

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5853-CCXPGK Issue Date: March 31, 2022

G. Tackaberry & Sons Construction Company Limited 109 Washburn RoadPO Box 70Athens, OntarioK0E 1B0

Site Location: Richmond Quarry Part of Lot 8, Concession 5 Township of Drummond-North Elmsley, County of Lanark

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

the establishment of sewage Works for the collection, transmission, treatment and disposal of up to 6,926 L/min of water (including precipitation, stormwater runoff, snowmelt and groundwater) accumulating within the confines of an approximately 15.1 ha extraction area of the existing Richmond Quarry located in the Township of Drummond-North Elmsley, discharging to the Blueberry Marsh and ultimately to the Tay River, consisting of the following:

- one (1) initial dewatering sump configuration, located in the central-eastern portion of the extraction area and periodically relocated in the quarry floor as extraction operations advance, having a total depth of approximately 3 m, a permanent pool depth of approximately 2.5 m, a top surface area of approximately 3,145 m² and a storage volume of 7,860 m³, housing a submersible pump having a discharge rate not to exceed 5,460 L/min (91 L/s) and controlled manually or by a set of float switches, with the intake of the pump located approximately 2.5 m above the bottom of the dewatering sump, discharging overland to the Blueberry Marsh and ultimately to the Tay River;
- one (1) final dewatering sump configuration, located in the central-eastern portion of the extraction area and periodically relocated in the quarry floor as extraction operations advance, having a total depth of approximately 3 m, a permanent pool depth of approximately 2.5 m, a top surface area of approximately 3,960 m² and a storage volume of 9,900 m³, housing a submersible pump having a discharge rate not to exceed 6,900 L/min (115 L/s) and controlled manually or by a set of float switches, with the intake of the pump located approximately 2.5 m above the bottom of the dewatering sump, discharging overland to the Blueberry Marsh and ultimately to the Tay River;
- all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the

proper operation of the aforementioned sewage Works;

all in accordance with the supporting documents listed in Schedule A.

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

"Approval" means this entire document and any schedules attached to it, and the application;

"District Manager" means the District Manager of the Ottawa District Office of the Ministry;

"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;

"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 G. Tackaberry & Sons Construction Company Limited and 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 Owner's application, this Approval and in the supporting documentation referred to herein, to the extent approved by 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 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 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 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.

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 or Ministry of Natural Resources and Forestry (MNRF) 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

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 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 <u>Business Names Act</u>, 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 <u>Corporations Information Act</u>, 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 will refer to this Approval's number.

4. OPERATION AND MAINTENANCE

1. The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained. The Owner shall also ensure that all monitoring and visual inspection programs and maintenance schedules for the Works and related equipment are complied with.

2. 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 or health hazard to the general public.

3. The Owner shall ensure that the maximum discharge rate from the Works does not exceed 6,926 L/min.

4. The Owner shall ensure that in the event of a spill or other contaminant release which could cause any detrimental effects on the quality of water (including precipitation, stormwater runoff, snowmelt and groundwater) discharging from the site, any pumping activities are immediately ceased. Furthermore, the Owner shall ensure that any pumping activities are resumed only after an investigation of the incident is undertaken, remedial and preventive measures are taken (if necessary) and the effluent discharged from the site is deemed not to cause any impairment to the receiving waterbody.

5. The Owner shall ensure that the design storage volume in the dewatering sump is maintained at all times.

6. During the period of discharge, the Owner shall undertake monthly visual inspections of the dewatering sump and have excess settled material cleaned-out, as necessary, with results recorded in a log book.

7. The Owner shall periodically measure the amount of sediment accumulating in the dewatering sump and remove the sediment, if necessary, to ensure continued suspended solids removal performance of the dewatering sump, with results recorded in a log book.

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 site. The logbook shall include the following:

(a) the name of the works;

(b) the name of the inspector who conducted each inspection;

(c) the date and results of each inspection, description of maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the Works; and

(d) upon request, make available the logbook for inspection and copying by Ministry personnel.

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.

10. 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 dewatering sump.

