

Environmental Assessment Approval

Approval Date: **DEC 11 2013**

Lafarge Hardscratch Quarry Extension Project Lafarge Canada Inc., Approval Holder Yarmouth County, Nova Scotia

The Lafarge Hardscratch Quarry Extension Project (the "Undertaking"), proposed by Lafarge Canada Inc. (the "Approval Holder"), Yarmouth County, Nova Scotia is approved pursuant to Section 40 of the *Environment Act* and Section 13(1)(b) of the Environmental Assessment Regulations. This Approval is subject to the following conditions and obtaining all other necessary approvals, permits or authorizations required by municipal, provincial and federal acts, regulations and by-laws before commencing work on the Undertaking. It is the responsibility of the Approval Holder to ensure that all such approvals, permits or authorizations are obtained before commencing work on the Undertaking.

This Environmental Assessment Approval is based upon the review of the conceptual design, environmental baseline information, impact predictions, and mitigation presented in the Registration Document.

Terms and Conditions for Environmental Assessment Approval

1.0 General Approval

- 1.1 The Environmental Assessment Approval for the project is limited to the project as described in the Registration Document. Any proposal by the Approval Holder for expansion, modification or relocation of any aspect of the project from that proposed in the Registration Document must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment.
- 1.2 The Approval Holder must, within two years of the date of issuance of this approval, commence work on the Undertaking unless granted a written extension by the Minister.
- 1.3 The Approval Holder must not transfer, sell, lease, assign or otherwise dispose of this approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of an approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 1.4 The Approval Holder must implement all mitigation and commitments in the Registration Document, unless approved otherwise by Nova Scotia Environment (NSE).

2.0 Quarry Operations

- 2.1 Prior to or as part of the application for amendments to Part V approval under the *Environment Act*, the Approval Holder must provide for review and consideration the following:
- a) a detailed quarry development plan including but not limited to the sequence of quarry development, soil erosion and sedimentation plans, progressive reclamation plans, etc.
 - b) details of stockpiling (aggregate, sediment removed from settling ponds, and overburden piles), including, as a minimum, stockpile locations, stockpile volumes, length of duration of any stockpiling activity on-site, and erosion and sedimentation control protection measures
 - c) an Annual Report detailing the status of EA conditions must be submitted to NSE on or before December 11, 2014, and annually thereafter.
- 2.2 The quarry management plan must be updated/revised to reflect the progressive development of the quarry. This is to take place over the lifetime of the Undertaking, at a schedule acceptable to NSE, and revised as approved by NSE.

3.0 Surface Water Resources

- 3.1 The Approval Holder must not undertake any quarry related activities within 30 metres of a watercourse unless otherwise approved by NSE. No development or removal of vegetation within this 30 metre buffer is permitted unless otherwise approved by NSE.
- 3.2 All discharges from the site must meet NSE requirements.
- 3.3 The Approval Holder, as part of the application for amendments to the Part V Approval under the *Environment Act*, must submit to NSE for review and approval:
- a) details of a surface water monitoring plan including sampling locations and parameters. Based on the results of the monitoring programs as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE;
 - b) details regarding plans for erosion and sediment control;
 - c) a stormwater management plan including details regarding the plans for monitoring, maintenance and upgrading of the flow retention/siltation treatment areas. Design criteria must recognize increased likelihood of more intense precipitation events in coming decades; and
 - d) details of pre and post development water quality and quantity monitoring program. Sampling methods and/or protocols must be provided as required by NSE.

- 3.4 All surface water protection and management programs must be updated /revised to reflect the progressive development of the quarry. This is to take place over the lifetime of the Undertaking, at a schedule acceptable to NSE, and revised as approved by NSE.

4.0 Wetlands

- 4.1 The Approval Holder must not undertake any quarry related activities within 30 metres of a wetland unless otherwise approved by NSE. No development or removal of vegetation within this 30 metre buffer is permitted unless otherwise approved by NSE.
- 4.2 Wetlands containing Canada Warbler are considered Wetlands of Special Significance. No development should occur within wetlands of special significance and a 30 metre vegetated buffer must be maintained. No development or removal of vegetation within this 30 metre buffer is permitted unless otherwise approved by NSDNR Wildlife Division and NSE.
- 4.3 If avoidance of wetlands is not possible during the development of the Project, any loss of wetland habitat through direct infilling or indirectly through alteration of wetland hydrology will require a wetland evaluation and application for alteration under the Activities Designation Regulations.

5.0 Groundwater Resources

- 5.1 The Approval Holder, as part of the application for amendments to the Part V Amendment under the *Environment Act*, must submit to NSE for review and approval:
- a) details of a groundwater monitoring program including location of monitoring wells and monitoring parameters. This program must be designed to evaluate potential impacts to both groundwater levels and groundwater quality. Based on the results of the monitoring programs, the Approval Holder must make necessary modifications to mitigation plans and/or quarry operations, if required, to prevent unacceptable environmental effects, to the satisfaction of NSE. This program shall be updated upon application for amendments to the Part V approval or other frequency as determined by NSE; and
 - b) details of a monitoring program to determine the potential for and extent of sulphide bearing material and plan to manage any exposed acid generating material and associated drainage (in consultation with NSE).
- 5.2 The Approval Holder must not excavate below the watertable, unless otherwise approved by NSE.
- 5.3 The Approval Holder must replace, at their expense, any water supply which has been lost or damaged as a result of quarrying operations to the satisfaction of NSE.

