage Tank No 2 (SS/PC): one (1) 62,500 L capacity tank equipped with six (6) effluent filters, to discharge effluent to a Bioreactor Tank as described below:

Secondary Treatment:

Bioreactor (MBBR) Tanks Nos. 3 and 4 (BR1 and BR2): two (2) bioreactor tanks connected in series, each with 13,500 L capacity and are equipped with moving bed bioreactor mesh baskets filled with proprietary media, complete with an aeration system and duplex effluent pumps to recirculate a portion of treated effluent back to the tank No .2 and to discharge effluent to a secondary clarifier tank No. 5 as described below:

Secondary Clarifier Tank No. 5 (SC): a hopper bottomed tank with 5,700 L capacity with 2 hopper bottom cells, equipped with submersible sludge return pumps and surface skimmer pump, discharging sludge into primary sedimentation / sludge storage tank No. 2 (SS/PC) and discharge supernatant clarifier effluent into an anoxic bioreactor tank No. 6 as described below:

Tertiary Treatment:

Bioreactor Tanks No. 6 (ABR-BR3): one (1) anoxic bioreactor tank with 4,200 L capacity and is equipped with moving bed bioreactor proprietary media, complete with mixing pump to recirculate internally with carbon supplement addition and aeration system and to discharge effluent to a tertiary clarifier tank No. 7 as described below:

Tertiary Clarifier Tank No. 7 (TC): a hopper bottomed tank with 5,700 L capacity with 2 hopper bottom cells, equipped with submersible sludge return pumps and surface skimmer pump,

discharging sludge into primary sedimentation / sludge storage tank No. 2 (SS/PC) and discharge supernatant clarified effluent into an effluent pump tank No. 8 as described below:

Effluent Pump Tank No. 8 (EPT): one (1) 50,000 L capacity tank with duplex effluent pumps, to discharge through an effluent flow meter and a 50 mm diameter forcemain into subsurface disposal bed as described below:

Chemical dosing: one (1) auxiliary on - demand chemical injection dosing system for injecting supplemental carbon source into the tank no. 6 internal mixing inlet line;

Subsurface Disposal Bed :- one (1) raised absorption type leaching bed and mantle on a land area of 17 m X 48 m, complete with a six (6) port auto distribution valve to discharge into six (6) beds No. 1 to No. 6, each are fed via a ten port distribution box and into a bed complete with ten (10) rows of 17 m long 76 mm diameter perforated distribution pipes, laid in individual trenches at 1.6 m on centre in imported sand bed (granular material) with percolation rate $T = 6 \text{ min/cm}$, including a 50 m long sand mantle located downgradient of the bed with a minimum sand depth of 300 mm;

all other controls, air supply compressors and diffuser systems, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned Works, all as per the supporting document 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. "Annual Maximum Daily Influent Flow" means the maximum Influent collected in a single day during a calendar year;
3. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
4. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
5. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
6. "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;
7. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
8. "*E. coli* " refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen

or chromogen, that produces fluorescence under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 + 0.5 °C or 44.5 + 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well methods);

9. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
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" 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. "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;
15. "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 D**;
16. "Operating Authority" 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;
17. "Owner" means 1160453 Ontario Limited, including any successors and assignees;
18. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
19. "Peak Daily Flow Rate" (also referred to as maximum daily flow or maximum day 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;
20. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
21. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage

treatment plant site excluding the Final Effluent disposal facilities;

22. "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;
23. "Works" means the approved sewage works includes Proposed 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. EXPIRY OF APPROVAL

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

3. CHANGE OF OWNER AND OPERATING AUTHORITY

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* , as amended, shall be included in the notification;
 - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O.*

1990, c. C.39 , as amended, 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 Authority;
 - b. change of Operating Authority, including address of new Operating Authority.
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 environmental compliance approval number.

4. CONSTRUCTION

1. The Owner shall ensure that the Treatment system is installed in accordance with the Manufacturer's Installation Manual.
2. The Owner shall ensure that any 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.
3. Upon construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.
4. Upon construction of the Works, the Owner shall prepare a set of as-built drawings showing the works "as constructed". "As-built" drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the site for the operational life of the Works and shall be made available for inspection by Ministry staff.

