

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0290-BCTP3X
Issue Date: October 27, 2020

Beamish Construction Inc.
2125 Great Northern Road
Sault Ste. Marie, Ontario
P6A 5K7

Site Location: Brandes Aggregates's Sault Ste. Marie Pit / Quarry
2125 Great Northern Road
City of Sault Ste. Marie
District of Algoma
P6A 5K7

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:

sewage works for the collection, transmission, treatment and disposal of stormwater and groundwater collecting within the confines of the Quarry & for the collection, transmission, treatment and recycle of water from aggregates washing operation at the above mentioned Site Location, consisting of the following:

Proposed Works - upgrade to the existing stormwater and groundwater management works (a two-stage settling pond) as follows:

Stormwater and Groundwater Management

- one (1) **forebay** (first cell) of a two-stage settling pond, with a surface area of approximately 701 square metres, a permanent pool depth of approximately 1.05 metres and a volume of approximately 736 cubic metres, flowing by gravity through a concrete pipe connection to the second cell settling pond.
- one (1) **settling pond** (second cell), with a surface area of approximately 1,019 square metres, a permanent pool depth of approximately 1.05 metres and a volume of approximately 1,070 cubic metres with a hickenbottom outlet structure with an invert set 1.05 metres above the pond bottom and a 100 mm diameter lower orifice to control 25 millimetre storm flows. A ditch inlet catch basin set 1.60 metres above the pond bottom will control the flows from larger storm

events.

- one (1) **overflow weir** , with an invert 1.80 metres above the pond bottom to convey major storm flows through the pond from which the final effluent discharges to the West Root River via the existing ditch.

Existing Works - existing sewage works as follows:

Stormwater and Groundwater Management

- one (1) forebay (first cell) of a two-stage settling pond, with a surface area of approximately 1,500 square metres, a depth of approximately 0.3 metres and a volume of approximately 450 cubic metres, flowing by gravity through a ditch to the second cell settling pond (**note: to be modified as detailed above**).
- one (1) settling pond (second cell), with a surface area of approximately 2,500 square metres, a depth of approximately 0.3 metres and a volume of approximately 750 cubic metres (**note: to be modified as detailed above**).
- one (1) **reserve stormwater pond** , with a surface area of approximately 4,800 square meters and a depth of approximately 0.3 metre and a volume of approximately 1,440 cubic meters accepting occasional overflow from the settling pond via a temporary connecting ditch.
- one (1) depression area accumulating surface water run-off (known as the “Trapped Runoff Water Area”) of approximately 47,000 square meters, an average depth of about 3.7 metres and a volume of approximately 162,000 cubic meters with no outlet.
- one (1) overflow ditch from the pond from which the final effluent discharges to the West Root River.

Aggregates Washing Operation Wastewater Management

- The source of aggregate wash water is one (1) Wash Pond, with a surface area of about 2,900 square metres, a depth of approximately 4.6 metre and a volume of approximately 13,395 cubic metres, equipped with a pump operating at up to 19 litres per second (1,136 litres per minute) within a closed loop system with wash water recirculated from the aggregate wash process. The Wash Pond is fed through snowmelt and precipitation. No other water is added to the pond.

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 the submitted supporting documents in Schedule A.

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

"Application" means the application for an environmental compliance approval submitted to the Ministry for approval by or on behalf of the Owner and dated July 31, 2018.

"Approval" means this environmental compliance approval, any schedules attached to it, and the Application;

"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;

"District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;

"EPA" means the *Environmental Protection Act, R.S.O. 1990, c.E.19* , as amended;

"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;

"Owner" means Beamish Construction Inc., and includes its successors and assignees;

"OWRA" means the *Ontario Water Resources Act, R.S.O. 1990, c. O.40* , as amended; and

"Works" means the sewage works described in the 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) Except as otherwise provided by these terms and conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with this Approval.
- (3) Where there is a conflict between a provision of this environmental compliance approval and any document submitted by the Owner, the conditions in this environmental compliance approval shall take precedence. Where there is a conflict between one or

more of the documents submitted by the Owner, the Application shall take precedence unless it is clear that the purpose of the document was to amend the Application

- (4) Where there is a conflict between the documents listed in the Schedule A, 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 terms and conditions of this Approval are severable. If any term and condition of this environmental compliance approval, or the application of any requirement of this environmental compliance 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.
- (6) 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. **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. B.17* ; and
 - (d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the “Initial Return” or “Notice of Change” filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* , 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.

