

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9513-CY4KSQ Issue Date: January 22, 2024

Lafarge Canada Inc. 6509 Airport Rd

Mississauga, ON L4V 1S7

Site Location: Moore Pit: Part of Lot 4, Concession 5 and Parts of Lots 3,

4 and 5, Concession 6

McGill Pit: Part of Lot 3, Concession 5

Municipality of North Grenville, ON K0G 1J0

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, use and operation of sewage works for the collection, transmission, treatment and reuse of process water effluent of up to 20,160 cubic metres per day from an aggregate washing operation as well as dug out ponds to maintain dry working conditions, with the dug out ponds discharging to South Gower Wetland, consisting of the following proposed Works:

Aggregate Wash Plant:

Pond D: one (1) sedimentation pond semi-circular in shape with a radius of 30 to 70 metres at 3:1 side slopes and minimum water depth of approximately 0 to 5 metres (actual shape and dimensions to be chosen by operator based on anticipated flow rate and associated design recommendations per operational needs), with a maximum rated capacity of 14,000 L/min, constructed above the ground water table and initially located in the McGill Pit licensed boundary and periodically relocated as extraction operations advance, receiving wash water effluent from the on-site aggregate wash plant, separated from the source pond A (to be approved via PTTW) via minium 5 metre wide berm, equipped with 450 mm diameter culverts discharging excess effluent to the source pond;

Dug Out Ponds:

- Pond B (catchment area 7.7 ha): one (1) existing sedimentation pond with a surface area of approximately 50,000 metre square and a maximum pond depth of approximately 5.8 metres, with a permanent pool volume of approximately 295,000 cubic metres, located along the south-west site boundary of the Moore Pit, receiving surface runoff from the surrounding area, discharging excess runoff volume to the existing "west ditch" controlled by a proposed trapezoidal outlet ditch set to 103.8 masl approximately 56 metres long and with 2:1 side slopes at a minimum depth of 0.25 metre and width of 4.7 metres, with the west ditch ultimately discharging to the South Gower Wetland within the licensed boundary of the pit;
- Pond C (catchment area 3.8 ha): one (1) existing sedimentation pond with a surface area of approximately 20,000 metre square and a maximum pond depth of approximately 5.8 metres, with a permanent pool volume of approximately 116,000 cubic metres, providing an active storage volume of approximately 4,000 cubic metres at a corresponding active storage depth of approximately 0.2 metres to contain the 24 hours 100-year storm event, located north-east of Pond B, discharging excess runoff volume to the existing "east ditch" within the licensed boundary of the pit;

including 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 supporting documents listed in Schedule A.

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

- 1. Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
- 2. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
- 3. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
- 4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
- 5. "Grab Sample" means an individual sample of at least 1000 millilitres collected in an appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;
- 6. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act,* R.S.O. 1990, c. P.28;
- 7. "Ministry" means the ministry of the government of Ontario responsible for the EPA and

OWRA and includes all officials, employees or other persons acting on its behalf;

- 8. "Owner" means Lafarge Canada Inc. and its successors and assignees;
- 9. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
- 10. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 11. "Works" means the approved sewage works, and includes Proposed Works;

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

TERMS AND CONDITIONS

1. GENERAL CONDITION

- 1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
- 3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 4. The issuance of, and compliance with the conditions of, this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage works; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. EXPIRY OF APPROVAL

- 1. This Approval will cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.
- 2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than **five (5) years**, the Owner shall submit an application for extension at least twelve (12) months prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

3. CHANGE OF OWNER

- 1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Owner;
 - b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act*, *R.S.O. 1990*, *c.B17* shall be included in the notification to the District Manager; or
 - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C39* shall be included in the notification to the District Manager.
- 2. In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.
- 3. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

4. CONSTRUCTION OF THE WORKS

1. Upon the construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.

2. Within six (6) months of the construction of the Sewage Works, a set of as-built drawings showing the Works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. OPERATION AND MAINTENANCE