5. MONITORING AND RECORDING

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

1. All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
2. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample

type specified for each parameter listed in the Influent Monitoring **Table 1** included in **Schedule B**.

3. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Effluent Monitoring **Table 2** included in **Schedule B**.
4. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Ground-water Monitoring **Table 3** included in **Schedule B**.
5. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in **Schedule C**.
6. The Owner shall employ measurement devices to accurately measure quantity of effluent being discharged to subsurface disposal system, including but not limited to water/wastewater flow meters, event counters, running time clocks, or electronically controlled dosing, and shall record the daily volume of effluent being discharged to the subsurface disposal system.
7. The Owner shall establish ground-water monitoring wells: one monitoring well upgradient of the proposed tile bed and one monitoring well closer to the on-site pond between the tile bed and the existing pond as follows:
 - a. Within three (3) months of issuance of this approval and prior to field installation; details of the locations (UTM Coordinates) and installation of the two (2) new ground-water monitoring wells shall be submitted to the District Manager for approval.
 - b. Within three (3) months of issuance of this Approval, the UTM coordinates of the three (3) existing ground-water monitoring wells shall be provided to the District Manager.
 - c. The water level monitoring should occur at three existing and two newly installed monitoring wells on a quarterly basis after the sewage system commissioning, for confirmation of the flow direction.
 - d. The ground-water shall be monitored for 3 years after the treatment system commissioning.
 - e. Monitoring shall continue for three (3) years and the frequency may be amended thereafter based on justification provided by a qualified hydrogeologist / geoscientist (P.Geo. or P.Eng.) and a review of the data by the Ministry.
8. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:
 - a. the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended

from time to time by more recently published editions;

- b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
- c. the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.

9. 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

6. DESIGN OBJECTIVES

The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the following objectives:

1. Annual Maximum Daily Influent Flow is within the Design Capacity of the Sewage Treatment Plant.

7. 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 4** included in **Schedule B** are met.

8. OPERATIONS AND MAINTENANCE

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works.
2. The Owner shall prepare an operations manual within **six (6) months** of the introduction of sewage to the Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for routine operation of all the Works;
 - b. inspection programs, including frequency of inspection, for all the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance for all the Works; copies of maintenance contracts for any routine inspections & pump-outs should

- be included for all the tanks and treatment units;
- d. procedures for the inspection and calibration of monitoring equipment;
 - e. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Spills Action Centre (SAC) and District Manager; and
 - f. procedures for receiving, responding and recording public complaints, including recording any follow-up 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 provide for the overall operation of the Works with an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 129/04.
 5. 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 or its authorized agent. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.
 6. The Owner shall ensure that the Primary Sedimentation Clarifier / Sludge Storage Tank No 2 (SS/PC) or other tanks are pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filters are cleaned out at minimum once a year or more often if required.
 7. The Owner shall ensure that the oil/grease interceptor is inspected and maintained on regular basis as required, and grease is disposed off site by a licensed hauler (e.g. at approved recycling sites).
 8. 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.
 9. The Owner shall ensure that flow of treated effluent discharged into the subsurface sewage system does not exceed 40,000 litres per day.
 10. 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.
 11. The Owner shall visually inspect the general area where sewage works are located for break-out once every month during the operating season.

12. 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.

9. REPORTING

1. **One week** prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.
2. 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.
3. 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.
4. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
5. The Owner shall prepare and submit a performance report, on an annual basis, within **ninety (90) days** following the end of each operational season to the District Manager. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - a. a summary and description of efforts made and results achieved in meeting the Effluent Compliance Limits in Condition 7;

- b. a review and assessment of performance of sewage works, including all treatment units and disposal beds;
- c. A summary of the ground-water monitoring program and evaluation of the monitored data including the 3 year's assessment and proposed further monitoring plans if necessary to the District Manager.
- d. a description of any operating problems encountered and corrective actions taken at all sewage Works located at the property;
- e. a record of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property' including but not limited to: records of maintenance inspections for the treatment system, records of effluent filters cleaning, records of tank pump-outs, records of sludge pump-outs accumulated from the treatment system, records of visual inspections of all disposal systems;
- f. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- g. a summary and interpretation of all daily flow data and results achieved in not exceeding the maximum daily sewage flow discharged into each one of the subsurface disposal system;
- h. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- i. a summary of all spill or abnormal discharge events;
- j. any other information the District Manager requires from time to time.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and

continue to operate the Works in compliance with it.