11. Within three (3) months of the issuance date of this Approval, the Owner shall prepare an operations manual for the operation of the Works that includes, but is not necessarily limited to, the following information:

(a) operating procedures for routine operation of the Works; including reduction or termination of discharge during major rain events, if necessary;

(b) inspection programs, including frequency of inspection for the Works and the methods or tests employed to detect when maintenance is necessary, as well as downstream receiving waterbody inspections for the occurrence of erosion and flooding;

(c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;

(d) contingency plans and procedures for dealing with potential exceedance of the Effluent Limits. The contingency plan shall cover the entire operational life of the sewage Work;

(e) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager. The contingency plan shall cover the entire operational life of the sewage Work; and

(f) complaint procedures for receiving and responding to public complaints.

12. The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

5. EFFLUENT LIMITS

1. The Owner shall design, construct, operate and maintain the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent discharged from the dewaterring sump:

Effluent Parameter	Concentration Limits		
	(milligrams per litre unless otherwise indicated)		
Column 1	Column 2		
Total Suspended Solid (TSS)	25		
pH of the effluent maintained between 6.0 to 9.5, inclusive, at all times			

2. For the purposes of determining compliance with and enforcing subsection (1), non-compliance with respect to the Total Suspended Solids concentration limit and pH limit is deemed to have occurred when any single grab sample analyzed for Total Suspended Solids is greater than 25 milligrams per litre, and any single measurement for pH is out of the 6.0 - 9.5 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 waterbody.

2. Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works shall not cause flooding or erosion on the receiving waterbody.

7. EFFLUENT QUALITY MONITORING AND RECORDING

The Owner shall, upon issuance of this Approval, 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 following sampling locations, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Effluent Monitoring			
Sampling Location	1) Discharge Point from the dewatering sump - the outlet		
	pipe of the pump discharging from the dewatering sump		
Sampling Frequency	Monthly (once per month) during periods of effluent		
	discharge		
Sampling Type	Grab		
Sampling Parameters	Total Suspended Solids (TSS), Total Oil and Grease, Total		
	Phosphorus (TP), Total Kjeldahl Nitrogen (TKN), Total		
	Ammonia Nitrogen (TAN), Nitrite Nitrogen, Nitrate		
	Nitrogen, Alkalinity, Aluminium, Boron, Barium, Calcium,		
	Chloride, Chromium (III), Chromium (IV), Copper,		
	Conductivity, Iron, Magnesium, Potassium, Sodium,		
	Strontium, Zinc, pH (field), Temperature (field)		

3. 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.

4. The Owner shall measure, record and calculate the discharge rate and volume of water pumped from the dewatering sump on a daily basis during the discharging period.

5. 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. THE BLUEBERRY MARSH WATER LEVELS

1. The Owner shall design, construct and undertake everything practicable to operate the Works such that the water levels in the Blueberry Marsh listed in Table 3 in the existing monitoring station (SG09-1) located within the Blueberry Marsh are within the range outlined in Table 3.

Table 3 - The Blueberry Marsh Water Level				
Month	Low Water Level (mASL)	High Water Level (mASL)		
March and April	141.95	142.36		
May and June	141.77	142.34		
July to October	-	141.96		
November to February	141.81	141.99		

2. In the event that the water level within the Blueberry Marsh is not within the water level range during a field measurement collected in accordance with Condition 9, the Owner shall:

(a) notify the District Manager as soon as possible during normal working hours, unless otherwise approved in writing by the District Manager;

(b) take immediate action to conduct further investigations, including a review of quarry pumping records and comparison to past pumping records, a visual inspection of the Blueberry Marsh and a review of recent meteorological data; and

(c) implement appropriate corrective measures, including reduction or termination or increase of discharge from the dewatering sump.

9. THE BLUEBERRY MARSH WATER LEVELS MONITORING AND RECORDING

1. The Owner shall measure the water level within the Blueberry Marsh at the location and frequency specified below and all results recorded:

Table 4 - The Blueberry Marsh Water Levels Monitoring			
Sampling Location	The existing monitoring station (SG09-1) located within the		
	Blueberry Marsh		
Sampling Frequency	Four times a year		
Sampling Type	Field Measurement		
Field Measurement	Water level		

2. 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.