6.0 Flora and Fauna

- 6.1 Clearing vegetation must be conducted outside of the breeding season for most

bird species (April 16 to August 31), unless otherwise approved by NSE.

- 6.2 Prior to construction, the Approval Holder must provide DNR's Regional Services and Wildlife Division staff with digital way point files revealing precise locations for all "RED", "YELLOW" and "UNDETERMINED" listed species identified during field work within the area proposed for development. The Approval Holder must report to NSE that the files have been provided to DNR.

7.0 Noise and Dust

- 7.1 The Approval Holder, as part of the application for amendments to the Part V approval under the *Environment Act*, must provide for review and approval, an updated blasting plan. The plan must include an updated pre blast survey for structures and water supplies within 800 metres of the blast area, a detailed blast monitoring plan, and a full blast damage response policy as required by NSE.
- 7.2 The Approval Holder must develop and implement an air quality and/or dust monitoring plan, at the request of NSE. This plan must include but not be limited to sampling locations, parameters, monitoring methods, protocols and frequency. Based on the results of the monitoring programs as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.
- 7.3 The Approval Holder must monitor noise levels, at the request of NSE. Based on the results of monitoring program as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.
- 7.4 All equipment is to be operated with standard noise suppression exhaust systems and kept in good repair.

8.0 Archaeological and Heritage Resources

- 8.1 The Approval Holder must cease work and contact the Coordinator, Heritage Division, Nova Scotia Department of Communities, Culture and Heritage immediately upon discovery of an archaeological site or artifact unearthed during any phase of the proposed Undertaking. If the find is of suspected or certain Mi'kmaq origin, the Approval Holder must also contact the Executive Director of the Kwilmu'kw Maw-klusuaqn Negotiation Office.

9.0 Public Engagement

- 9.1 The Approval Holder must develop and submit to NSE, a complaint resolution program to address public concerns associated with the Undertaking. The complaint resolution program must include but not be limited to the appointment of a contact person designated to deal with concerns from the public.
- 9.2 The Approval Holder must appoint a contact person designated to deal with complaints from the public, and must provide the contact person information to NSE 30 days prior to the commencement of any work. Records of these complaints and associated actions must be made available to NSE upon request.

- 9.3 At the request of NSE, the Approval Holder must form a Community Liaison Committee (CLC). The NSE Guidelines for the Formation of a Community Liaison Committee should be used for guidance. The Approval Holder must operate the CLC for the duration of the Undertaking and until released in writing by NSE.

10.0 First Nation and Aboriginal Engagement

- 10.1 At the request of NSE, Approval Holder must develop and implement a Mi'kmaq Communication Plan for the Undertaking, which will include a process for communicating project details and seeking input from the Mi'kmaq community.

11.0 Transportation

- 11.1 The Approval Holder must address transportation related concerns in the following manner:
- a) dust on site roads must be stabilized using water. All other means require approval by NSE;
 - b) trucking contracts must stipulate adherence to speed limits, use of tarpaulins, vehicle maintenance requirements and periodic inspections; and
 - c) trucks must be free of loose debris prior to leaving the site.

12.0 Quarry Development and Reclamation

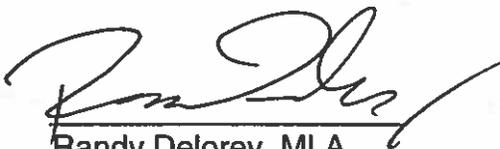
- 12.1 The Approval Holder, as part of the application for amendments to the Part V Approval under the *Environment Act*, shall provide for review and approval a preliminary reclamation plan that includes progressive reclamation and details of future land use.
- 12.2 Reclamation plans must be updated/ revised to reflect the progressive development of the quarry. This is to take place over the lifetime of the Undertaking, at a schedule acceptable to NSE, and revised as approved by NSE.
- 12.3 Quarry expansion approval is subject to progressive reclamation at the existing site being completed to the satisfaction of NSE. Re-vegetation will be limited to the use of native species unless otherwise approved by NSE
- 12.4 The Approval Holder shall operate the quarry in a manner such that the active area does not exceed ten hectares (10 ha) at any time, unless otherwise approved by NSE.
- 12.5 Quarry operations must be completed and reclaimed to the satisfaction of NSE and other appropriate regulatory departments.

13.0 Contingency Plans

- 13.1 The Approval Holder, as part of the application for amendments to the Part V

Approval under the *Environment Act*, must submit to NSE for review and approval a contingency plan that meets NSE's Contingency Planning Guidelines and addresses (including but not limited to):

- a) accidental occurrences, and includes the location of spill equipment kept on-site and emergency phone numbers;
 - b) training to be delivered to staff, including contractors;
 - c) procedures for responding to incidents occurring during times when the facility is not staffed (e.g. evenings, weekends, holidays);
 - d) impacts to watercourses and water resources and domestic water supplies;
 - e) releases of dangerous goods or waste dangerous goods;
 - f) potential fire at the facility (to be reviewed and approved by the local fire and emergency service providers);
 - g) petroleum and hazardous material spills and surface water control structure failure; and
 - h) such other information as required by NSE.
- 13.2 Contingency plans must be updated/revised to reflect the progressive development of the quarry. This is to take place over the lifetime of the Undertaking, at a schedule acceptable to NSE, and revised as approved by NSE.
- 13.3 Refuelling must not be conducted within 100 metres of any surface water resource, unless otherwise approved by NSE.



Randy Delorey, MLA
Minister of Environment