

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 4924-C93TT3  
Issue Date: January 21, 2022

Environmental 360 Solutions Ltd.  
2800 14th Ave, No. 305  
Markham, Ontario  
L3R 0E4

Site Location: E360 Waste Processing Site  
571 Welham Rd and 575 Welham Rd  
Barrie City, County of Simcoe  
L4N 8Z6

*You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

establishment, use and operation of stormwater management Works for the collection, treatment and disposal of stormwater run-off from the non-hazardous waste processing facility with a total catchment area of 1.96 ha to provide Enhanced Level water quality control and erosion control, and to attenuate post-development peak flows to pre-development peak flows for all storm events up to and including the 100-year storm event, discharging to the municipal storm sewer on Welham Road and the Welham Road roadside ditch, consisting of the following:

- a storm sewer system comprised of manholes, catchbasins and sewers ranging in diameter from 300 mm to 525 mm throughout the site, discharging to the underground stormwater storage tanks described below;
- roof storage (catchment area 0.49 ha with 100% imperviousness), located on top of the waste processing building, having a minimum available storage volume of 163.4 cubic metres and a maximum ponding depth of 100 millimetres, discharging via seven (7) Zurn Z10-5 Control-Flo roof drains with 4 notches each, discharging a maximum of 41.6 litres per second under the 100-year storm event to the infiltration gallery described below via a 375 mm storm sewer;
- One (1) 42 m x 7 m x 0.96 m deep infiltration gallery, located at the south side of the site, comprised of 50 mm clear stone wrapped in geotextile with a 450 mm perforated underflow pipe, providing a minimum total storage volume of 113 m<sup>3</sup>, discharging overflow into MH106 via a 450 mm overflow pipe;
- one (1) 113 m x 2.0 m x 1.5 m deep bioswale, located at the south side of the site, with a 2.0 m wide bottom, a 0.20 m deep layer of topsoil, a 1.0 m deep layer of filter media, a 0.3 m deep layer of granular

stone with a 150 mm perforated underflow pipe and an impervious liner to prevent infiltration, collecting runoff from the paved aisles to the south and east of the waste processing building (catchment area of approximately 0.245 ha with an imperviousness of 100%), and discharging into CB2, CB3, CB7 and CB8 via four (4) 200 mm overflow pipes;

- one (1) 43.5 m x 5.4 m permeable paver area (Permacon "Boulevard Drain" or Equivalent Equipment), located at the east side of the waste processing building, with a 0.35 m deep layer of 18-20 mm gravel, a 0.45 m deep layer of 50 mm clear stone with a 150 mm underflow perforated underflow pipe, and an impervious liner to prevent infiltration, collecting runoff from the eastern parking lot (catchment area of approximately 0.12 ha with an imperviousness of 100%) and discharging into CB4 and CB5 via the 150 mm underflow pipe;
- two (2) underground stormwater storage tanks in series, located at the west and southwest sides of the site, the first tank having a volume of 573 m<sup>3</sup> and the second tank having a volume of 190 m<sup>3</sup>, both with a bottom invert elevation of approximately 268.53 m and a depth of 1.09 m, complete with an impermeable geomembrane liner, an interstitial leak detection sensor (between the concrete tanks and impermeable liner) with an audible/visual alarm system, and an outlet control structure consisting of a gate valve in a normally-open position and a 130 mm orifice at an invert elevation of 268.41 m, discharging a maximum of 57.4 L/s under the 100-year storm event to the stormwater filter described below;
- one (1) 1,012 m<sup>3</sup> underground fire water storage tank, located at the northeast corner of the site, with a bottom invert elevation of approximately 267.30 m and a depth of 3.45 m, complete with an impermeable geomembrane liner, an interstitial leak detection sensor (between the concrete tank and impermeable liner) with an audible/visual alarm system, and a gate valve at the inlet in a normally-closed position, receiving and containing fire water during emergency fire situations only;
- one (1) stormwater filter (Contech StormFilter Model SFPD0818 or Equivalent Equipment) (catchment area 1.73 hectares with 85% imperviousness), located at the west side of the site, equipped with thirty-four 0.69 m high Phosphosorb cartridges, having a sediment capacity of 932 litres and a treatment storm flow rate capacity of 24 litre per second, discharging to the manhole on Welham Road via a 300 mm storm sewer;

including erosion/sediment control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

all in accordance with the submitted supporting documents listed in Schedule "A" forming part of this Approval.

