

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 2233-C73GVX
Issue Date: October 5, 2021

Balune Launch Inc.
91 Trillium Dr
Kitchener, ON N2E 1W8

Site Location: Angstrom Engineering Headquarters
160 Boychuk Dr
City of Cambridge, ON.

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 of stormwater management Works to service a proposed industrial building with office space located at 160 Boychuk Drive in the City of Cambridge, for the collection, transmission, treatment and disposal of stormwater runoff from a total catchment area of 2.02 hectares, to provide Enhanced Level water quality protection and erosion control, to attenuate post-development peak flows to pre-development peak flows for all storm events up to and including the regional storm event, discharging towards Freeport Creek, consisting of the following:

- **rooftop storage (catchment area 0.71 hectares)**, provided on top of the proposed buildings, having a minimum available combined storage volume of approximately 392 cubic metres and a corresponding required ponding depth of approximately 14 centimetres, discharging via twelve (12) single notch flow control roof drains (Zurn Model Z105 or approved Equivalent) per building, which control flow to 22.5 litres per minute per 25 mm of head per drain, allowing a maximum combined discharge of approximately 51 litres per second during the regional storm event, discharging to the proposed infiltration gallery identified below via private on-site storm sewers;
- **infiltration gallery (catchment area 0.71 hectares)**, one (1) infiltration gallery located east of the proposed building below the parking lot, with a footprint of approximately 25 metres by 19.5 metres providing a storage volume of approximately 136 cubic metres via 0.7 m of 19 mm diameter clear stone wrapped in non-woven filter cloth, receiving roof runoff from the two proposed building to be distributed via 250 mm diameter storm sewers discharging to a manifold structure comprised of approximately fourteen (14) rows of 150 mm diameter perforated pipes spaced 1.25 m to 1.5 m apart, complete with two (2) inspection ports, discharging to the proposed stormwater management pond identified below via on-site private storm sewer system;

- **oil and grit separator "OGS 15" (catchment area 0.90 hectares):** one (1) oil and grit separator, Imbrium Model Stormceptor EF08 (or Equivalent Equipment), located at the north-west corner of the northern parking lot, having a sediment storage capacity of 8,780 Litres, an oil storage capacity of 1,070 litres, a total storage volume of approximately 12,900 litres, a maximum treatment flow rate of 31.7 litres per second, receiving parking lot runoff as well as excess runoff from the infiltration gallery, discharging to the proposed dry pond identified below;
- **interim stormwater management facility (catchment area 0.35 hectares):** one (1) temporary dry pond, located at the north-west property boundary south of the dry pond described below, receiving overland flow from the future site of a building addition to be replaced with roof drain controls during the ultimate scenario described above, having an active storage volume of approximately 35 cubic meters during the 100-year storm event, discharging via one (1) 200 mm diameter outlet pipe controlled by one (1) 100 mm diameter orifice plate as well as via one (1) 2 m wide weir towards the dry pond described below;
- **stormwater management facility (catchment area 1.88 hectares):** one (1) dry pond, located at the north-west property boundary, receiving minor runoff via one (1) 375 mm diameter storm sewer inlet with headwall (as well as via one (1) 200 mm diameter storm sewer during interim conditions) as well as major runoff via one (1) overland flow inlet from the parking lot and via one (1) overland flow inlet receiving flow from a conveyance swale west of the future building addition during the ultimate scenario, providing approximately 50 m³ of dead storage, having an active storage volume of approximately 407 cubic meters during the regional storm event, discharging via one (1) 300 mm diameter outlet pipe controlled by one (1) 90 mm diameter orifice plate as well as via one (1) 5 m wide weir towards Freeport Creek;

including erosion/sedimentation 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 application and 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, as amended;

5. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
6. "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;
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. "Owner" means Balune Launch Inc. and its successors and assignees;
9. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
10. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
11. "Temporary Works" means the temporary Works, described in this Approval and that are to be used for short-term purposes only in accordance with this Approval, until otherwise approval for an extension of this period has been granted;
12. "Works" means the approved sewage works, and 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 CONDITION

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 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 to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.
2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than **five (5) years**, the Owner shall submit an application for extension at least twelve (12) months prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.
3. This Approval to the **Temporary Works** shall expire and become null and void within **five (5) years** of the date of this Approval.
4. The Owner shall decommission the **Temporary Works** on or before the expiry date mentioned in subsection 2.

