

Environmental Assessment Approval

Approval Date: March 17, 2022

Welshtown Quarry Expansion

Dexter Construction Company Ltd.

Welshtown, Shelburne County, Nova Scotia

Terms and Conditions for Environmental Assessment Approval

1 Definitions

- 1.1 *Environment Act* means Environment Act 1994-95, c.1, s.1, and includes, unless the context otherwise requires, the regulations made pursuant to the Act, as amended from time to time.
- 1.2 Department means the Department of Environment and Climate Change, and the contact for the Department for this Approval is:

Department of Environment and Climate Change
Western Region, Yarmouth Office
55 Starrs Road, Unit 9, Nova Scotia B5A 2T2
Phone : (902) 742-8985, Fax : (902) 742-7796
- 1.3 Minister means the Minister of Environment and Climate Change.
- 1.4 Commencement means the same as to commence work, as defined in the Environmental Assessment Regulations.
- 1.5 EA means Environmental Assessment

2 Scope

- 2.1 This Approval (the "Approval") relates to the Approval Holder(s) and their Registration Document, and all documentation submitted to the Department prior to the issuance of this approval for the Welshtown Quarry Expansion Project, situated at or near Welshtown, Shelburne County, Nova Scotia, hereafter referred to as the "Project."
- 2.2 The Approval Holder(s) shall ensure the Project is carried out in accordance with this Approval and reference documents, including the Registration Document and supporting documentation.

3 General

- 3.1 The Approval Holder shall conduct the Project in accordance with the Environment Act, as amended from time to time.
- 3.2 The Approval Holder shall, within two years of the date of issuance of this Approval, commence work on the Project unless granted a written extension by the Minister.
- 3.3 The Approval Holder shall provide written notification to the Department of the commencement date of the Project, at a minimum 30 days prior to the commencement.
- 3.4 The Approval Holder shall provide to the Department a concordance table detailing the status of the EA terms and conditions on January 31 of each year until released in writing by the Department.
- 3.5 Prior to any proposed expansion, modification, or relocation of any aspect of the Project from that proposed in the Registration Information, the Approval Holder must submit the proposal to the EA Branch for review and may require an EA.
- 3.6 Nothing in this Approval relieves the Approval Holder of the responsibility for obtaining and paying for all other licenses, permits, approvals or authorizations necessary for carrying out the Project which may be required by municipal by-laws or provincial or federal legislation. The Minister does not warrant that such licenses, permits, approvals or authorizations will be issued.
- 3.7 No authority is granted by this Approval to enable the Approval Holder(s) to commence or continue the Project on lands which are not in the control or ownership of the Approval Holder(s). It is the responsibility of the Approval Holder(s) to ensure that such a contravention does not occur. The Approval Holder(s) shall provide, to the Department, proof of such control or ownership upon expiry of any relevant lease or agreement. Failure to retain said authorization may result in this Approval being cancelled or suspended.
- 3.8 The Approval Holder shall 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 this Approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 3.9 If there is a discrepancy between the Registration Documentation and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.

- 3.10 Upon any changes to the Registry of Joint Stock Companies information related to the Approval Holder, the Approval Holder shall provide a copy to the Department within 5 days of the changes.
- 3.11 Where a timeline is associated with a condition(s) of the Approval, the Approval Holder shall fulfil the requirements of the condition(s) within the prescribed timeline, unless otherwise authorized in writing by the Department.
- 3.12 The Approval Holder shall notify the Department in writing within 48 hours of any incidents of non-compliance with this Approval.
- 3.13 The Approval Holder shall bear all expenses incurred in carrying out the environmental management and monitoring required under the terms and conditions of this Approval.
- 3.14 Unless specified otherwise in this Approval, all samples required to be collected by this Approval shall be collected, preserved, and analysed, by qualified personnel, in accordance with recognized industry standards and procedures that are deemed acceptable to the Department.
- 3.15 The Approval Holder shall ensure that this Approval, or a copy, is present at the Project site while personnel are on site and that personnel directly involved in the Project are made fully aware of the terms and conditions which pertain to this Approval.
- 3.16 The Approval Holder shall update and/or revise any of the plans, programs or other documents required in this Approval to reflect the progressive development of and/or changes to the Project at a schedule acceptable to, or upon the request of, the Department.
- 3.17 Based on the results of the monitoring plans required in this Approval, the Approval Holder shall make necessary modifications to mitigation plans and/or changes to Project operations to prevent unacceptable environmental effects, as required by the Department.
- 3.18 Where a condition of this Approval requires the Approval Holder to consult a particular party or parties regarding the content of a document, the Approval Holder shall: provide a written notice to each such party inviting comments on the document within a reasonable timeframe, provide a written explanation to each party how the comments are addressed and considered, as well as maintain a record of consultation with each party and provide a copy of such consultation to the Department.