4. Condition 4 is included to ensure that the works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.
6. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
7. Condition 7 is imposed to ensure that the effluent discharged from the Works to the shallow ground-water meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality.
8. Condition 8 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such information is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the work.
9. Condition 9 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

Schedule A

1. Application for Environmental Compliance Approval submitted by Bob Phillips, P.Eng. of J.H. Cohoon Engineering Ltd. dated April 8, 2021 for the proposed Sewage Treatment System to service Scotlynn Transport - Bunkhouse Residence, including design report, final plans, specifications and all supporting documentation.

Schedule B

Influent Monitoring Table 1

Sampling Location	Upstream of the Treatment System - Tank 1
Frequency	Quarterly
Sample Type	Grab
Parameters	BOD ₅ , Total Suspended Solids (TSS) and Total Kjeldahl Nitrogen (TKN)

Final Effluent Monitoring Table 2

(Sample Point- Tank No.7 discharge line to pump tank)

Effluent Parameter	Frequency	Sample Type
CBOD ₅	Once a month during operating season	Grab
Total Suspended Solids	Once a month during operating season	Grab
Total Ammonia Nitrogen (TAN)	Once a month during operating season	Grab
E.Coli	Once a month during operating season	Grab
Flow Rate	Continuous	Meter installed on the pump forcemain located in the control shed.

Ground-water Monitoring Table 3

(Sample Point- new Wells GW1 and GW2 and existing Wells EXGW 1, 2 and 3)

Effluent Parameter	Frequency	Sample Type
Total Kjeldahl Nitrogen (TKN)	Quarterly	Grab
Total Inorganic nitrogen (TIN)	Quarterly	Grab
pH	Quarterly	probe

Final Effluent Compliance Limits Table 4

Effluent Parameter	Annual Average Effluent Concentration* ¹ Limits (milligrams per litre unless otherwise indicated)	
	Summer (May 01 to October 31)	Winter, if operated during these months: (November 01 to April 30)
<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
CBOD5	10.0	15.0
Total Suspended Solids (TSS)	10.0	15.0
Total Ammonia Nitrogen (TAN)* ²	3	4
Total Inorganic Nitrogen (TIN)* ²	3.0	3
<i>E. coli.</i>	100 CFU/100 millilitres* ³	100 CFU/100 millilitres* ³

Note*¹: The limit of *E.coli.* is for monthly Geometric Mean Density.

Note*²: During commissioning stage, **six (6) months** after the date of start-up, an interim compliance limit applies for the Total Inorganic Nitrogen (TIN) and TAN as: 4.0 mg/l during Summer (May 01 to October 31), or 6.0 mg/L during Winter (November 01 to April 3).

Note*³: If the MPN method is utilized for *E. coli* analysis, the limit shall be 100 MPN/100 millilitres.

Schedule C

Sludge/Biosolids Monitoring – holding tank/truck loading bay

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate as Nitrogen	Grab	Annually
Metal Scan for: Arsenic,Cadmium, Cobalt,Chromium, Copper,Lead, Mercury, Molybdenum,Nickel, Potassium, Selenium and Zinc.	Grab	Annually

Schedule D

Methodology for Calculating and Reporting Monthly Geometric Mean Density

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

$$\sqrt[n]{x_1 x_2 x_3 \cdots x_n} ; \text{ in which,}$$

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

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

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

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

The Geometric Mean Density for these data: $\sqrt[4]{10 \times 100 \times 300 \times 50} = 62$

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

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

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

The Notice should also include:

1. The name of the appellant;

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

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

This Notice must be served upon:

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

AND

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

AND

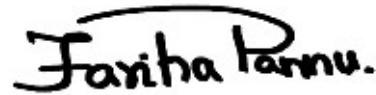
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

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

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

DATED AT TORONTO this 10th day of August, 2021



Fariha Pannu, P.Eng.

Director

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

MN/

c: District Manager, MECP Hamilton - District
Bob Phillips, P.Eng., J.H. Cohoon Engineering Ltd.