

Canadian Environmental Assessment Act - Screening Report

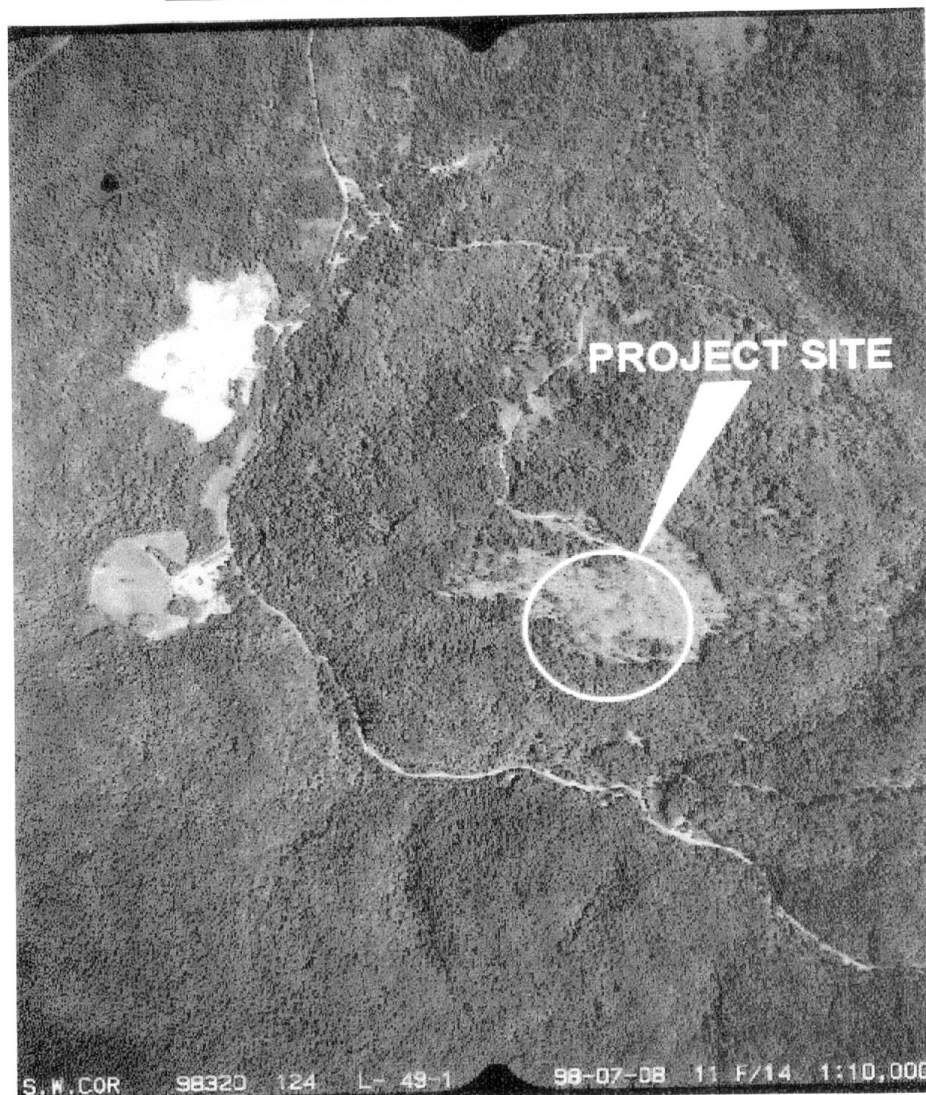


Figure 3: Aerial photograph of MacLeod Resources Ltd. proposed marble quarry in Kennedy's Big Brook, Nova Scotia.

Canadian Environmental Assessment Act - Screening Report**Table 1: Potential Project / Valued Ecosystem Interactions and Mitigation (S.16(1))**

Significance of residual impacts rated as follows:

0 = None, 1 = Insignificant, 2 = Significant, 3 = Unknown, Positive (+), Negative (-).