*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. "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;

3. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19;
5. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment
6. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the PEA;
7. "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;
8. "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;
9. "Owner" means Environmental 360 Solutions Ltd., and includes its successors and assignees;
10. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
11. "PEA" means *Professional Engineers Act*, R.S.O. 1990, c. P.28;
12. "Works" means the sewage works described in the Owner's application, and this Approval.

*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.

4. The Approval is based on an average imperviousness of 81% for approximately a 1.96 ha drainage area. Any future development changes within the total drainage area that might increase the required storage volumes or increase the flows to or from the the stormwater management facility will require an amendment to this Approval.
5. The issuance of, and compliance with the Conditions of this Approval does not:
  - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage Works; or
  - b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

## **2. EXPIRY OF APPROVAL**

1. This Approval will cease to apply if the approved Works as described in this Approval 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. 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.
2. Within six (6) months of the construction of the Works, a set of as-built drawings showing the Works "as constructed" shall be prepared. These drawings shall be kept up to date through revision undertaken from time to time and a copy shall be retained for the operational life of the Works.

#### **5. MONITORING AND RECORDING**

1. The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:
  - a. 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.
  - b. Samples shall be collected and analyzed at the sampling point(s), sampling frequencies and sample type specified for each parameter listed in the effluent monitoring table in Schedule B.
  - c. The methods and protocols for sampling, analysis and recording shall conform to the methods and protocols specified in the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02 and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager.
2. The measurement frequencies specified in the effluent monitoring table in Schedule B in respect of any parameter are minimum requirements which may, after 24 months of monitoring in accordance with this condition, be modified by the Director in writing from time to time.
3. 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 LIMITS**

1. The Owner shall design, construct and operate the Works such that the concentrations of the materials listed as effluent parameters in the effluent limits table in Schedule C are not exceeded in the effluent

from the Works.

## **7. OPERATION AND MAINTENANCE**

1. The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety, health or flooding hazard to the general public.
2. The Owner shall prepare an operations manual prior to the commencement of operation of the Works, that includes, but is not necessarily limited to, the following information:
  - a. operating procedures for the Works;
  - 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. an emergency response plan for the Works to handle emergency situations such as a structural, mechanical failure, fires, or an unforeseen flow condition.
  - f. a spill prevention and contingency plan, consisting of procedures and contingency plans, including notification to the District Manager and the City of Barrie, 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; and
  - g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.
3. The Owner shall maintain the operations manual up-to-date and retain a copy at the location of the Works for as long as they are in operation. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.
4. The Owner shall ensure that the discharge from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.
5. The Owner shall undertake an inspection of the condition of the Works, at least twice a year, and undertake any necessary cleaning and maintenance to ensure that sediment, oil, debris and excessive

decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.

6. During emergency fire situations, the Owner shall ensure that:
  - a. the gate valve on the outlet of the underground stormwater storage tanks is closed; and
  - b. the gate valve on the inlet of the underground fire water storage tank is opened.
7. The Owner shall ensure that stormwater does not contact waste at any time, except during the unloading of tire waste from the waste management trucks to inside of the building.
8. The Owner shall ensure the immediate inspection of the Works after a spill or emergency fire, and, if necessary, clean and maintain the Works (including hauling and off-site disposal of any fire water collected within the Works) to prevent the discharge of contaminants and the excessive buildup of oil.
9. The Owner shall ensure that the Works are operated exclusively for the collection, transmission, treatment and disposal of stormwater runoff. Under no circumstance shall any process wastewater (including, but not limited to, the wastewater from the waste management activities) from the site be discharged into the Works.
10. The Owner shall maintain a record of the results of the inspections, cleaning and maintenance operations undertaken, and shall keep the record at the location of the Works for inspection by the Ministry. The record shall include the following:
  - a. the name of the Works;
  - b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and
  - c. the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.
11. 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.

