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Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

### **ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 8785-B8JL58

Issue Date: February 22, 2019

1074261 Ontario Limited 7300 Yonge Street, No. 201 Markham, Ontario L4J 5M9

Site Location: Tim Hortons and Esso gas bar
2329 Highway 11 South
Town of Gravenhurst, District Municipality of Muskoka

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:

subsurface disposal works for the collection, transmission, treatment and disposal of domestic sewage with a maximum design daily capacity of 16,000 litres per day (L/d) and balancing capacity of 25,000 L/d, consisting of the following:

one (1) existing 4,500 litre septic tank and one (1) existing 1.5 metres (m) diameter pump chamber serving Esso gas bar office and washroom, discharging effluent to the existing pump chamber.

one (1) existing Class 4 sewage system serving the Tim Horton's Restaurant, with use permit number GMO-19-91 issued on Aug. 2, 1991 by Ministry of Environment) consisting of :

one (1) existing 45,000 litre equalization balancing tank complete with two (2) approximately 200 L/min submersible sewage pumps receiving sewage from Tim Horton's building and complete with timed-dose duplex pump controller complete with high water level alarm, discharging sewage to the existing septic tank described below.

one (1) existing 18,000 litre septic tank complete with high water level alarm receiving sewage from above mentioned balancing tank and discharging effluent to the existing pump chamber. The septic tank shall complete with an OBC approved effluent filter.

one (1) existing 2,700 litre pump chamber complete with two (2) approximately 160 L/min submersible sewage pumps receiving sewage from Tim Horton's building and Esso Gas Bar office and discharging to the new septic tank described below.

one (1) new precast concrete two-compartment septic tank with a total capacity of 18,000 litres (L) receiving sewage from existing pump chamber described above and discharging to following MBBR .

one (1) or more new Moving Bed Bio-Reactors (MBBR) with total capacity of 19,000 L receiving gravity flow from the new septic tank and discharging effluent to the following clarifiers.

one (1) or more new clarifiers with total effective surface area of 7.4 square metres (m<sup>2</sup>) discharging effluent to the following eq./dosing pump chamber.

one (1) new eq/dosing pump chamber with total capacity of 18,000 L, equipped with three (3) approximately 100 L/min submersible sewage pumps at 4 m Total Dynamic Head (TDH) discharging effluent to the leaching beds.

two (2) existing leaching bed cells (North Cell and South Cell) each consisting of 15 runs of 15 m long distribution pipe with the total length of 225 metres each.

one (1) optional (if required) above ground leaching bed (East Cell), with a contact area of 830 m<sup>2</sup>, equipped with fifteen (15) rows of 75 millimetre diameter perforated distribution pipes with a total length of 225 m, constructed in imported sandy soil with a percolation rate of 5 minutes per centimetre and with a minimum depth of 900 millimetres, covered by a mantle with minimum thickness of 300 millimetres extending 15 metres beyond the outer distribution pipes.

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 Supporting Documentation submitted to the Ministry as listed in the **Schedule A** in this Approval.

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

- 1. "Approval" means this entire Approval document and any Schedules to it, including the application and Supporting Documentation;
- 2. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 3. "Director" means a person appointed by the Minister pursuant to Section 5 of the EPA for the purposes of Part II.I of the EPA;

- 4. "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;
- 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, as amended:
- 7. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
- 8. "Licensed Installer" means a person who is registered under the OBC to construct, install, repair, service, clean or empty on-site sewage systems;
- 9. "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;
- 10. "OBC" means the Ontario Building Code;
- 11. "Owner" means 1074261 Ontario Limited and its successors and assignees;
- 12. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
- 13. "Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;
- 14. "Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval.
- 15. "Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed Works and Existing Works previously constructed.

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 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 in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
- 4. Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- 5. The Conditions of this Approval are severable. If any Condition of this Approval,or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

## 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

- 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 Owner;
  - b. change of address of the Owner;
  - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager;
  - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Informations Act*, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager;
- 2. In the event of any change in ownership of the Works, other than a change to a

successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

3. The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

#### 4. CONSTRUCTION

- 1. The Owner shall ensure that the construction of the Proposed Works is supervised by a licensed installer or a Professional Engineer, as defined in the *Professional Engineers Act*.
- 2. The Owner shall ensure that the MBBR Treatment system is installed in accordance with the Manufacturer's Installation Manual.
- 3. 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 Professional Engineer or Licensed Installer for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.
- 4. Upon construction of the Proposed Works, the Owner shall prepare a statement, certified by a licensed installer or a Professional Engineer, that the Proposed Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.
- 5. Upon construction of the Proposed Works, the Owner shall prepare a set of asbuilt 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.
- 6. The Owner shall properly abandon any portion of unused existing sewage Works, as directed below, and upon completion of decommissioning report in writing to the District Manager.
  - a. any sewage pipes leading from building structures to unused sewage Works components shall be disconnected and capped;

