



GOLDER

Goffs Quarry Expansion Project

**TERMS & CONDITIONS FOR ENVIRONMENTAL
ASSESSMENT APPROVAL**

March 2020

AGENDA

- **Introductions**
- **Minister's Decision**
- **Terms & Conditions of Environmental Assessment Approval**
- **Monitoring Update - 2020**

Introductions

GOFFS QUARRY EXPANSION PROJECT

Glen Merkley, P.Eng.

- Environmental Services Practitioner - Golder Associates
 - 5 years professional experience

Callie Andrews, B.Sc., M.Sc.

- Environmental Assessment Specialist - Golder Associates
 - 13 years professional experience

Minister's Decision

GOFFS QUARRY EXPANSION PROJECT

- “Following a review of the information provided by Scotian Materials Limited, and the information provided during the government and public consultation of the environmental assessment, I am satisfied that any adverse effects or significant environmental effects of the undertaking can be adequately mitigated through compliance with the attached terms and conditions.”

General Conditions

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
3.1	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.	No update
3.2	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.	30 day notice of commencement was provided to the Department indicating work will commence March 20, 2020
3.3	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.	Submitted to NSE on January 31, 2020

General Conditions

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
3.4	Any proposal by the Approval Holder for expansion, modification or relocation of any aspect of the Project from that proposed in the Registration Information shall be submitted to the EA Branch for review and may require an EA.	Not applicable
3.5	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 bylaws or provincial or federal legislation. The Minister does not warrant that such licenses, permits, approvals or authorizations will be issued.	No update
3.6	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.	No update

General Conditions

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
3.7	If there is a discrepancy between the Registration Information and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.	-
3.8	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.	No update
3.9	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.	No update

General Conditions

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
3.10	The Approval Holder shall notify the Department in writing within 48 hours of any incidents of non-compliance with this Approval.	No non-compliance incidents in 2019.
3.11	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.	-
3.12	Unless specified otherwise in this Approval, all samples required to be collected by this Approval shall be collected, preserved and analyzed, by qualified personnel, in accordance with recognized industry standards and procedures that are deemed acceptable to the Department.	No Project related sampling occurred in 2019.

General Conditions

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
3.13	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.	A copy of this approval is available at the main office of the Goffs Quarry. The site orientation will be updated to include the terms and conditions of this approval.
3.14	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.	No update

General Conditions

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
3.15	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.	No Project activities occurred in 2019. Not applicable.
3.16	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.	Consultation Log maintained

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.1	The Approval Holder shall not conduct any Project activities, or removal of vegetation within 30 metres of a watercourse and/or a wetland unless otherwise authorized in writing by the Department.	No Project activities occurred in 2019.
4.2	Refueling shall not be conducted within 30 metres of any surface water resource.	No Project activities occurred in 2019.

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.3	<p>Prior to commencement of the Project, the Approval Holder shall submit a surface water quality and quantity monitoring plan, including sampling locations, parameters and frequency to the Department for review and acceptance. This shall include baseline watercourse monitoring and sedimentation pond discharge monitoring. The Approval Holder shall develop the plan in consultation with the Department's Sustainability and Applied Science Division, and Fisheries and Oceans Canada and shall implement the plan once the plan is deemed acceptable by the Department.</p>	<p>A Surface Water Quality and Quantity Monitoring Plan was submitted for review to NSE on November 29, 2019 and to the Department of Fisheries and Oceans (DFO) on December 11, 2019. Received comments from NSE and DFO and resubmitted plan on March 2, 2020.</p>

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.4	<p>Prior to commencement of the Project, the Approval Holder shall submit an erosion and sedimentation control plan, developed by a qualified professional engineer or geoscientist licensed to practice in the Province of Nova Scotia, to the Department for review and acceptance. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.</p>	<p>Erosion and sedimentation control plan was included in the Surface Water Quality and Quantity Monitoring Plan submitted on November 29, 2019. The plan was designed by Design Point.</p>

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.5	<p>The Approval Holder, as part of the application for the Part V Approval under the Environment Act, shall submit a stormwater management plan to the Department for review and acceptance. This plan shall include final design details and supporting rationale completed by a qualified professional engineer or geoscientist licensed to practice in the Province of Nova Scotia. The plan shall include details to support the mitigation of scour, flooding, sediment loading and thermal charging related to system discharges, and consideration for the potential impacts of climate change in sizing requirements. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.</p>	<p>A stormwater drainage plan was included in the Industrial Approval amendment application submitted to the Department to review on December 10, 2019 and included in the Surface Water Quality and Quantity Monitoring Plan. The stormwater drainage plan was designed by Design Point.</p>

