

Environmental Assessment Approval

Approval Date: *Original Dated December 18, 2008*

Donkin Underground Exploration Project Xstrata Coal Donkin Management Limited, Proponent

Cape Breton Regional Municipality, Nova Scotia

The Donkin Underground Exploration Project (the "Undertaking"), proposed by Xstrata Coal Donkin Management Limited (the "Approval Holder"), Cape Breton Regional Municipality, 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, 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 undertaking is limited to the undertaking as described in the Registration Document. Expansion, modification or relocation of any aspect of the undertaking 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 Approval Holder must commence work on the Undertaking unless granted a written extension by the Minister within 2 years of the date of issuance of this approval.

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.

2.0 Surface Water

2.1 Prior to or as part of the application for Part V Approval under the *Environment Act*, the Approval Holder must provide for review and consideration the following:

a) Details of a surface water monitoring program including sampling locations and parameters. 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 Nova Scotia Environment (NSE).

b) Details regarding plans for erosion and sediment control.

c) Details regarding the plans for monitoring, maintenance and upgrading of the flow retention/siltation treatment areas. Design criteria must include increased likelihood of more intense precipitation events in coming decades.

d) Details regarding plans for monitoring, maintenance, replacement and/or upgrading of the settling ponds. Settling pond design criteria must recognize increased likelihood of more intense precipitation events in coming decades.

3.0 Groundwater

3.1 Prior to or as part of the application for Part V Approval under the *Environment Act*, the Approval Holder must provide for review and consideration the following:

a) Details of a groundwater monitoring program including location of monitoring wells and 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 as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.

b) Details regarding plans to address existing impacts identified on site through baseline monitoring and investigation work (i.e. elevated metals, BTEX).

4.0 Plants & Animals

4.1 Clearing of areas must be conducted outside of the breeding season for most bird species (May 1 to August 31), unless otherwise approved by NSE.

5.0 Air Quality

5.1 The Approval Holder must develop and implement an air quality and/or dust monitoring plan, at the request of NSE. 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.

6.0 Noise

6.1 The Approval Holder must monitor noise levels, at the request of NSE. 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.

6.2 The Approval Holder must comply with the Guidelines for Environmental Noise Measurement and Assessment.

7.0 Transportation

7.1 The Approval Holder must finalize the Traffic Impact Study (TIS) and implement recommendations contained in the TIS, to the satisfaction of Nova Scotia Transportation & Infrastructure Renewal (NSTIR).

7.2 The Approval Holder must address transportation related concerns in the following manner:

- dust on site roads must be stabilized using water, other means require approval by NSE
- records must be maintained of ongoing vehicle inspections to ensure that all contracted haulers have properly functioning engine noise muffling devices and other operating equipment
- trucking contracts must stipulate adherence to speed limits, use of tarpaulins, vehicle maintenance requirements and periodic inspections
- trucks must be free of loose debris prior to leaving the site

8.0 Public Consultation

8.1 The Approval Holder must provide, when requested by NSE, records of the Community Liaison Committee (CLC) including meeting minutes, complaints and associated actions.

9.0 Archaeological Resources

9.1 The Approval Holder must cease work and contact the Executive Director, Heritage Division, NSTC&H, the Executive Director, Union of Nova Scotia Indians, and the Executive Director, Confederacy of Mainland Mi'kmaq, immediately upon discovery of an archaeological site or artifact discovered or identified during any phase of the undertaking.

10.0 Site Operation

10.1 Prior to or as part of the application for Part V Approval under the *Environment Act*, the Approval Holder must provide for review and consideration the following:

- a) A contingency plan acceptable to NSE that meets NSE's Contingency Planning Guidelines and addresses:
- accidental occurrences, and includes the location of spill equipment kept on-site and emergency phone numbers
 - training to be delivered to staff, including contractors
 - procedures for responding to incidents occurring during times when the facility is not staffed (e.g. evenings, weekends, holidays)
 - impacts to watercourses and water resources and domestic water supplies
 - releases of dangerous goods or waste dangerous goods
 - potential fire at the facility (to be reviewed and approved by the local fire and

- emergency service providers)
- petroleum and hazardous material spills and surface water control structure failure
- such other information as required by NSE

b) An Environmental Protection Plan (EPP) for the construction, operation and maintenance of the Project.

c) a waste management plan to be implemented during construction and operation of the Undertaking. This plan will include waste minimization procedures, recycling procedures, and disposal procedures for both solid waste and dangerous goods and waste dangerous goods or otherwise hazardous wastes generated or handled on "site" as required by NSE.

d) The locations and construction details for proposed new roads and associated infrastructure.

e) Details of site development.

f) Details of stockpiling including, as a minimum, stockpile locations, stockpile volumes, length of duration of any stockpiling activity on-site, the site and erosion and sedimentation control protection measures.

g) Plans for any shutdowns.

10.2 Refuelling must not be conducted within 100 metres of any watercourse or water resource.

10.3 The Approval Holder will implement notification procedures in accordance with s.69 of the *Environment Act* in the event of a release of a substance.

10.4 All plans related to the site operation must be resubmitted over the lifetime of the undertaking, at a schedule as required by NSE.

Original Signed By

Mark Parent
Minister of Environment