If there is a conflict between the Approval Holder and a party or parties that they are required to consult, the Department will determine if suitable consultation has been completed.

4 Industrial Approval

- 4.1 Prior to any quarrying in the expansion area, the Approval Holder shall apply for an amendment to their current Part V Approval under the *Environment Act* (i.e., Industrial Approval 2016-095706) and wait for the amendment to be approved.

5 Water Resources

- 5.1 The Approval Holder shall not conduct any Project activities or remove vegetation within 30 metres of a watercourse and/or a wetland unless otherwise authorized in writing by the Department.
- 5.2 Refueling shall not be conducted within 30 metres of any surface water resource.
- 5.3 Prior to any wetland alterations, the Approval Holder shall obtain the Part V Approval under the *Environment Act* for any wetlands to be altered by the Project. The Wetland Alteration applications shall be prepared per current Departmental guidance.
- 5.4 The Approval Holder, as part of the application for amendment for Part V Approval under the *Environment Act*, shall develop a detailed monitoring plan for indirect hydrological impacts to Wetlands 3, 4 and 12 (as identified in the EA registration information). The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.
- 5.5 Based on the results of the wetland monitoring plan, if the Department determines that adverse effects have occurred from indirect wetland alteration, compensation shall be required for loss of wetland area and function.
- 5.6 The Approval Holder, as part of the application for amendment of the Part V approval under the *Environment Act*, shall develop and submit a detailed surface water monitoring plan, including sampling locations, parameters, and frequency to the Department for review and acceptance. The plan shall consider, at minimum:
 - a) Monitoring of Total Suspended Solids (TSS), pH, general chemistry, and metals.
 - b) Measures to monitor the surface water quality in Wetland 12 (as identified in EA registration information) and at a downstream point on Tributary 1 (as identified in the Addendum) from the quarry site. The measures shall be established on a risk-based approach associated with the different quarry phases and activities, including period of shut-downs.
 - c) Measures to monitor the water quality in the drainage at northeast of the project area (as identified in the Addendum) in case it receives discharge from the quarry site.

- d) Appropriate monitoring timing window and frequencies for water quantity to support on-going evaluation of the mitigations in place and to validate conclusions provided in the Addendum regarding insignificant impacts to surface water quantity. Based on results, additional measures may be required, including further regulatory authorizations (e.g., Watercourse and Wetland Alteration Approvals and *Fisheries Act* authorization).

The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.

5.7 The Approval Holder, as part of the application for amendment of the Part V approval under the *Environment Act*, shall develop and submit a detailed surface water management plan to the Department for review and acceptance. This plan, as well as any related water management infrastructure, shall be developed by a qualified professional engineer licensed to practice in the Province of Nova Scotia and shall address the following, at minimum:

