## **Environmental Assessment Approval**

Approval Date: JUL 1 8 2013

# Donkin Export Coking Coal Project Xstrata Coal Donkin Management Limited (XCDM), Proponent

## Cape Breton Regional Municipality, Nova Scotia

The Donkin Export Coking Coal Project (the "Undertaking"), proposed by Xstrata Coal Donkin Management Limited (XCDM) (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 Environmental Assessment Registration Document.
- 1.2 Expansion, modification or relocation of any aspect of the Undertaking from that proposed in the registration information must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment (EA).
- 1.3 The Approval Holder must, within two years of the date of issuance of this Approval, commence work on the Undertaking unless granted a written extension by the Minister.
- 1.4 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.

1.5 The Approval Holder must implement all mitigation and commitments in the Registration Document, unless approved otherwise by Nova Scotia Environment (NSE).

#### 2.0 Surface Water

- 2.1 The Approval Holder must obtain an approval from NSE for the construction of watercourse crossings, as specified in the Activities Designation Regulations.
- 2.2 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; and
  - 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.
- 2.3 Refuelling must not be conducted within 100 metres of any watercourse or wetland.

#### 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 Wetlands

- 4.1 The Approval Holder must obtain an approval from NSE for wetland alterations, as specified in the Activities Designation Regulations.
- 4.2 Prior to any wetland alteration, the Approval Holder must develop a Wetland Compensation Plan. The Wetland Compensation Plan and associated reporting requirements must be developed to the standards as defined by NSE and establish specific objectives intended to prevent the net loss of wetlands in accordance with the Nova Scotia Wetland Conservation Policy. Based on the results of measures taken to offset losses of wetland and of wetland functions and service, the Approval Holder must make necessary modifications to compensation plans, and/or site operations, to the satisfaction of NSE.
- 4.3 The Approval Holder must implement and adhere to the Wetland Compensation Plan once finalized and approved by NSE.
- The Approval Holder must provide an annual report to be submitted by January 15th of each year to NSE detailing the results of measures taken to offset losses of wetland and of wetland functions and service, unless otherwise approved by NSE.

#### 5.0 Flora and Fauna

- Prior to clearing and /or construction, the Approval Holder must provide DNR's Regional Services and Wildlife Division staff with digital way point files revealing precise locations for all "RED", "YELLOW" and "UNDETERMINED" listed species identified during field work within the area proposed for development. The Approval Holder must report to NSE that the files have been provided to DNR.
- 5.2 Site preparations that include deforestation, clearing and grubbing must be undertaken between September 1<sup>st</sup> and March 30<sup>th</sup> in order to minimize impacts on breeding birds that may include endangered and threatened species listed under the *Species at Risk Act* and/or *Nova Scotia*

- Endangered Species Act, unless otherwise approved by NSE.
- 5.3 The Approval Holder must establish and maintain, as a minimum, a 300 m terrestrial buffer to the cliffs to ensure seabird nesting habitat and birds are protected from mine development. Prior to development, a schedule of acceptable activities both inside and outside the buffer (seaward and terrestrial) must be filed with Nova Scotia Department of Natural Resources Wildlife Division.

## 6.0 Atmospheric Resources

- 6.1 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.
- The Approval Holder must employ GHG emissions estimation techniques approved by NSE to quantify Project related GHG emissions.
- Prior to proceeding to the Production phase of development, or at the request of NSE, the Approval Holder, must prepare and implement a GHG Management Plan to mitigate Project related GHG emissions.
- The Approval Holder must adhere to the GHG Management Plan once finalized and approved by NSE.
- 6.5 The Approval Holder is responsible for the cost of any specialized professional or consultation services deemed necessary by NSE, to assist in the technical review of the GHG management Plan.
- 6.6 The Approval Holder must report annually all Project related GHG emissions to NSE.

#### 7.0 Noise

7.1 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.

#### 8.0 Transportation

- 8.1 The Approval Holder must develop a Transportation Plan in consultation with Nova Scotia department of Transportation and Infrastructure Renewal and NSE for the transportation of coal to domestic customers and the Port of Sydney.
- 8.2 Any modification or changes to the primary method of transportation of coal from that proposed in the registration information must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment (EA).

#### 9.0 Consultation

- 9.1 The Approval Holder must operate the CLC for the duration of the undertaking and until released in writing by NSE.
- 9.2 At the request of NSE, the Approval Holder must provide records of the Community Liaison Committee (CLC) including meeting minutes, complaints and associated actions.
- 9.3 The Approval Holder must develop a complaint resolution plan to address all concerns associated with the project. The Approval Holder must appoint a contact person designated to deal with complaints, and must provide the contact information to NSE.

## 10.0 First Nation and Aboriginal Engagement

- 10.1 At the request of NSE, the Approval Holder must develop a plan to engage the Mi'kmaq of Nova Scotia, to discuss any impacts on traditional Mi'kmaq resources, and to clarify Project activities and identify associated mitigation measures.
- 10.2 The Approval Holder must invite a Mi'kmaq representative from the community in closest proximity to the Project to participate in the CLC.
- 10.3 The Approval Holder must consult with the Mi'kmaq of Nova Scotia in the development of a wetland compensation plan.

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## 11.0 Archaeological and Heritage Resources/ Aboriginal Interests

11.1 The Approval Holder must cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture and Heritage immediately upon discovery of an archaeological site or artifact unearthed during any phase of the proposed Undertaking. If the find is of certain or suspected Mi'kmaq origin, the Approval Holder must also contact the Executive Director of the Kwilmu'kw Maw-klusuaqn Negotiation Office.

## 12.0 Site Operation

- 12.1 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;
  - 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; and
  - g) Plans for any shutdowns.
- 12.2 All plans related to the site operation must be resubmitted over the lifetime of the undertaking, at a schedule as required by NSE.

#### 13.0 Site Reclamation

- 13.1 Prior to, or as part of the application for Part V Approval under the *Environment Act*, the Approval Holder must submit to NSE for review and approval, a plan for progressive reclamation.
- 13.2 The Approval Holder must report on the progress of reclamation at a schedule established by NSE.
- 13.3 The Approval Holder must post financial security to cover the reclamation of the mine development.

Sterling Belliveau

Minister of Environment