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.6	<p>The Approval Holder, as part of the application for the Part V Approval under the Environment Act, shall submit a design of the on-site settling pond(s), to the Department, including a plan to monitor compliance during the different operational phases of the Project. The settling pond(s) shall be designed by qualified professional engineer, licensed to practice in the Province of Nova Scotia. Water discharge criteria shall be established in consultation with the department.</p>	<p>The design of the on-site settling pond was included in the sedimentation pond plan which was included in the Surface Water Quality and Quantity Monitoring Plan. The plan included discharge criteria and was designed by Design Point. The plan was submitted for review and comment on December 10, 2019.</p>

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.7	The Approval Holder, as part of the application for the Part V Approval under the Environment Act, shall submit information surrounding the plan for water use for the purpose of dust suppression, including the water source(s) and its estimated volumes to determine whether requirements for water withdrawal approvals will be triggered.	Information regarding water use was included in the IA Amendment Application submitted for review on December 10, 2019.
4.8	The Approval Holder, prior to the project's operations ceasing, shall submit a surface water management plan that includes maintenance of watercourse flows during the reclamation phase. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.	No requirement at this time.

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.9	<p>Prior to commencement of Project, the Approval Holder shall submit a Wetland Management Plan to the Department for all wetlands directly or indirectly impacted as a result of the development, including those wetlands predicted to experience changes in hydrologic or hydrogeologic inputs. As part of the plan, the Approval Holder shall develop a comprehensive wetland monitoring plan in consultation with the Department. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.</p>	<p>A Wetland Management Plan was submitted for the Departments review on December 4, 2019. Received comments from NSE and re-submitting plan in March 2020.</p>

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.10	The Approval Holder shall obtain Wetland Alteration Approvals from the Department prior to Project operation within each project phase (1 and 2 as defined in the EA Registration Information).	A Wetland Alteration Approval request was submitted for review on December 4, 2019 for wetlands WL4 and WL3. The Wetland Alteration Approval is pending acceptance of the Wetland Management Plan.

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.11	<p>The Approval Holder, as part of the application 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 evaluate potential impacts to both groundwater levels and groundwater quality. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.</p>	<p>Groundwater monitoring requirements were included in the IA Amendment Application submitted on December 10, 2019.</p>

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.12	The Approval Holder shall immediately contact the Department should sulphide bearing material be encountered on the Project site, and at the request of the Department implement a plan to manage the sulphide bearing material.	No requirements at this time.

Water Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
4.13	Prior to blasting in the expansion area, the Approval Holder, as part of the application for the Part V approval under the Environment Act, shall provide for review and acceptance, an updated blasting plan, to the Department. The plan shall include an updated pre-blast survey for structures and water wells within 800 metres of the point of the blast, a detailed blast monitoring plan, and a full blast damage response policy.	Updated Blasting Plan included in the IA Amendment application submitted on December 10, 2019.
4.14	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.	No requirements at this time

Flora and Fauna

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
5.1	<p>Prior to commencement of the Project, the Approval Holder shall provide Nova Scotia Department of Lands and Forestry, Wildlife Division with digital way points and shape files revealing precise locations for wetlands and species listed under the Species at Risk Act and/or Endangered Species Act as well as all S1, S2 and S3 listed species under the Atlantic Canada Conservation Data Center, identified during field work within the area of the Project. The date of the above noted field data shall also be provided to the Department of Lands and Forestry. The Approval Holder shall provide written notification to the Department that the files have been provided to the Department of Lands and Forestry.</p>	<p>Digital way points and shape files to be provided to the Department of Lands and Forestry prior to commencement of the Project.</p>

Flora and Fauna

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
5.2	<p>Prior to commencement of the Project, The Approval Holder shall develop, in consultation with the Department of Lands and Forestry, Regional Services and Wildlife Divisions, a wildlife management plan to address the following points:</p> <p>a) measures to protect all identified species listed under the Species at Risk Act and/or Endangered Species Act as well as all S1, S2 and S3 listed species under the Atlantic Canada Conservation data Centre;</p> <p>b) approaches and procedures to avoid avian species nests - e.g. common nighthawk (<i>C. minor</i>) and bank swallows (<i>Riparia riparia</i>)- during the breeding season in the event Project operations and /or facilities create nesting habitat;</p>	<p>Wildlife Management Plan developed and submitted to the Department of Lands and Forestry for review on December 2, 2019. Comments are due by the end of this week.</p>