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 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.B17* shall be included in the notification to the District Manager; or
 - 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. C39* shall be included in the notification to the District Manager.

2. 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.
3. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

4. CONSTRUCTION OF THE WORKS

1. Upon the 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 personnel.
2. Within one year of the construction of the *Sewage works*, a set of as-built drawings showing the works “as constructed” shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. 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 undertake an inspection of the condition of the Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, 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.
3. The Owner shall construct, operate and maintain the Works with the objective that the effluent 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, foam or discoloration on the receiving waters.
4. The Owner shall ensure the immediate clean-out of the Works after a fuel or oil spill capture.

5. The Owner shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:
 - a. loss of fuel or oil to the Works; or
 - b. a spill within the meaning of Part X of the EPA.
6. 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 and maintenance procedures for routine operation of 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. contingency plans and procedures for dealing with potential abnormal situations and for notifying the District Manager; and
 - e. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
7. 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.
8. The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the Works for inspection by the Ministry. The logbook 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 method of clean-out of the Works; and
 - c. the date of each spill within the catchment area, including follow-up actions and remedial measures undertaken.

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 operation and maintenance activities required by this Approval.

6. 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 millimetres 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.

7. EFFLUENT OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Works in accordance with the following objectives:
 - a. Effluent 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 or sheen or foam or discolouration on the receiving waters.
2. In the event of an exceedance of the objective set out in subsection 1, the Owner shall:
 - a. notify the District Manager as soon as possible during normal working hours;
 - b. take immediate action to identify the source of contamination; and
 - c. take immediate action to prevent further exceedance.

8. REPORTING

1. One (1) 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, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

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 prepare performance reports on a calendar year basis and submit to the District Manager when requested by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a. a description of any operating problems encountered and corrective actions taken;
 - b. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works, including an estimate of the quantity of any materials removed from the Works;
 - c. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
 - d. a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 7.
 - g. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
 - h. a summary of all spill or abnormal discharge events; and
 - i. any other information the District Manager requires from time to time.

9. SPILL CONTINGENCY PLAN

1. Within six (6) months from the issuance of this Approval, the Owner shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. The Owner shall, upon request, make this plan available to Ministry staff. This plan shall include as a minimum:
 - a. the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;

- b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;
 - c. a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);
 - d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;
 - e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and Ministry Spills Action Centre 1-800-268-6060;
 - f. Safety Data Sheets (SDS) for each hazardous material which may be transported or stored within the area serviced by the Works;
 - g. the means (internal corporate procedures) by which the spill contingency plan is activated;
 - h. a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;
 - i. an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and
 - j. the date on which the contingency plan was prepared and subsequently, amended.
2. The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.
 3. The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

Schedule A

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted and signed by Andrew Campbell, Vice President of Balune Launch Inc., dated May 18, 2021 and received on June 11, 2021, and all supporting documentation and information.
2. Stormwater Management Report "Angstrom Engineering New Headquarters", dated May 4, 2021, including calculations and engineering drawings, prepared by MTE Consultants.

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

1. Condition 1 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. 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. Condition 1.4 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
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 in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
5. Condition 5 is included as regular inspection and necessary removal of sediment and excessive decaying vegetation from the Works are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the Works. The Condition also ensures that adequate storage is maintained in the Works at all times as required by the design. Furthermore, this Condition is included to ensure that the Works are operated and maintained to function as designed.
6. Condition 6 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.

7. Condition 7 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to meet on an ongoing basis. Also imposed are procedures to be followed to minimize environmental impact in the event the objectives are exceeded.
8. Condition 8 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.
9. Condition 9 is included to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

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 5th day of October, 2021



Fariha Pannu, P.Eng.

Director

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

MS/

c: District Manager, MECP Guelph
Lynn Ingram, P.Eng., MTE Consultants Inc.