## **8. TEMPORARY EROSION AND SEDIMENT CONTROL**

1. The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every two (2) weeks and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue

until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.

2. The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and erosion control measures.

## **9. REPORTING**

1. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
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 prepare performance reports on a calendar year basis and submit to the District Manager by June 30 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
  - a. a summary and interpretation of all monitoring data, including an overview of the success and adequacy of the Works;
  - b. a description of any monitoring results which indicate that contaminants may be entering the Works, including the potential sources of the contaminants and any corrective actions taken or proposed to be taken;
  - c. a description of any operating problems encountered and corrective actions taken;
  - d. a summary of all inspection, maintenance and clean-out carried out on the Works;
  - e. a summary of all spill or abnormal discharge events; and
  - f. any other information the District Manager requires.



## **Schedule A**

1. Environmental Compliance Approval Application for a Municipal and Private Sewage Works submitted and signed by Donato Ardellini, Director of Environmental 360 Solutions Ltd., dated January 12, 2021 and received on January 22, 2021, and all supporting documentation and information.
2. Email from James Michener, Dillon Consulting Limited, dated July 22, 2021 to Nick Zambito, Ministry, regarding stormwater contact with waste, including all supporting documentation and information.
3. Letters from Betsy Varghese, Dillon Consulting Limited, dated October 15, 2021 and December 10, 2021 to Nick Zambito, Ministry, regarding a response to Ministry comments on Environmental 360 Solutions ECA Application, including all supporting documentation and information.
4. Email from Betsy Varghese, Dillon Consulting Limited, dated January 11, 2022 to Nick Zambito, Ministry, regarding storm sewer sizing, including all supporting documentation and information.
5. Email from Betsy Varghese, Dillon Consulting Limited, dated January 19, 2022 to Nick Zambito, Ministry, regarding the change in site address.

## Schedule B

### Effluent Monitoring Table

<b>Table 1 - Sampling and Monitoring for the Works</b>	
<b>Locations</b>	Outlet of the stormwater filter
<b>Frequency</b>	Quarterly
<b>Sample Type</b>	Grab
<b>Parameters</b>	Total Suspended Solids, Heavy Metals (aluminum, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, molybdenum, nickel, silver, thallium, vanadium and zinc), Total Petroleum Hydrocarbons (diesel, gasoline, heavy oils, and oil and grease), Volatile Organic Compounds (benzene, ethylbenzene, toluene, and xylenes), pH and Temperature

## Schedule C

### Effluent Limits

Table 2 - Stormwater Management Facility Effluent Limits	
Effluent Parameter	Limit
Total Suspended Solids	25.0 mg/L

*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.
2. Conditions 2 and 4 are 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 approved Works and to ensure that any subsequent Owner of the Works is made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 5 is included to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body.
5. Condition 6 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 do not cause any impairment to the receiving watercourse.
6. Condition 7 is included to require that the Works be properly operated and maintained such that the environment is protected and to ensure that appropriate steps are taken to address the immediate concerns or otherwise abnormal situation and minimizing environmental damage.
7. Condition 8 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.

8. 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.

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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

and

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

and

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

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

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

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

DATED AT TORONTO this 21st day of January, 2022

A handwritten signature in black ink that reads "Fariha Pannu." The signature is written in a cursive style with a horizontal line above the name.

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Fariha Pannu, P.Eng.

Director

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

NZ/

c: District Manager, MECP Barrie  
Shajetha Sabanathan, Trinity Consultants Ontario Inc.