10. SPILL CONTINGENCY AND POLLUTION PREVENTION PLAN

1. Within three (3) months of the construction of the Works, the Owner shall implement a Spill Contingency and Pollution Prevention Plan that includes, but is not necessarily limited to, the following information:

(i) the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;

(ii) the name, job title and 24-hour telephone number of the person(s) responsible for activating the Spill Contingency and Pollution Prevention Plan;

(iii) a site plan drawn to scale showing the facility, nearby buildings, streets, drainage patterns, any receiving body(ies) of water that could potentially be significantly impacted 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);

(iv) steps to be taken to report, contain, clean up and dispose of contaminants following a spill;

(v) 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 MOE Spills Action Centre 1-800-268-6060;

(vi) Materials Safety Data Sheets (MSDS) for each hazardous material which may be transported or stored within the area serviced by the Works;

(vii) the means (internal corporate procedures) by which the Spill Contingency and Pollution Prevention Plan is activated;

(viii) a description of the spill response and pollution prevention 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;

(ix) an inventory of response and clean-up equipment available to implement the Spill Contingency and Pollution Prevention Plan, location and, date of maintenance/replacement if warranted; and

(x) the date on which the Spill Contingency and Pollution Prevention Plan was prepared and subsequently, amended.

2. The Spill Contingency and Pollution Prevention Plan shall be kept in a conspicuous, readily accessible location on-site.

3. The Spill Contingency and Pollution Prevention Plan shall be amended from time to time as required by changes in the operation of the facility.

11. **REPORTING**

1. The Owner shall forthwith orally report to the District Manager or designate, any exceedence of any parameter specified in Condition 5, and in writing within seven (7) days of the exceedence, as defined in Condition 5.2.

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, 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 to the District Manager on an annual basis within ninety (90) days following the end of the period being reported upon. The reports shall contain, but shall not be limited to, the following information:

(a) 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 Objective and/or Ontario Drinking Water Objective for the monitored parameter, including an overview of the success and adequacy of the Works;

(b) a summary of water levels within the Blueberry Marsh collected pursuant to Condition 9 and a comparison to the Water Level Triggers outlined in Condition 8, including mitigation actions and corrective measures implemented to ensure that the minimum or maximum water level triggers are met;

(c) a tabulation of the total daily discharge rate and volume from the dewatering sump;

(d) an assessment of the impact of the quarry discharge on the Blueberry Marsh;

(e) a description of any operating problems encountered and corrective actions taken;

(f) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage Works;

(g) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

(h) a summary of any complaints received during the reporting period and any steps taken to address the complaints;

(i) a summary of any by-pass, spill or abnormal discharge events; and

(j) any other information the District Manager requires from time to time.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which Approval was granted. This condition is also imposed 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. 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 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 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 quarry 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. Furthermore, the condition is imposed 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. Conditions 5 and 6 are imposed to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
- 6. Condition 7 is included to require the Owner to demonstrate on a continual basis that the quality of the effluent from the approved Works is consistent with the effluent limits specified in the Approval and that the approved Works do not cause any impairment to the receiving watercourse.
- 7. Condition 8 is imposed to establish the Blueberry Marsh Water Level Range to be used as a mechanism to trigger corrective actions before environmental impairment occurs.
- 8. Condition 9 is included to require the Owner to demonstrate on a continual basis that the quantity of the effluent from the approved Works do not cause any impairment to the receiving Blueberry Marsh.
- 9. Condition 10 is included to ensure that the Owner will implement the Spill Contingency and Pollution Prevention Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.
- 10. Condition 11 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

Schedule A forms part of this Approval and contains a list of supporting documentation/information received, reviewed and relied upon in the issuance of this Approval.

SCHEDULE A

- 1. Environmental Compliance Approval Application submitted by Golder Associates Ltd., dated June 8, 2021 and received June 17, 2021.
- 2. The technical report titled "Application for an Industrial Sewage Works Environmental Compliance Approval, Tackaberry Richmond Quarry" dated June 2021, specifications and engineering drawings, all prepared by Golder Associates Ltd.
- 3. The design report titled "Quarry Water Management Report, Tackaberry Richmond Quarry" dated June 2021, specifications and engineering drawings, all prepared by Golder Associates Ltd.
- 4. All other information and documentation provided by Golder Associates Ltd. as it relates to this application.

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	Part II.1 of the <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5
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* 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

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.

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DATED AT TORONTO this 31st day of March, 2022

Fariha Parnu.

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

KC/

c: District Manager, MECP Ottawa District Office Kevin MacKenzie, M.Sc., P.Eng., Principal, Water Resources Engineer, Golder Associates Ltd.