

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 1251-BLXKGP  
Issue Date: May 18, 2020

St. Marys Cement Inc. (Canada)  
55 Industrial Street, Toronto,  
Ontario, M4G 3W9

Site Location: 55 Industrial Street, City of Toronto,  
Ontario, M4G 3W9.

*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 sewage works for the collection, transmission, treatment and disposal of stormwater, from the 4.52 ha. ready mix concrete manufacturing facility site of the St. Marys Cement Inc. (Canada), to provide enhanced quality control and quantity control for all storms up to and including the 100-year storm event, prior to discharge into a future connection to the City of Toronto's storm sewer, draining into the Walmsley Brook connected to the Don River (West Branch), consisting of the following:

**Proposed Works:**

1. On-site stormsewers: Cap off and or disconnect existing stormsewers on the site, diameter ranging from 250 mm to 300 mm which are presently carrying flows from the site catchment areas to the city of Toronto's storm sewers and connect the site catchbasins with new stormsewers ranging from 300 mm to 600 mm diameter to intercept surface run-off from the site and discharge into a stormwater management pond as described below:

2. Stormwater management Pond:- a vertical walled concrete wetpond having three (3) chambers with a peak total storage capacity of 5156 cu.m. at approximately 2.9 m in cells 1 and 3 and 5.1 m in cell 2, including 835 cu.m. of permanent pool volume at 800 mm depth in cell 1 and 3 and 3 m in cell 2 and approximately 4321 cu.m. of extended detention storage, for re-use in the cement plant (under normal operating conditions);

- In case of high flow events and when re-use of water is not needed, further treatment in Cells 2 and 3 is activated with addition of CO<sub>2</sub> gas or equivalent pH neutralization chemical dosing system to precipitate high alkalinity prior to discharge as follows:

- Flow Control and Pumping: during high flow and no reuse, pond water to discharge via a flow control outlet structure complete with 100 mm diameter orifice at the downstream wall of the cell 1. The cell 3 is provided with a well for a submersible pump, rated at 180 L/min. to discharge pond effluent into a proprietary package

treatment system as described below:

3. Package Treatment Unit: comprised of multiple bag filtration system followed by a granulated activated carbon (GAC) vessel rated at 180 L/min, to discharge via the sampling point / compliance well, complete with an emergency shut-off valve, to finally discharge into the existing 1350 mm diameter Municipal storm sewer leading to Walmsley Brook;

- all complete with other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage Works; all to work with the following existing works:

**Existing Works:**

1. Site Stormsewer: 300 mm diameter, intercepting the building roof drain and south-west parking lot and discharging into the municipal stormsewer;

2. Municipal storm sewer: size ranging from 750 mm to 1350 mm that flow through the site and discharge downstream of the site into the Walmsley Brook;

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

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

1. "Approval" means this entire document and any schedules attached to it, and the application;
2. "District Manager" means the District Manager of the Toronto District Office of the Ministry;
3. "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;
4. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19, as amended;
5. "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;
6. "Owner" means St. Marys Cement Inc. (Canada) and its successors and assignees;
7. "Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;
8. "Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed Works and Previous 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 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 Approval is based on an average imperviousness of approximately 45% for a total drainage area of 4.52 ha. Any future development changes within the total drainage area that might increase the required storage volumes or increase the flows to or from the storage pond or any structural/physical changes to the sewage works including inlets or outlets will require an amendment to 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 Owner or operating authority, or both;
  - b. change of address of Owner or operating authority or address of new Owner or operating

authority; change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Partnerships Registration Act*;

c. change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the *Corporations Information Act*, 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 will refer to this Approval's number.

### **3. CHANGES IN PROCESSES OR PROCESS MATERIALS**

1. The Owner intends to use and reuse the site storm water for its own purpose. The owner shall give written notice to the District Manager of any plans to change the processes or process materials in the Owner's enterprise serviced by the Works where the change may significantly alter the quantity or quality of the influent to or effluent from the Works, and no such change(s) shall be made unless with the written concurrence of the District Manager and approval of the Director.

### **4. OPERATIONS MANUAL**

1. The Owner shall prepare an operations manual prior to the commencement of operation of the sewage works, that includes, but not necessarily 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 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 spill, bypasses and any other abnormal situations and for notifying the District Manager; and
  - e. complaint procedures for receiving and responding to public complaints.
2. 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.