VECs	DESCRIPTION OF EFFECTS	REQUIRED MITIGATION	RESIDUAL IMPACTS
Ground Water Quantity & Quality	n/a		
Surface Water Quantity & Quality	<p>Potential for erosional runoff leaving the site during the construction phase.</p> <p>Potential contamination from hydrocarbons released from machinery.</p>	<p>Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and silty runoff during the construction phase.</p> <p>Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refuelling must be done at least 30 m from any water body. Basic petroleum spill clean-up equipment should be on-site. All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-565-1633).</p>	-1
Rivers and Lakes	n/a		
Marine Waters	n/a		
Fish/Fish Habitat	Failure of drainage control structures could result in release of silt laden run-off impacting downstream fish and fish habitat.	Drainage control structures (check dams) must be inspected on a regular basis and maintained as required.	-1

Canadian Environmental Assessment Act - Screening Report

VECs	DESCRIPTION OF EFFECTS	REQUIRED MITIGATION	RESIDUAL IMPACTS
Soils	See "Surface Water Quantity..." above. Exposed soil and spoil may erode. Construction waste will be generated.	See "Surface Water Quantity..." above. The exposed soil area is minimized by limiting the area that is exposed at any one time and by limiting the time that any one area is exposed. All stockpiled soil must be covered and/or dyked to prevent erosion or silty runoff from leaving the site. Wherever possible, exposed soil should be replanted or sodded to ensure soil stabilization. All construction wastes must be recycled where possible or otherwise disposed of appropriately.	-1
Geology/ Geophysics	n/a		
Bogs, Wetlands, and Ponds	n/a		
Estuaries/Saltmarshes	n/a		
Air Quality	Potential noise nuisance due to quarry machinery and trucks. Potential for excessive dust due to truck traffic and quarry operations.	All machinery and vehicles must be fitted with standard and well maintained noise suppression devices. Quarry operating hours can be manipulated to reduce nuisance noise. Quarry vehicles should reduce speed on adjacent gravel surfaced roads during dusty conditions. Requests for dust suppressant application by appropriate authority should be made as required.	-1
Climate	Extreme precipitation events could result in hydraulic overloading and release of improperly treated effluent to the surrounding environment.	The facility should be designed to accommodate potentially extreme precipitation events as a possible result of climate change.	-1
Vegetation	Site has been previously cleared.		

Canadian Environmental Assessment Act - Screening Report

VECs	DESCRIPTION OF EFFECTS	REQUIRED MITIGATION	RESIDUAL IMPACTS
Wildlife and Birds	n/a		
Rare and/or Endangered Species	None noted within spatial boundaries of the project.	None required.	0
Cumulative Effects	n/a		
Aquaculture / Agriculture	n/a		
Archaeology/ Palaeontology/ Heritage	Potential historic homestead site beyond zone of influence of project.	None required.	0
Recreational Use	n/a		
Land Use	n/a		
Health & Safety	n/a		
Native Lands	n/a		
Navigation	n/a		

The above ratings were based on information provided by the proponent, a review of project related activities, an appraisal of the environmental setting and the identification of resources at risk, the identification of potential impacts within temporal and spatial bounds and on personal knowledge and professional judgement.

A significant impact was defined as an activity which would result in the harmful alteration and disruption of a habitat over a prolonged period (e.g. more than 1 year) and distance (e.g. 0.5 km.), or the release of a deleterious substance (e.g. petroleum products) into the environment.

It is therefore reasonable to conclude that with appropriate mitigation in place and good work practices, impact will be of short duration and the potential zone of influence will be confined to the immediate vicinity of the work.

Canadian Environmental Assessment Act - Screening Report

PART F: DETERMINATION

The responsible line manager is required to provide a determination of the significance of environmental effects. The decision outlined below is based on the interpretation of impacts and mitigation described in Part D.

Project Name: Kennedy's Big Brook Marble Quarry

Project Number: 8404328

Location: Kennedy's Big Brook, Nova Scotia

The Atlantic Canada Opportunities Agency is the federal responsible authority for the project as defined by the Act. The department has screened the project for adverse environmental effects as required under Section 5 of the Act. On the basis of this screening, the department has determined that the decision opposite the "X" applies to this proposal.