Flora and Fauna

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
5.2 (cont.)	<p>c) appropriate mitigation measures to minimize the risk of impacts on birds listed under the Migratory Birds Conservation Act and processes to follow should an active nest be found at any time of the year;</p> <p>d) appropriate mitigation measures for the event of finding nests of Snapping Turtle (<i>Chelydra serpentina</i>) or wood turtle (<i>Gratemys insculpta</i>) in the quarry development area for the life of the Project operations, and;</p> <p>e) measures to manage non-native (alien invasive) plant species during all Project phases. 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.</p>	<p>Wildlife Management Plan developed and submitted to the Department of Lands and Forestry for review on December 2, 2019. Comments are due by the end of this week.</p>

Flora and Fauna

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
5.3	<p>The Approval Holder shall clear vegetation outside of the breeding season for most bird species (April 15 to August 15), 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.</p>	<p>No Project activities occurred in 2019.</p>

Flora and Fauna

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
5.4	<p>The Approval Holder shall report sightings of avian species at risk as listed on Schedule 1 of the Species at Risk Act to Environment and Climate Change Canada, Canadian Wildlife Service. The Approval Holder shall report sightings of avian species listed under the Nova Scotia Endangered Species Act to the Department of Lands and Forestry. The Approval Holder shall provide written notification to the Department that sightings have been reported to the Canadian Wildlife Service and to the Department of Lands and Forestry.</p>	<p>No Project activities occurred in 2019.</p>

Air Quality

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
6.1	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.	No requirements at this time.
6.2	At the request of the Department, the Approval Holder shall monitor noise levels.	No requirements at this time

Archaeology and Heritage Resources

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
7.1	<p>The Approval Holder shall cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture and Heritage (CCH) 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 CCH.</p>	<p>No Project activities occurred in 2019.</p>

Public Engagement

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
8.1	Prior to commencement of the Project, the Approval Holder shall establish a 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 Approval Holder shall implement the plan once deemed acceptable by the Department.	A Complaint Resolution Plan was submitted to the Department in January 30, 2020 for review and comment.
8.2	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.	Contact details included in the Complaint Resolution Plan.

Public Engagement

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
8.3	<p>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. The Approval Holder shall operate the CLC for the duration of the Project or until released in writing by the Department.</p>	<p>Scotian has established a Community Liaison Committee for the 3.99 ha quarry. This committee will continue to be engaged with the Goffs Expansion Project.</p>

Engagement with the Mi'kmaq of Nova Scotia

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
9.1	Prior to commencement of Project, 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. The Mi'kmaq Communication Plan for the Project must include specific measures for communicating any Project details regarding Wisqoq (Black Ash) with the Mi'kmaq community.	A Mi'kmaq Communication Plan was developed and submitted for comment and review on December 20, 2019. .

Contingency Plan

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
10.1	The Approval Holder, as part of the application for the Part V Approval under the Environment Act, shall develop a 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 Approval Holder shall implement the plan once deemed acceptable by the Department, over the lifetime of the Project.	A Contingency Plan was submitted as part of the IA Amendment application submitted on December 20, 2019.
10.2	The contingency plan shall be kept on Project site at all times when personnel are on site and made available to the Department upon request.	The Contingency Plan will be available to on-site personnel.

Rehabilitation

GOFFS QUARRY EXPANSION PROJECT

#	EA Approval Condition	Status
11.1	This Approval is subject to progressive rehabilitation at the existing Project site being completed as required by the Department.	No requirements at this time
11.2	Project operations shall be completed and rehabilitated as required by the Department.	No requirements at this time
11.3	Re-vegetation shall be limited to the use of native species, unless otherwise authorized in writing by the Department.	No requirements at this time

Goffs Quarry Update – 2020

Monitoring:

- Stream water quality consistent with baseline conditions.
- Stream flows are consistent with rates measured prior to quarrying.
- No quarry related impacts to adjacent wetlands.
- Groundwater quality consistent with baseline conditions.
- Monitoring wells adjacent to quarry showing reduction in water levels, however, on-site monitoring wells located near perimeter of the site are not seeing the influence of quarry activity. Groundwater table is reacting as predicted.



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Questions?