Environmental Assessment Approval

Approval Date:

DEC 2 2 2016

Loch Katrine Quarry Expansion Dexter Construction Company Limited, Approval Holder Guysborough County, Nova Scotia

The Loch Katrine Quarry Expansion (the "Undertaking"), proposed by Dexter Construction Company Limited (the "Approval Holder"), Guysborough 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 (EA).
- 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.
 - The Approval Holder must notify Nova Scotia Environment (NSE) the commencement date of the Undertaking, at a minimum 30 days prior to the commencement.
- 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.

2.0 Surface Water Resources

- 2.1 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.
- 2.2 The Approval Holder, as part of the application for amendments to the Part V Approval under the *Environment Act*, must submit the following to NSE for approval, and must implement the plans once approved. Based on the results of the monitoring and management programs as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE:
 - a) a surface water monitoring plan including sampling locations and parameters;
 - b) an erosion and sedimentation control plan; and
 - 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.
- 2.3 At the request of NSE, the Approval Holder must implement in consultation with NSE, 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.
- 2.4 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.

3.0 Wetlands

- 3.1 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.
- 3.2 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.

4.0 Groundwater Resources

4.1 The Approval Holder, as part of the application for amendments to the Part V Approval under the *Environment Act*, must submit the following to NSE for approval, and must implement the program once approved: 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 must be updated upon application for amendments to the Part V approval or other frequency as determined by NSE; and

- 4.2 The Approval Holder must not excavate below the watertable, unless otherwise approved by NSE.
- 4.3 The Approval Holder must replace, at their expense, any water supply which has been lost or damaged as a result of project operations to the satisfaction of NSE.

5.0 Flora and Fauna

- 5.1 Prior to commencement of the project, the Approval Holder must provide Nova Scotia Department of Natural Resources (DNR), Wildlife Division with digital way points and/or shape files revealing precise locations for all "RED", "YELLOW" and "UNDETERMINED" listed species (under the General Status Ranks of Wild Species in Nova Scotia), and S1, S2 and S3 listed species (under the Atlantic Canada Conservation Data Center), identified during field work within the area of the Undertaking. The date of the above noted field data must also be provided to DNR. The Approval Holder must report to NSE that the files have been provided to DNR.
- 5.2 Prior to commencement of the project, the Approval Holder must develop and implement a Wildlife Management Plan to include the following points in consultation with DNR, Wildlife Division and the Canadian Wildlife Service, and notify NSE completion of the plan:
 - a) measures to protect common nighthawk and bank swallows during the breeding season;
 - b) measures to mitigate impacts on large round-leaved orchid;
 - c) measures to manage non-native (alien invasive) plant species; and
 - d) measures to manage and mitigate blasting related impacts on birds and mammals. The plan must include, but not be limited to identifying sensitive times and project locations for which blasting may impact wildlife.
- 5.3 The Approval Holder must clear vegetation outside of the breeding season for most bird species (April 15 to August 15), unless otherwise approved by NSE.

6.0 Noise and Dust

6.1 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.

- At the request of NSE, the Approval Holder must develop and implement an air quality and/or dust monitoring plan. 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.
- 6.3 At the request of NSE, the Approval Holder must monitor noise levels. 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.

7.0 Archaeological and Heritage Resources

7.1 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 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-klusuagn Negotiation Office.

8.0 Transportation

8.1 The Approval Holder must obtain approval from Nova Scotia Department of Transportation and Infrastructure Renewal, prior to using a South River Lake Road access point for trucking and other commercial purposes related to this project.

9.0 Public Engagement

- 9.1 The Approval Holder, as part of the application for amendments to the Part V Approval under the *Environment Act*, must develop and implement a complaint resolution plan to address all concerns associated with the Undertaking. The Approval Holder must appoint a contact person designated to deal with complaints, and must provide the contact information to NSE.
- 9.2 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, the 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 Contingency Plans

- 11.1 The Approval Holder, as part of the application for amendments to the Part V Approval under the *Environment Act*, must submit to NSE 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.
- 11.2 Contingency plans must be updated/revised to reflect the progressive development of the project. This is to take place over the lifetime of the project, at a schedule acceptable to NSE, and revised as approved by NSE.
- 11.3 Refuelling must not be conducted within 100 metres of any surface water resource, unless otherwise approved by NSE.

12.0 Project Development and Reclamation

- 12.1 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 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 project. This is to take place over the lifetime of the project, 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 Quarry operations must be completed and reclaimed to the satisfaction of NSE and other appropriate regulatory departments.

Margaret Miller, MLA Minister of Environment