Technical Assessment

- Project not likely to cause significant adverse environmental effects - proceed. *Section 20.1(a).*
- Project not likely to cause significant adverse environmental effects with mitigation - proceed using mitigative measures as determined. *Section 20.1(a).*
- Inadequate information available - further study and assessment is required. *Section 18(2).*
- Project likely to cause significant adverse environmental effects that cannot be justified in the circumstances - project will not proceed. *Section 20.1(b).*
- Uncertain if project will cause significant adverse environmental effects - refer to the Minister of the Environment for review by a Mediator or a Panel. *Section 20.1(c)(i).*
- Project likely to cause significant adverse environmental effects that may be justified in the circumstances - refer to the Minister of the Environment for review by a Mediator or a Panel. *Section 20.1(c)(ii).*

Public Concern

- Public concern about the project is such that a referral to the Minister of the Environment for a review by a Mediator or a Panel is warranted. *Section 20.1(c)(iii).*
- Public concern about the project is such that a referral to the Minister of the Environment for a review by a Mediator or a Panel is not warranted. *Section 20.1(c)(iii).*

Canadian Environmental Assessment Act - Screening Report

PART G: COMMENTS

Impacts

Potential impacts of this project are associated with construction phase disturbance.

Mitigation

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and silty runoff during the construction phase.

Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refuelling must be done at least 30 m from any water body. Basic petroleum spill clean-up equipment should be on-site. All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-565-1633).

Drainage control structures (check dams) must be inspected on a regular basis and maintained as required.

The exposed soil area is minimized by limiting the area that is exposed at any one time and by limiting the time that any one area is exposed. All stockpiled soil must be covered and/or dyked to prevent erosion or silty runoff from leaving the site. Wherever possible, exposed soil should be replanted or sodded to ensure soil stabilization.

All construction wastes must be recycled where possible or otherwise disposed of appropriately.

All machinery and vehicles must be fitted with standard and well maintained noise suppression devices. Quarry operating hours can be manipulated to reduce nuisance noise.

Quarry vehicles should reduce speed on adjacent gravel surfaced roads during dusty conditions. Requests for dust suppressant application by appropriate authority should be made as required.

The facility should be designed to accommodate potentially extreme precipitation events as a possible result of climate change.

Any and all stipulations of federal, provincial, or municipal authorities or their officers must be strictly followed. Any discrepancies must be successfully resolved before the pertinent work may begin.

PART H: FOLLOW-UP

Follow-up studies are not likely to be required.

This project has been placed on the follow-up list. The proponent must provide site access to

*Project #: 8404328
December 20, 2001*

Page 13

Canadian Environmental Assessment Act - Screening Report

Responsible Authority officials and/or its' agents upon request.

SCREENING CERTIFICATE

This document summarizes the results of an environmental assessment related to the above project that has been performed and completed by the Responsible Authority in accordance with the Canadian Environmental Assessment Act.

Environmental Officer: _____

PWGSC	Name	Title	Date
-------	------	-------	------

Project Officer: _____

ACOA	Name	Title	Date
------	------	-------	------

Responsible Line _____

Manager ACOA	Name	Title	Date
--------------	------	-------	------

ENVIRONMENTAL REQUIREMENTS *(to be forwarded to the proponent)*

Project Name: Kennedy's Big Brook Marble Quarry
Location: Kennedy's Big Brook, Nova Scotia

Comments

Potential impacts of this project are associated with construction phase disturbance.

Mitigation / Environmental Protection Measures

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and silty runoff during the construction phase.

Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refuelling must be done at least 30 m from any water body. Basic petroleum spill clean-up equipment should be on-site. All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-565-1633).

Drainage control structures (check dams) must be inspected on a regular basis and maintained as required.

The exposed soil area is minimized by limiting the area that is exposed at any one time and by limiting the time that any one area is exposed. All stockpiled soil must be covered and/or dyked to prevent erosion or silty runoff from leaving the site. Wherever possible, exposed soil should be replanted or sodded to ensure soil stabilization.

All construction wastes must be recycled where possible or otherwise disposed of appropriately.

All machinery and vehicles must be fitted with standard and well maintained noise suppression devices. Quarry operating hours can be manipulated to reduce nuisance noise.

Quarry vehicles should reduce speed on adjacent gravel surfaced roads during dusty conditions. Requests for dust suppressant application by appropriate authority should be made as required.

The facility should be designed to accommodate potentially extreme precipitation events as a possible result of climate change.

Any and all stipulations of federal, provincial, or municipal authorities or their officers must be strictly followed. Any discrepancies must be successfully resolved before the pertinent work may begin.

Project #: 8404328
December 20, 2001

Canadian Environmental Assessment Act - Screening Report

Follow-Up Requirements

Section 38(1) of the Canadian Environmental Assessment Act requires the Responsible Authority to verify environmental assessment predictions and mitigation efficacy through the conduct of a Follow Up Program. In this regard, the proponent will be expected to provide site access to ACOA and/or its' delegate to perform related duties as required.