- 1. The Owner shall 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 programs and maintenance schedules for the Works are complied with.
- 2. The Owner shall, upon identification of any spill, bypass or loss of any product, by-product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance into the environment, take immediate action to prevent the further occurrence of such loss and prevent the substance from entering the sedimentation or clear water ponds.
- 3. 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 any spill, bypass or loss of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance are kept on hand and in good repair for immediate use in the event of:
 - a. any spill, bypass or loss of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance;
 - b. a spill within the meaning of Part X of the EPA; or
 - c. the identification of an abnormal amount of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance in any part of the Works.
- 4. The Owner shall ensure that the design minimum liquid retention volumes of the Works are maintained at all times.
- 5. During the period when aggregate washing is occurring, the Owner shall undertake monthly visual inspections of the Works for potential spills, structural integrity of the perimeter containment berms and accumulation of sediment in the Works and undertake corrective measures, if necessary, to ensure continued suspended solids removal performance of the Works, with results recorded in a log book.

- 6. The Owner shall periodically visually monitor the amount of sediment accumulating in the wash plant sedimentation pond along with any overflow to the source pond and expand/relocate the sedimentation pond when required, if necessary, to ensure continued suspended solids removal performance of the sedimentation pond, with results recorded in a log book. No sediment shall be used on Site for rehabilitation without complying with all applicable laws in place at the time of reuse.
- 7. The Owner shall ensure that no excavation takes place within Ponds B and C.
- 8. The Owner shall ensure that there is no direct connection between the aggregate wash plant ponds and Ponds B and C.
- 9. The Owner shall ensure that any water discharged to the natural environment does not result in scouring, erosion or physical alteration of stream channels or banks and that there is no flooding in the receiving area or water body, downstream water bodies, ditches or properties caused or worsened by the discharge.
- 10. The Owner shall ensure that no turbid water shall be discharged to the Provincially Significant Wetland and downstream watercourse;
- 11. 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;
 - d. the date measurement of sediment was undertaken, the amount of sediment measured, if sediment removal was undertaken and where any removed sediment was disposed.
- 12. The log book shall be retained at the site and be made available for Ministry inspection upon request.
- 13. The Owner shall prepare an operations manual prior to the introduction of wash water to 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.
- 14. 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 Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.
- 15. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.

6. EFFLUENT LIMITS

1. The Owner shall design, construct and operate the Works such that the concentrations of the materials listed as effluent parameters in the effluent limits table in **Schedule B** are not exceeded in the effluent from the Works.

7. MONITORING AND RECORDING

- 1. The Owner shall, upon commencement of operation of the Sewage Works, carry out a monitoring program, and 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 at the respective sampling point over the time period being monitored.
- 2. 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 in the monitoring table 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" (January 2016), PIBS 2724e02, as amended;
 - 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;
- c. for any parameters not mentioned in the documents referenced in Paragraphs 3.a and 3.b, the written approval of the District Manager shall be obtained prior to sampling.
- 4. The Owner shall install and maintain a flow measuring device(s), to measure the discharge rate of the intake pump to the aggregate wash plant on a daily basis during the operational period, with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flowrate for the entire design range of the flow measuring device(s).
- 5. The Owner shall undertake visual inspection at the Pond B and C outlets, East Ditch, and West Ditch at the time of sampling for the presence of water clarity, erosion, and flooding and shall record and report the findings in the annual performance report.
- 6. The measurement frequencies specified in the effluent monitoring table in Schedule B in respect of any parameter are minimum requirements which may, after 2 years of monitoring in accordance with this Condition, be modified by the Director in writing from time to time.
- 7. The Owner shall take photographs of the monitoring locations during the sampling events.
- 8. 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. 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:
 - a. the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;
 - b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the Spill Contingency and Pollution Prevention Plan;
 - c. 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);

- d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;
- e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and MOE Spills Action Centre 1-800-268-6060;
- f. Materials Safety Data Sheets (MSDS) for each hazardous material which may be transported or stored within the area serviced by the Works;
- g. the means (internal corporate procedures) by which the Spill Contingency and Pollution Prevention Plan is activated and a description of the Trigger Mechanism(s);
- h. 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;
- i. 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
- j. 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.