- (3) The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this environmental compliance approval.

3. OPERATION MANUAL

- (1) The Owner shall prepare an operations manual that includes, but is not limited to, the following information:
 - (a) operating procedures for routine operation of the Works;
 - (b) inspection programs, including frequency of inspection, for the Works and the methods or tests to be 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 a potential spill, bypasses or any other abnormal situations, including notifying the District Manager of the situation; and
 - (e) procedures for receiving and responding to public complaints.
- (2) The Owner shall review and update the operations manual from time to time and shall retain a copy of the updated manual on-site at the Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

4. OPERATION AND MAINTENANCE

- (1) The Owner shall ensure that the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.
- (2) The Owner shall carry out on an as-needed basis, specific maintenance requirements like removing build-up, associated with the Works.
- (4) The Owner shall, upon identification of a loss of oil and fuel, take immediate action to prevent the further occurrence of such loss and prevent the spill from entering into the Works.
- (5) In furtherance of, but without limiting the generality of, the obligation imposed by subsection (1), the Owner shall ensure that equipment and material for the containment, clean-up and disposal of oil and fuel and materials contaminated with oil or fuel are kept

on hand and in good repair for immediate use in the event of:

- (a) loss of oil or fuel during refuelling or equipment maintenance;
- (b) a spill within the meaning of Part X of the EPA; and/or
- (c) the identification of an abnormal amount of oil or fuel in the Works.

5. EFFLUENT LIMITS

- (1) The Owner shall operate and maintain the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the **settling pond**.

Table 1 - Effluent Limits	
Effluent Parameter	Concentration Limit (milligrams per litre unless otherwise indicated)
Column 1	Column 2
Oil and Grease	15
Total Suspended Solids	25
pH of the effluent maintained between 6.0 and 9.5, inclusive, at all times	

- (2) For the purposes of determining compliance with and enforcing subsection (1):
 - (a) non-compliance with respect to a Concentration Limit is deemed to have occurred when any single grab sample analyzed for a parameter named in column 1 of subsection (1) is greater than the corresponding maximum concentration set out in column 2 of subsection (1), and
 - (b) non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range.

6. EFFLUENT - VISUAL OBSERVATIONS

- (1) Notwithstanding any other condition in this Approval, the Owner shall ensure 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 or foam on the receiving waters.
- (2) Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works shall not cause flooding or erosion to the downstream receiver

and in particular road flooding.

7. MONITORING AND RECORDING

The Owner shall 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 and analyzed at the **sampling locations**, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2a - Effluent Monitoring	
Location	Stormwater management pond outlet (i.e. the settling pond)
Frequency	Monthly sampling during periods of discharge
Sample Type	Grab
Parameters	Oil and Grease, pH and Total Suspended Solid (TSS).

Table 2b - Water Quality Monitoring	
Locations	Stormwater management pond (i.e. the settling pond)
Frequency	Thrice Annually (i.e. Spring, Summer and Fall)
Sample Type	Grab
Parameters	Temperature, pH, hardness, dissolved organic carbon, total suspended solids, total ammonia, nitrate, nitrite, total phosphorus, chloride, aluminium, antimony, arsenic, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

Table 2c - Water Level Monitoring	
Locations	Trapped Runoff Water Area
Frequency	Monthly during ice-free periods
Parameters	Water Level

- (3) Within **three (3) months** from the date of issuance of this Approval, the Owner shall submit to the District Manager for review and approval, a Stormwater Management Pond water quality trigger plan with associated trigger values for the Water Quality Monitoring Program so that sampling in the receiver will be initiated if the water quality of the Stormwater Management Pond is degraded above applicable provincial and/or federal water quality criteria, or if more appropriate, ambient concentrations of the West Root River or Root River. The trigger plan and associated triggers can be modified with written approval from the District Manager, from time to time.
- (4) Within **six (6) months** from the date of issuance of this Approval, the Owner shall determine the elevation of the low point along the edge of the Trapped Runoff Water

Area using proper surveying techniques, and shall install a staff gauge in this Area to indicate the trigger elevation (this is to be completed during the open water season and when it is safe to do so) that will be determined as required by subsection (5).