- a) Detailed design of surface water management measures (e.g., berms, ditches) to minimize impacts to surface water resources due to increased surface runoff from quarry development, as estimated in the Water Balance Assessment (Appendix C, Addendum). Potential impacts of climate change on sizing requirements shall also be considered.
- b) Drainage ditches used to redirect water from the quarry to lower reaches of the Roseway River shall be designed to include barriers to fish passage to avoid the potential access and stranding of fishes.
- c) Details of aggregate wash pond(s) design, including location, capacity and closed-loop designs, cleaning and maintenance approach, wastewater disposal if any, and how will the pond(s) be addressed in the quarry reclamation phase. Potential water sources for refilling/replenishing wash pond(s) should be identified. Information on the interaction and/or connection between wash pond(s) and proposed settling pond should also be included.
- d) Details related to final settling pond designs, including considerations for appropriate removal of TSS and minimizing impacts to surrounding water resources during the different operational phases of the year.
- e) Methods for wastewater treatment and/or disposal of the water used for dust control. Evaluation of estimated amount of water usage for dust control from fractured quarry floor, the proposed settling pond, and any additional water source(s) (and identification of the source(s)). Evaluation of the potential impacts of chloride-based dust suppressants to water resources, and details on the required mitigations shall also be provided.
- f) Delineation of the expanded quarry area and application of extra surface water management measures to cope with increased surface water runoff and maintenance of the existing site drainage pattern with progressive quarry development and reclamation.
- g) Retaining capacity of the fractured quarry floor, and its interaction with surface water management measures through quarry development.

- h) Specific measures to manage surface water at the south of the study area, including measures to prevent erosion and release of sediment from quarry operations into Wetland 12 (as identified in the EA registration document) and subsequently into Tributary 1 (as identified in the Addendum).
- i) Approaches to maintain the effectiveness of surface water control measures.

The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.

- 5.8 Prior to commencement of the Project, the Approval Holder shall implement a comprehensive erosion and sedimentation control plan, developed by a qualified professional engineer or geoscientist licensed to practice in the Province of Nova Scotia. The plan shall be provided to the Department upon request.
- 5.9 The Approval Holder shall update the erosion and sedimentation control plan throughout the life of the quarry to address the state of development or reclamation, site specific conditions and reasonable and foreseeable weather events. Updates shall be developed by a qualified professional engineer or geoscientist licensed to practice in the Province of Nova Scotia, as well as shall be dated and made available to the Department upon request.
- 5.10 The Approval Holder, as part of the application for amendment for the Part V Approval under the *Environment Act*, shall submit a groundwater monitoring plan including the location of monitoring wells and monitoring parameters to the Department for review and acceptance. This plan shall be designed to assess the water table location, horizontal hydraulic gradients, hydraulic conductivities, groundwater flow directions, as well as baseline water quality conditions. An on-going monitoring component for water levels and groundwater quality shall be included. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department and prior to expansion of the quarry area. The groundwater monitoring plan shall be designed, implemented, and assessed by a professional hydrogeologist licensed to practice in Nova Scotia.
- 5.11 The Approval Holder, as a part of the application for amendment for the Part V Approval under the *Environment Act*, shall submit a plan for baseline water survey of water supply wells within 1 km of the project expansion area boundaries to the Department for review and acceptance. The Approval Holder shall undertake the survey once its plan is deemed acceptable by the Department and prior to expansion of the quarry area.
- 5.12 Prior to any blasting in the expansion area, the Approval Holder shall prepare an updated blasting plan. The plan shall consist of a completed pre-blast survey for structures within 800 metres of the point of the blast. A blast monitoring plan and a blast damage response shall also be prepared. These documents shall be made available to the Department upon request.

- 5.13 The Approval Holder shall not excavate within 0.5 metre of the measured maximum annual water table level unless otherwise authorized in writing by the Department.
- 5.14 The Approval Holder, at their expense, shall replace any water supply which has been lost or damaged as a result of Project operations, as authorized and required by the Department.