3. The Owner shall inspect the sewage works monthly (at minimum) and ensure that the design minimum liquid retention volume(s) of the pond is maintained at all times.
4. The Owner shall conduct a survey of sediment accumulation within the pond **annually** and clean and maintain the Works to prevent the excessive build-up of sediments. The annual sediment accumulation survey is for a period of two (2) years following the start-up of the operation of the Works. If the two surveys indicate low sediment accumulation, sediment accumulation survey can be reduced to biannually. Any change in the frequency of sediment accumulation survey can be undertaken only after written agreement is obtained from the District Manager.

## **5. EFFLUENT OBJECTIVES**

1. The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials listed as effluent parameters in the effluent objectives table in **Schedule B** are not exceeded in the effluent from the Works.
2. The Owner shall include in all reports submitted in accordance with Conditions 8 and 9 a summary of the efforts made and results achieved under this Condition.

## **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 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.

## **7. 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.

## 8. EFFLUENT MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the sewage works, carry out the monitoring program, only when water is being discharged into the City sewer. 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 point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the effluent monitoring table included in **Schedule B**:
3. The methods and protocols for sampling, analysis, toxicity testing, 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" Version 2.0 dated Jan 1, 2016 (PIBS 2724e02), as amended from time to time by more recently published editions;
  - 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; and
  - c. in respect of any parameters not mentioned in Tables 1 and 2 in Schedule B, a written approval of the District Manager shall be obtained prior to sampling.
4. The temperature and pH of the effluent from the Works shall be determined in the field at the time of sampling.
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.
6. The measurement frequency and parameters specified in the Schedule B, may after two (2) years of monitoring in accordance with this Condition, be modified by the Director in writing from time to time.

## 9. REPORTING

1. One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.
2. The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 5 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.
3. 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.

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 first such report shall cover the first annual period following the issuance of this approval / commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
  - a. a description of and number of times pondwater was not re-used, any high flow situation occurred, and CO<sub>2</sub> or any equivalent and the package treatment in the pond necessitated, prior to discharge of pondwater into the municipal sewer;
  - b. a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 5.
  - c. a description of any operating problems encountered and corrective actions taken;
  - d. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
  - e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
  - f. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
  - g. 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.
2. Condition 2 and 3 are 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 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 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 5 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
5. Conditions 6 and 7 are imposed to ensure that the effluent discharged from the Works to the Walmsley Brook connected to the Don River (West Branch) meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
6. Condition 8 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the (design objectives) specified in the Approval and that the approved works does not cause any impairment to the receiving watercourse.
7. Condition 9 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**

1. Application for Environmental Compliance Approval submitted by Dilan Singaraja, P.Eng. of GHD Limited received on January 02, 2020 for the proposed Works, including design report, final plans, specifications and all supporting documentation.
2. Email memo with revised work plans submitted by Dilan Singaraja, P.Eng. of GHD Limited received on May 4, 2020 for the proposed Works, including revised drawings and all supporting documentation.

## Schedule B

### Table -1 Effluent Objectives

Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
Total Suspended Solids	25.0 mg/L
Oil and Grease	15.0 mg/L
pH	pH of the effluent to be maintained within the range of 6.5 to 9.5

### Table - 2 Effluent Monitoring

(sample point at the outlet of the cell 3 of the wet pond from the wet well/compliance well)

Effluent Parameter	Frequency	Sample Type
Total Suspended Solids (TSS)	A minimum of 4 samples per year, during active flow into the City Storm sewer, taken during Spring and Summer months: after each significant rainfall of 13mm or larger.	Grab
Oil and Grease	same as above	Grab
Metal Scan <sup>1</sup>	same as above	Grab
pH and Turbidity	Continuous for all discharges	Sensor Probe

1. ICP metal scan shall include aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, thallium, uranium, vanadium, and zinc.

*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

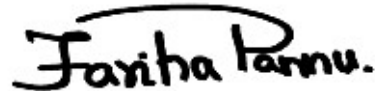
The Director appointed for the purposes of  
Part II.1 of the Environmental Protection Act  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

**\* 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](http://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 18th day of May, 2020



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

MN/

c: District Manager, MECP Toronto - District  
Dilan Singaraja, P.Eng. GHD Limited