- (5) Within **six (6) months** from the date of issuance of this Approval, the Owner shall submit to the District Manager for review and approval, a Trapped Runoff Water Area water level trigger plan. This trigger plan shall include, but not be limited to:
 - (a) An appropriate trigger elevation for the Water Level Monitoring Program with supporting data to ensure that the trigger elevation is set at an elevation that will contain a 24-hour 100-year storm event in the Trapped Runoff Water Area without overtopping; and
 - (b) Mitigation measures for managing the water level in the Trapped Runoff Water Area should the trigger elevation be exceeded, which shall include:
 - (i) The collection of a water sample that shall be analyzed for the full suite of parameters to ensure that the water is suitable for discharge (all parameters are below the trigger level concentrations for the SWM pond); and
 - (ii) Plans to pump the excess water to the proposed SWM pond to maintain the water level in the Trapped Runoff Water Area below the trigger elevation, provided that water quality is suitable for discharge.
- (6) 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 publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
 - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.
- (7) The measurement frequencies and parameters specified in Table 2a and 2b are minimum requirements which may, after **twenty-four (24) months** of monitoring in accordance with this condition, be modified by the Director in writing from time to time.
- (8) The recording frequency specified in Table 2c may, after **two (2) years** of monitoring in accordance with this condition, be modified by the Director in writing from time to time.
- (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.

8. REPORTING

- (1) The Owner shall report to the District Manager or designate, any exceedence of any parameter specified in condition 5 orally, as soon as reasonably possible, and in writing within **seven (7) days** of the exceedence.
- (2) In addition to the obligations under Part X of the EPA, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or 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 to the District Manager, a performance report, on an annual basis, on or before April 1st. The reports shall contain, but shall not be limited to, the following information:
 - (a) all monitoring data in hard copy and electronic spreadsheet that can be manipulated by the reviewer and include, but not be limited to, a summary and interpretation of all monitoring data collected pursuant to condition 7, and a comparison to the effluent limits outlined in condition 5, and the Provincial Water Quality Objectives (PWQOs) for the monitored parameters, including an overview of the success and adequacy of the Works and presentation of photographic records of inspections;
 - (b) a description of any operating problems encountered and corrective actions taken;
 - (c) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
 - (d) a summary of the calibration and maintenance carried out on all effluent monitoring equipment; and
 - (e) 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. Condition 1.(6) 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 the Ministry records are kept accurate and current with respect to 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.
3. Condition 3 is included to ensure that a comprehensive operations manual 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 a manual is an integral part of the operation of the Works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.
4. Condition 4 is included to ensure that the Works will be operated and maintained in a manner enabling compliance with the terms and conditions of this Approval, such that the environment is protected and deterioration, loss, injury or damage to any person or property is minimised and/or prevented.
5. Conditions 5 and 6 are imposed to ensure that the effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receivers.
6. Condition 7 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and effluent limits specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.
7. 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.

SCHEDULE 'A'

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted by Patty Wong, P.Geo., AECOM Canada Ltd., and signed by Corey Bugyra, Operations Manager, of Beamish Construction Inc., dated July 31, 2018; and all supporting documentation and information.

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

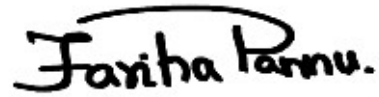
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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 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 27th day of October, 2020



Fariha Pannu, P.Eng.

Director

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

AA/

c: Area Manager, MECP Sault Ste. Marie Area Office

c: District Manager, MECP Sudbury District Office

Patty Wong, P.Geo., AECOM Canada Ltd.