6 Flora and Fauna

- 6.1 Prior to commencement of the Project, the Approval Holder shall provide the Wildlife Division and Regional Services, Department of Natural Resources and Renewables (DNRR) with digital way points and shape files revealing precise locations for wetlands, and species listed under the Species at Risk Act (SARA) and/or Endangered Species Act (ESA), as well as of Species of Special Concern (i.e. species assessed by the Committee on the Status of Endangered Wildlife in Canada as at risk, but not listed under SARA or ESA, and all S1, S2 and S3 listed species under the Atlantic Canada Conservation data Centre) identified during field work. The data provided to DNRR shall include, at minimum, the date of the field observances and habitat description.

The Approval Holder shall provide written notification to the Department that the files have been provided and deemed acceptable by the DNRR.

- 6.2 The Approval Holder shall not remove vegetation within 100 metres radius of any occurrence of Blue Felt Lichen in the project area, unless otherwise approved by the Department.
- 6.3 Prior to commencement of the Project, the Approval Holder shall provide the Wildlife Division and Regional Services (DNRR) with digital way points and shape files revealing precise locations of the Blue Felt Lichen occurrences and the associated 100-metre buffer radius. The data provided to DNRR shall include, at minimum, the date of the above noted field observances, the host tree species, and the description of the surrounding habitat.

The Approval Holder shall provide written notification to the Department that the data and related information have been provided and deemed acceptable by the DNRR.

- 6.4 Prior to commencement of the Project, the Approval Holder shall develop, in consultation with the Wildlife Division (DNRR), a Wildlife Management Plan. The plan shall include pre-construction surveys, mitigation, management, and monitoring measures necessary to protect wildlife during all phases of the Project. The points to be addressed in the plan shall include, but not be limited to:

- a) Preconstruction surveys to assess the potential for bats or their dwellings, including hibernacula, maternity roosts, and summer roost sites, to occur within the proposed project area. Reporting should include discussion on proposed mitigation measures and follow-up monitoring programs based on the results of the assessments. The location of the rock outcrops which may be used as dwellings for bats in the project area shall also be reported.
- b) Measures to protect all identified species listed under the Species at Risk Act and/or under the Endangered Species Act, as well as all Species of Conservation Concern. Plans to monitor the effectiveness of the protective measures shall also be considered.
- c) Procedures to avoid creating nesting habitat for Bank Swallows and Common Nighthawks, as well as to determining whether nests are present, and for protecting nests should they be encountered.
- d) Mitigation measures and management procedures should snapping turtles or wood turtles or their nests be found on site.
- e) Procedures to monitor the condition and health of the occurrences of Blue Felt Lichen during all phases of the project.
- f) Procedures to identify and manage plant communities which include Reindeer Lichen and Golden heather.
- g) Measures to mitigate adverse effects of noise, light, and dust on wildlife.
- h) Communication procedures for reporting observations of species listed under the Species at Risk Act and/or Endangered Species Act, Species of Conservation Concern, and unexpected wildlife observations on site to project managers and to the Wildlife Division, DNRR.
- i) Training approach to onsite workers for identification of species listed under the Species at Risk Act and/or Endangered Species Act and procedures to follow if they are encountered on site.
- j) Listing (and accompanying location mapping) of all the invasive species of plant identified within the project area during field work. Measures to manage non-native plant species during all project phases. Periodic inventory of non-native plant species to identify any additional species and required management measures.

- k) Measures to address changes to Species at Risk and Species of Conservation Concern listings over time.

Prior to commencement of the Project, the Approval Holder shall ensure the wildlife management plan is deemed acceptable by the Department.

The Approval Holder shall begin to implement the plan immediately following the acceptance of the wildlife management plan by the Department.

Any changes to the approved plan shall be previously authorized in writing by the Department.