### 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 Effluent Monitoring Table included in **Schedule B**.
- 3. The Owner shall establish a groundwater monitoring well approximately 10 meters down-gradient, on the south and west of the existing subsurface disposal system and collect samples at the frequency specified, by means of the specified sample type and analyzed for each parameter listed n the Groundwater Monitoring Table included in **Schedule B**.
- 4. Prior to the startup of the Works, background groundwater quality must be established by collecting groundwater samples and having them analyzed for the parameters listed in the Groundwater Monitoring Table included in **Schedule B**.
- 5. The monitoring outlined pursuant to subsection (4) shall be undertaken for a period of at least three (3) years following the start up of the Works.
- 6. The Owner shall employ measurement devices to accurately measure quantity of effluent being discharged to each individual 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 methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
  - 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.
- 8. 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. EFFLUENT OBJECTIVES

- 1. The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named as effluent parameters in the Effluent Objectives Table listed in **Schedule B** are not exceeded in the effluent being discharged to the subsurface disposal system.
- 2. For the purposes of subsection (1):
  - a. The concentrations of CBOD5 and TSS named in Column 1 of Effluent Objectives Table listed in Schedule B, as measured at each monitoring event, should be compared to the corresponding concentration set out in Column 2 of Effluent Objectives Table listed in **Schedule B**.

#### 7. EFFLUENT LIMITS

- 1. The Owner shall design, construct, operate and maintain the Works such that the concentrations of the materials named as effluent parameters in the Effluent Limits Table in **Schedule B** are not exceeded in the effluent from the Works:
- 2. For the purposes of determining compliance with and enforcing subsection (1):
  - a. The monthly average concentration of CBOD<sub>5</sub> & TSS named in Column 1 of Effluent Limits Table listed in **Schedule B** shall not exceed the corresponding maximum concentration set out in Column 2 of Effluent Limits Table listed in **Schedule B**.

## **8. OPERATIONS AND MAINTENANCE**

- 1. 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 District Manager; and
- f. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
- 2. The Owner shall maintain the operations manual current and retain a copy at the location of the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- 3. 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.
- 4. The Owner shall ensure that all septic 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.
- 5. The Owner shall ensure that grass-cutting is maintained regularly over all the subsurface disposal beds, and the surface of the bed(s) are visually observed on a monthly basis. In the event a break-out is observed from a subsurface disposal bed, the Owner shall ensure that the sewage discharge to the bed is discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within one (1) week. The Owner shall ensure that during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to a surface water body or to the environment, and shall be safely collected and disposed off through a licensed waste hauler to an approved waste disposal site.
- 6. The Owner shall ensure that adequate steps are taken to ensure that the area of the Works are protected from all forms of vehicle traffic.
- 7. The Owner shall employ for the overall operation of the Works a person who possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.

#### 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. In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance

into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and 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 description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6;
  - b. a summary and interpretation of all monitoring data and a comparison to the Effluent Limits (Condition 7) including an overview of the success and adequacy of the Works, and a Contingency Plan in the event of not in compliance with the Effluent Limits.
  - c. a review and assessment of performance of sewage works, including all treatment units and disposal beds;
  - 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 septic tank effluent filters cleaning, records of septic tank pumpouts, 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;

## Schedule A

 Application for Environmental Compliance Approval submitted by Robin Smith of Robin Smith Engineering received on December 10, 2018 for the proposed Private Sewage Works, including Environmental Study Report, design report, final plans and specifications.

## Schedule B

# **Effluent Monitoring Table**

Sampling Location	on discharge from the Equalization/Dosing Chamber
Frequency	Once a month during the months of March, May, July, August, October and December
Sample Type	Grab
Parameters	CBOD5
	Total Suspended Solids (TSS)
	Total Phosphorus
	Total Ammonia Nitrogen
	Nitrite
	Nitrate

# **Groundwater Monitoring Table**

Sampling	at downgradient monitoring wells	
Location		
Frequency	Once a month during the months of May, July, August and October	
Sample Type	Grab	
Parameters	Nitrate - Nitrogen	
	Nitrite - Nitrogen	
	Total Phosphorus	

# **Effluent Objectives Table**

Effluent Parameter	Concentration Objective
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(tested at Equalization/Dosing Chamber)	(milligrams per litre unless otherwise indicated)
Column 1	Column 2
CBOD <sub>5</sub>	10
Total Suspended Solids	10

## **Effluent Limits Table**

Effluent Parameter (tested at Equalization/Dosing Chamber)	Concentration Limit (milligrams per litre unless otherwise indicated)
Column 1	Column 2
CBOD <sub>5</sub>	20
Total Suspended Solids (TSS)	20

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 groundwater meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
- 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.

10.

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, S.O. 1993, c. 28 (Environmental Bill of Rights), the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner 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

The Environmental
Commissioner

AND 1075 Bay Street, Suite 605
Toronto, Ontario
M5S 2B1

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation AND 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 <a href="https://www.ert.gov.on.ca">www.ert.gov.on.ca</a>

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 www.ebr.gov.on.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 22nd day of February, 2019

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

MA/

c: District Manager, MECP Barrie District Office Robin Smith, Robin Smith Engineering