

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9993-B6YQK9

Issue Date: October 23, 2019

Colacem Canada Inc.
2540 Daniel-Johnson Blvd, No. 808
Laval, Quebec
H7T 2S3

Site Location: Colacem L'Original Cement Plant
County Road 17
Lot 217, Concession Parcel M100
Township of Champlain, United Counties of Prescott and
Russell

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

establishment of stormwater management works for the collection, transmission, treatment and disposal of stormwater runoff serving the approximately 36.8 hectare cement plant, located on Lot 217, Parcel M100, Township of Champlain, United Counties of Prescott and Russell, Ontario, to provide an Enhanced Level quality control and quantity control for all storm events up to and including the 100-year storm event, discharging to Charlebois Drain, consisting of the following:

Stormwater Collection and Conveyance System

- sixteen (16) 600 mm precast concrete catch basins located within the catchment areas;
- storm sewer pipes downstream of the catch basins to convey runoff from the catchment areas into the on-site ditches as described below;
- on-site ditches, with side slopes of 3H:1V on both sides, a bottom width of 1.0 m, a longitudinal gradient of 0.2% and a minimum ditch depth of 0.5 m, conveying stormwater runoff to the stormwater management pond as described below;

Stormwater Management Pond

- a wet pond with a sediment forebay, providing an Enhanced Level quality control as well as quantity control for a total drainage area of approximately 28.8 hectares, having a minimum permanent pool

volume of 2,248 cubic metres with a permanent pool depth of 1.5 m, an extended detention storage volume of approximately 5,817 cubic metres with a freeboard of 1.8 m, and a total storage volume of approximately 8,065 cubic metres, including permanent pool volume, at a depth of approximately 3.3 m, attenuating post-development peak flows to pre-development levels for all storm events up to and including the 100-year storm event, discharging via one (1) 300 mm outlet pipe with a 110 mm diameter orifice plate at the top of the permanent pool (50.8 masl), one (1) 450 mm outlet pipe with a 356 mm diameter orifice plate located 0.6 m above the permanent pool elevation, and a 1.7 m long overflow weir located 0.3 m below the top of the berm (52.3 masl), to the Charlebois Drain through a drainage ditch;

Stormwater Management for Petcoke Storage Area

Stormwater management works for the approximately 2.4 ha petcoke stockpile area, collecting stormwater runoff and pumping it to the cement plant for re-use in the manufacturing process, consisting of the following:

- one (1) 900 mm precast concrete square sump located down gradient of the petcoke stockpile area with a total storage volume of approximately 1.0 cubic metre;
- a submersible pump located at the bottom of the sump with a design rate of 20 m³/h, pumping collected runoff to the cement plant for re-use;

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 supporting documents listed in Schedule "A" forming part of this Approval.

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

"Approval" means this entire document including the application and any supporting documents listed in any schedules in this Approval;

"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 Cornwall Area Office and Ottawa District Office of the Ministry;

"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 Colacem Canada Inc. and its successors and assignees;

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

"Wet Event" means a rainfall event with a minimum of 15 millimetres of rain in a 24 hour period;

"Works" means the sewage works described in the Owner's application, and this Approval.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) 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 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 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. 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 **thirty (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 Business Names Act, R.S.O. 1990, c. B17 shall be included in the notification to the District Manager;

(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, other than a change in ownership to the municipality, i.e. assumption of the Works, the Owner shall notify the succeeding owner in writing of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

4. OPERATIONS MANUAL

(1) The Owner shall prepare an operations manual prior to the commencement of operation of the 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 yearly 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 OBJECTIVES

(1) The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 1 - Effluent Objectives	
Effluent Parameter	Concentration Objective
Total Suspended Solids	25.0 mg/L
Oil and Grease	15.0 mg/L
pH of the effluent maintained within the range of 6.5 to 8.5	

(2) The Owner shall use best efforts to:

(a) maintain the pH of the effluent from the Works within the range of 6.5 - 8.5, inclusive, at all times;

(b) 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 or sheen or foam or discolouration on the receiving waters.

6. SPILL CONTINGENCY AND POLLUTION PREVENTION PLAN

(1) Before the commencement of operation of the Works, the Owner shall prepare a Spill Contingency and Pollution Prevention Plan that outlines procedures as to how to mitigate the impacts of a spill within the drainage areas serviced by the Works and prevent pollution incidents, and provide a copy to the District Manager. The said plan shall include as a minimum, but not limited to:

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

(b) a site plan drawn to scale showing the different operating and process areas of the cement plant, roads, catch basins and/or manholes and/or ditches and/or drainage channels, drainage patterns (including direction(s) of flow in storm sewers) 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);

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

(d) a listing of telephone numbers for: local clean-up companies who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and Ministry of the Environment, Conservation and Parks (MECP) Spills Action Centre 1-800-268-6060;

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

(f) 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 to whom;

(g) 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, including testing and calibration of the equipment; and

(h) 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 place near the reception area on site.

