

Environmental Assessment Approval

Approval Date: Sept 3, 2002

Kennedys Big Brook Red Marble Mine

MacLeod Resources Limited, Proponent

**near River Denys, Inverness County
Nova Scotia**

The Kennedys Big Brook Red Marble Mine (the "Undertaking"), proposed by MacLeod Resources Limited (the "Proponent"), Inverness County is approved pursuant to 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, by-laws, guidelines, policies or standards before commencing work on the Undertaking. It is the responsibility of the Proponent 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 Information.

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 Proponent 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 Proponent shall within 2 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 Proponent shall not transfer, sell, lease, assign or otherwise dispose of this approval without the written consent of the Minister.

2.0 Groundwater Resources

- 2.1 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide the results of a groundwater tracer test (dye test), as proposed in the Environmental Assessment Registration document. Based on test results, plans for appropriate mitigation will be required as part of application for Part V Approval under the *Environment Act*.
- 2.2 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall propose a groundwater monitoring program for the purpose of establishing vertical gradient of groundwater levels. Details regarding the monitoring program, including, but not limited to, frequency, parameters to be sampled for, and location of monitoring, must be approved by the NSDEL, EMC Division, Port Hawkesbury Office.
- 2.3 The proponent shall not extract material below the water table.

3.0 Surface Water Resources

- 3.1 All discharges from the site must meet the NSDEL requirements.
- 3.2 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval:
 - a) details for the surface water collection system capable of diverting all wastewater and runoff discharge, including extreme precipitation events, to the settling ponds of both the extraction area and processing area. Further details of the system must be approved by the EMC Division, Port Hawkesbury Office
 - b) details of any water treatment planned for the settling ponds (both at the extraction area and the processing area)
 - c) details regarding erosion and sediment control protection
 - d) details regarding the maintenance of the settling ponds (both at the extraction area and the processing area)
 - e) details regarding the program to monitor water quality. As proposed in the registration document, a fourth season of baseline data must be collected, and the monitoring program must continue for 2 years following operation before reevaluation. Further details of the monitoring program must be approved by the EMC Division, Port Hawkesbury Office.

4.0 Blasting

- 4.1 No explosives shall be used or stored on site.

5.0 Public Consultation

- 5.1 The Proponent shall form, at the request of the DEL, the Proponent shall form a Community Liaison Committee (CLC) in consultation with the NSDEL and with municipal and community representatives. The NSDEL *Guidelines for the Formation of a Community Liaison Committee* shall be used for the guidance of the Proponent and community.

6.0 Archaeological and Cultural Resources

- 6.1 The Proponent shall cease work and notify the Director, Heritage Division, Nova Scotia Department of Tourism and Culture and the Executive Director, Union of Nova Scotia Indians immediately upon discovery of an archaeological site or artifact unearthed during construction or operation.

7.0 Noise and Dust

- 7.1 All mine equipment is to be operated with standard noise suppression exhaust systems and kept in good repair.
- 7.2 Petroleum products shall not be used as a dust suppressant.
- 7.3 The Proponent shall monitor for noise and dust at the request of the NSDEL.
- 7.4 Hours of construction and operation are limited to five days per week, 10 hours per day, unless otherwise approved by the NSDEL.

8.0 Transportation

- 8.1 All trucks leaving the mine site with crushed marble or other material which may produce dust during transportation will be fitted with tarpaulins to cover loads.
- 8.2 Dust on mine site roads will be stabilized using water or other means as required by the NSDEL.
- 8.3 Transportation of material from the site is limited to Monday to Friday, between the hours of 7:00 a.m. and 7:00 p.m., unless otherwise approved by the NSDEL.
- 8.4 Site staff shall ensure that trucks are clean and inspected before leaving the mine site.

- 8.5 Ongoing vehicle inspections shall be undertaken to ensure that all contracted haulers have properly functioning engine noise muffling devices and other operating equipment.
- 8.6 Trucking contracts shall stipulate adherence to speed limits, vehicle maintenance requirements and periodic inspections.

9.0 Mine Operation

- 9.1 No hazardous materials are to be stored on the sites other than fuels and lubricants, unless otherwise approved by NSDEL.
- 9.2 The Proponent shall operate the mine within the NSDEL requirements.
- 9.3 Plans for any proposed expansion, extension or modification shall be submitted to the Environmental Assessment Branch for review and may require an environmental assessment.
- 9.4 The Proponent, as part of the application for Part V Approval under the *Environment Act*, shall provide for review and approval:
 - a) details of stockpiling (marble, sediment removed from settling ponds, and overburden piles) at the proposed mine site, including, as a minimum, stockpile locations, stockpile volumes, length of duration of any stockpiling activity on site, and erosion protection measures
 - b) plans for shutdowns
 - c) details on any chemicals to be used.

10.0 Reclamation

- 10.1 The Proponent shall ensure the preparation of a preliminary reclamation plan, that includes progressive reclamation, requiring approval by the NSDEL and the appropriate regulatory departments or agencies prior to the commencement of mineral extraction.
- 10.2 Mining operations must be completed and reclaimed to the satisfaction of the NSDEL and the appropriate regulatory departments.

11.0 Contingency Plan

- 11.1 As part of the application for the Part V Approval under the *Environment Act*, the Proponent shall provide a written contingency plan that addresses accidental occurrences at both the extraction area and processing area, including but not limited to contingencies for surface water control structure

failure, spills or fire, and procedures for responding to incidents occurring during times when the facility is not staffed (eg. season of non-operation, evenings, weekends, holidays).

ORIGINAL SIGNED BY

Minister of Environment and Labour