9. REPORTING

- 1. One (1) week prior to the start-up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
- 2. The Owner shall report to the District Manager orally as soon as possible any non-compliance with the compliance limits, and in writing within seven (7) days of non-compliance.
- 3. The Owner shall, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- 4. 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.

- 5. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a summary and interpretation of all monitoring data and a comparison to the
 effluent limits outlined in Condition 6, including an overview of the success
 and adequacy of the Works as well as comparison to the CCME-CWQG
 (Canadian Council for Minister's of the Environment Canadian Water Quality
 Guidelines) for particulate matter;
 - b. a description of any operating problems encountered and corrective actions taken:
 - c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works, including an estimate of the quantity of any materials removed from the Works;
 - d. a summary of the calibration and maintenance carried out on all monitoring equipment;
 - e. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
 - f. all photographs and a summary of photographs taken during the sampling events;
 - g. a summary of all spill or abnormal discharge events; and
 - h. 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 constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. Condition 1.4 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
- 2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
- 3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 4. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
- 5. Condition 5 is included 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 operations 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. Condition 5 is also 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. Furthermore, Condition 5 is included to ensure that accumulated sediment in the sedimentation and clear water ponds is removed to maintain the intended sediment removal performance of the sewage works.
- 6. Condition 6 is imposed to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements, as specified, on a continuous basis, thus minimizing environmental impact on the receiver.

- 7. Condition 7 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, and to demonstrate that the Works are properly operated and maintained and do not cause any impairment to the environment.
- 8. Condition 8 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.
- 9. Condition 9 is included to provide a performance record for future references, to ensure that the Ministry as well as the general public 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 an Industrial Sewage Works submitted and signed by Blair Walker, Environment and Public Affairs Manager of Lafarge Canada Inc., dated November 15, 2022 and received on November 23, 2022, and all supporting documentation and information.
- 2. Engineering Report and Impact Assessment, Industrial Sewage Works for Discharge, Bennett Road Pit, dated September 9, 2021, including calculations and engineering drawings, prepared by Morrison Hershfield. Ltd.
- 3. Design Brief for Wash Plant Discharge Pond, dated November 15, 2023, including calculations and engineering drawings, prepared by Morrison Hershfield. Ltd.
- 4. Response Memo, dated December 19, 2023, including calculations and engineering drawings, prepared by Morrison Hershfield. Ltd.

Schedule B

Monitoring Program

Effluent Limits Table (measured at the discharge outlets of Pond B and Pond C)

Effluent Parameter	Average Calculator	Limit
Total Suspended Solids	Single Sample Result	25 mg/L
рН	Single Sample Result	between 6.0 - 9.5 inclusive

Surface Water Sampling - Effluent Monitoring Table

Frequency	Twice each in the spring, summer and fall	
Sample Type	Grab (during a discharge event)	
Sampling Locations	Pond B Outlet*, Pond C Outlet*, Background Location** East and West	
	Ditch	
Parameters	Total Suspended Solids, Turbidity, Oil and Grease, Phenols, pH (field)	
	Total Phosphorus, PHCs and PAHs	

^{*} as shown on Figure 7 of Appendix A of the Engineering Report and Impact Assessment; ** BEN-02 (background location upstream of discharge point; shown on Figure 2) of the Engineering Drawings

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.

and

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor and
Toronto, Ontario
M7A 2J3

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 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.

DATED AT TORONTO this 22nd day of January, 2024

Fariha Parnu.

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

MS/

c: District Manager, MECP Kingston - District Anthony West, Morrison Hershfield