(3) The Spill Contingency and Pollution Prevention Plan will be amended from time to time as needed by changes in the operation of the facility or to reflect updates in the Municipal By-Laws, or improved Best Management Practices by the Owner.

7. OPERATIONS 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.

(2) 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.

(3) The Owner shall conduct a survey of sediment accumulation within the pond **annually** and, if necessary, 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.

(4) The Owner shall ensure that the wet pond does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam. In the event that a visible film, sheen or foam is observed, the Owner will immediately initiate the Spill Contingency and Pollution Prevention Plan.

(5) In the event that a spill is identified, the Owner shall investigate the cause and implement the Spill Contingency and Pollution Prevention Plan in accordance with Condition 6.(1), if necessary.

(6) The Owner shall ensure that stormwater runoff collected from the petcoke storage area is re-used in the manufacturing process without discharge to the environment.

(7) The Owner shall ensure that all raw materials except petcoke, will be stored in enclosed structures.

(8) The Owner shall ensure that the cement plant is operated as a closed loop system and no process water is discharged to the environment.

(9) The Approval is based on an average imperviousness of approximately 24% for a total drainage area of 28.8 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.

(10) The Owner shall maintain a logbook to record the results of these inspections required under Subsection (2), (3) and (4), and any cleaning and maintenance operations undertaken, and shall keep the logbook at the Owner's office for inspection by the Ministry. The logbook shall include the following:

(a) the name of the Works; and

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed.

(c) the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

8. MONITORING AND RECORDING

(1) The Owner shall, upon commencement of operation of the sewage works, carry out a stormwater monitoring program. The monitoring program shall include obtaining grab samples from the effluent of the wet pond during discharge periods for at least four (4) rainfall wet events per year. The four (4) sampling events shall occur between March 1 and November 30, with at least one month between consecutive samples.

(2) 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.

(3) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Stormwater Effluent Monitoring (Sampling point at the outlet of the wet pond)	
Frequency	See Section 8 (1)
Sample Type	Grab
Parameters	Total Suspended Solids, Oil and Grease, Metal Scan ^{1,2} , pH

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.

2. Metals analysis shall be both total and dissolved metals.

(4) 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 Version 2.0" (January 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 (a) or (b), the written approval of the District Manager, which approval shall be obtained prior to 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.

9. 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.

10. 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 orally as soon as possible any non-compliance with the effluent criteria, and in writing within seven (7) days of non-compliance.

(3) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

(4) In addition to the obligations under Part X of the *Environmental Protection Act*, 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.

(5) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within 60 days following the end of the period being reported upon. The first such report shall cover the first annual period following the 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 summary and interpretation of all monitoring data and a comparison to the Effluent Objectives (for Total Suspended Solids, Oil and Grease, pH) or to the PWQOs for the parameters without Effluent Objectives, including an overview of the success and adequacy of the Works;
- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all inspection, maintenance and clean-out carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a tabulation of the volume of sludge generated in the reporting period, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- (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) a summary of any Contingency Plan undertaken during the reporting period and a discussion regarding their adequacy.

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.
2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction, to ensure the ongoing protection of the environment. It also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
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 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 work.
5. 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 pro-actively and voluntarily before environmental impairment occurs.
6. Condition 6 is included to ensure that the Ministry is immediately informed of the occurrence of an emergency or otherwise abnormal situation so that appropriate steps are taken to address the immediate concerns regarding the protection of public health and minimizing environmental damage and to be able to devise an overall abatement strategy to prevent long term degradation and the re-occurrence of the situation.
7. Condition 7 is included to require that the Works be properly operated and maintained such that the environment is protected.
8. Condition 8 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval and that the Works do not cause any impairment to the receiving watercourse.

9. Condition 9 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.
10. Condition 10 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. Application for Approval of Industrial Sewage Works, dated June 1, 2016 and submitted by Marc Bataille, Director at Colacem Canada Inc. with supporting from Golder Associates;
2. Industrial Sewage Works and Stormwater Management Plan, dated January 2016, along with drawings, prepared by Golder Associates;
3. Revised Stormwater Management Plan Version 1.1 dated August 2017, along with revised drawings, prepared by Golder Associates;
4. Addendum Letter on Stormwater Management Plan for the Revised Site Plan, dated October 30, 2018, along with revised drawings, prepared by Golder Associates;
5. Technical Memorandum dated November 13, 2018, prepared by Golder Associates;
6. All additional supporting documents (emails) submitted by Rachel Gould, Project Manager from Golder Associates;

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, S.O. 1993, c. 28 (Environmental Bill of Rights), the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner 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 Environmental Commissioner
1075 Bay Street, Suite 605
Toronto, Ontario
M5S 2B1

AND

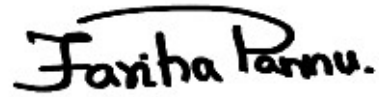
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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 23rd day of October, 2019



Fariha Pannu, P.Eng.

Director

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

YZ/

c: Area Manager, MECP Cornwall Area Office

c: District Manager, MECP Ottawa Area Office
Melanie Kennedy, Golder Associates Ltd.