- 6.5 The Approval Holder shall clear vegetation outside of the breeding season for most bird species (April 15 to August 31), unless otherwise authorized in writing by the Department. Vegetation clearing shall be recorded in a daily log that shall be available for review by the Department indicating the date and time of the clearing operation and the contractor.
- 6.6 The Approval Holder shall report sightings of any raptor nest at the project area to DNRR, and management measures might be required. The Approval Holder shall provide written notification to the Department that sightings have been reported to DNRR.
- 6.7 Prior to vegetation clearing, the Approval Holder shall implement measures to identify potential Chimney Swift residences in the project area. If detected, mitigation measures and a monitoring plan shall be implemented. Any occurrence of Chimney Swift residences in the project area shall be reported to Environment Canada Climate Change, Canadian Wildlife Service, and additional measures might be required. The Approval Holder shall provide written notification to the Department that the occurrences have been reported to the Canadian Wildlife Service.

7 Air Quality & Noise Levels

- 7.1 At the request of the Department, the Approval Holder shall develop and implement an air quality and/or dust monitoring plan. This plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols, and frequency.
- 7.2 At the request of the Department, the Approval Holder shall develop and implement a plan to monitor noise levels. The plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols, and frequency.
- 7.3 The Approval Holder shall ensure that noise emissions at the property boundaries do not contribute to an exceedance of the maximum permissible sound levels limits specified in the Nova Scotia Environment and Labour “Guidelines for Environmental Noise Measurement and Assessment” dated 18, 2005, as amended from time to time.

8 Archaeological and Heritage Resources

- 8.1 The Approval Holder shall cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture, Tourism and Heritage (CCTH) immediately upon discovery of an archaeological, or paleontological site, artifact or fossil specimen unearthed during any phase of the Project. If the find is of certain or possible Mi'kmaq origin, the Approval Holder shall also contact the appropriate Mi'kmaq representatives as advised by CCTH.

9 Transportation

- 9.1 The Approval Holder shall obtain approval from the Department of Public Works, prior to placing any traffic signage related to this Project on any provincially owned road.

10 Public Engagement

- 10.1 Prior to commencement of the Project, the Approval Holder shall develop and implement a comprehensive complaint resolution plan for receiving and responding to complaints related to the Project, including a reporting system which records, and documents steps taken to determine the cause of complaint and the corrective measures taken to alleviate the cause and prevent its recurrence. The plan shall be made available to the Department upon request.
- 10.2 Prior to commencement of the Project, the Approval Holder shall appoint a contact person designated to deal with complaints and shall provide the contact information to the Department.
- 10.3 At the request of the Department, the Approval Holder shall develop and implement a plan for the formation and operation of a Community Liaison Committee (CLC) including terms of reference, which meets the Department's Guide for the Formation and Operation of a Community Liaison Committee, as amended from time to time. The Approval Holder shall operate the CLC for the duration of the Project or until released in writing by the Department.

11 Engagement with the Mi'kmaq of Nova Scotia

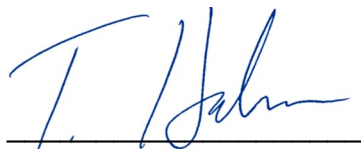
- 11.1 At the request of the Department, the Approval Holder shall develop and implement a Mi'kmaq Communication Plan for the Project, which will include a process for communicating Project details and seeking input from the Mi'kmaq community, including but not limited to wildlife protection.

12 Contingency Plan

- 12.1 Prior Project commencement, The Approval Holder shall develop a comprehensive contingency plan which meets the Department's Contingency Planning Guidelines. The plan shall provide prevention measures and address accidental occurrences including but not limited to: spills of hydrocarbons or other hazardous materials, failure of erosion and sediment control measures, fires, and vehicular collisions. The Plan shall be maintained and updated over the life of the project.
- 12.2 The contingency plan shall be kept on the Project site at all times when personnel are on site and made available to the Department upon request.

13 Rehabilitation

- 13.1 This Approval is subject to progressive rehabilitation at the existing Project site being completed as required by the Department.
- 13.2 Project operations shall be completed and rehabilitated as required by the Department.
- 13.3 Re-vegetation shall be limited to the use of native species, unless otherwise authorized in writing by the Department.



Tim Halman, MLA

Minister of Environment and Climate Change