

Nova Scotia Environment and Labour (“NSEL”)

Environmental Assessment Approval

Approval Date: *Original dated February 3, 2004*

Stellarton Pit Mine Extension

Pioneer Coal Limited, Proponent

**Stellarton, Pictou County
Nova Scotia**

Stellarton Pit Mine Extension (the “Undertaking”), proposed by Pioneer Coal Limited (the “Proponent”), Stellarton, Pictou 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, extension, 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 Environmental Assessment Approval shall expire within two years of the

date of its issuance unless the Proponent commences work on the Undertaking by the end of the two year period, unless granted a written extension by the Minister,

- 1.3 a) The Proponent shall not transfer, sell, lease, assign or otherwise dispose of this approval without the written consent of the Minister.
- b) 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 under 1.4(a) of these Terms and Conditions.
- 1.4 The Proponent shall implement all mitigation and commitments in the Registration Document, unless approved otherwise by the NSEL.

2.0 Groundwater Resources

- 2.1 The Proponent, as part of the application for Part V Approval(s) under the *Environment Act*, shall provide for review and approval details of a groundwater monitoring program, including monitoring station locations, sampling parameters, and sampling frequency, as required by the NSEL.
- 2.2 The Proponent, as part of application for Part V Approval(s) under the *Environment Act*, shall provide for review and approval a mitigation plan to address degradation, reduction, or loss of water quality or quantity of residential water supplies and a contingency plan to address any unexpected well interference effects.

3.0 Surface Water

- 3.1 The Proponent, as part of the application for Part V Approval(s) under the *Environment Act*, shall provide for review and approval:
 - a) details of a surface water collection system capable of diverting all wastewater and runoff discharge, including extreme precipitation events, to the sedimentation pond system.
 - b) details of wastewater treatment and a sedimentation pond system for all surface and pit water generated from the site, its stockpiles, roads and all other surfaces. The capacity of the wastewater management system must be approved by NSEL.
 - c) an Erosion and Sediment Control Plan which covers, at a minimum,

surface infrastructure, mine development and operation, and stockpiles.

- d) details regarding the maintenance of the wastewater management system at all times, until these structures have been reclaimed.
- e) details regarding a program to monitor water quality and quantity, including, but not limited to, liquid effluent, surface water, and acid generation potential, that is capable of providing data for any necessary adjustments to mitigation measures, mine design and/or operation. All monitoring details including, but not limited to, sampling protocols, locations of all monitoring stations, parameters sampled for, the frequency of sampling, and format of reporting, must be approved by the NSEL.

4.0 Air Quality, Noise and Visual Impact

- 4.1 Petroleum products shall not be used as a dust suppressant.
- 4.2 As part of application for Part V Approval(s) under the *Environment Act*, the Proponent shall submit to NSEL for review and approval detailed plans for mitigating air particulate emissions and noise appropriate to each season of operation.
- 4.3 As part of application for Part V Approval(s) under the *Environment Act*, the Proponent shall submit to NSEL for review and approval detailed plans for monitoring air particulates and noise.
- 4.4 The Proponent shall participate in future airshed management program(s) as required by the NSEL.
- 4.5 All mining and related site activity are limited to between the hours of 7:00 a.m. and 10:00 p.m., unless otherwise approved by the NSEL, with the exception of the Highwall Miner and associated equipment for use with the Highwall Miner, specifically two loaders, and one large dozer.
- 4.6 The Proponent is not permitted to extract coal during July and August, unless otherwise approved by the NSEL. The Proponent may apply for approval to extract coal during July and August by providing adequate justification as part of their application for Part V Approval(s) under the *Environment Act*.

- 4.7 The Proponent is permitted to conduct the following activities during the months of July and August of each year:
- a) site security
 - b) environmental monitoring
 - c) site reclamation (between 7a.m. and 10p.m.)
 - d) equipment maintenance
 - e) maintenance and operation of site environmental controls.
- 4.8 The Proponent shall maintain a buffer of a minimum 30 m distance between the farthest extent of the mine operations and any property lines, unless written consent is obtained from the owner. On the eastern perimeter of the mine site, a treed buffer shall be maintained.

5.0 Aquatic Resources

- 5.1 The Proponent shall prepare and submit to NSEL a detailed assessment of existing fish habitat and benthic organism survey data. Based on results, the Proponent may be required by NSEL to continue, modify or implement a new fish habitat and benthic organism monitoring program.
- 5.2 If results of continued fish habitat and benthic organism surveys show significant change from baseline conditions, the Proponent shall make necessary modifications to pit dewatering procedures, mitigation measures and/or mine operations to the satisfaction of the NSEL. Any such changes must be reported to and approved by the NSEL and other appropriate departments.

6.0 Public Consultation

- 6.1 The Proponent shall form a Community Liaison Committee (CLC) in consultation with the NSEL, and with municipal and community representatives. The NSEL *Guidelines for the Formation of a Community Liaison Committee* shall be used for the guidance of the Proponent and community.
- 6.2 The Proponent shall submit for review and approval to NSEL a Dispute Arbitration Process and Policy to address environmental concerns that arise during the operation and reclamation of this undertaking.

7.0 Archaeological Resources

- 7.1 Prior to commencing work on the undertaking, the Proponent shall clarify with the Curator of Archaeology, Heritage Division, Nova Scotia Department of Tourism, Culture, Heritage, the extent of archaeological reconnaissance survey work completed to date on the mine site. To the satisfaction of the Curator of Archaeology, the Proponent shall complete further archaeological reconnaissance survey work on any portion of the mine site not yet complete.
- 7.2 The Proponent shall cease work and contact the Curator of Special Places, Heritage Division, Nova Scotia Department of Tourism, Culture, and Heritage, and Executive Director, Confederacy of Mainland Mi'kmaq, immediately upon discovery of an archaeological site or artifact unearthed during any phase of the proposed project.

8.0 Transportation

- 8.1 The Proponent shall address transportation related concerns by ensuring that:
- a) all trucks leaving the mine site will be fitted with tarpaulins to cover loads.
 - b) dust on mine site roads will be stabilized using water or other suitable means.

9.0 Pit Plan and Operation

- 9.1 The Proponent, as part of the application for Part V Approval(s), shall provide for review and approval:
- a) details of stockpiling (coal, overburden, and wasterock) at the proposed mine site and existing mine site west of MacGregor Avenue, including, as a minimum, stockpile locations, stockpile volumes, length of duration of any stockpiling activity on site, and erosion protection measures.
 - b) details of all infrastructure on the west side of MacGregor Avenue, including crushing, blending, and load-out facilities, to be used.
 - c) plans for shutdowns.
 - d) details and inventories of any chemicals to be used.
- 9.2 Blasting is not permitted.

- 9.3 If all necessary properties outlined in the Registration Document are not obtained then any resulting proposed changes to the mine as proposed in the Registration Document shall be submitted to the Environmental Assessment Branch for review and may require an environmental assessment.

10.0 Site Reclamation

- 10.1 The Proponent shall ensure the preparation of a preliminary reclamation plan for approval by the NSEL and the appropriate regulatory departments or agencies prior to the commencement of mineral extraction. This shall include specifications on how progressive reclamation will be maximized at the mine.
- 10.2 Mining operations must be completed and reclaimed to the satisfaction of the NSEL and the appropriate regulatory departments.

11.0 Contingency Plan

- 11.1 The Proponent shall provide for review and approval a contingency plan that addresses accidental occurrences including, but shall not be limited to:
- a) surface water control structure failure,
 - b) spills or fire, and
 - c) procedures for responding to incidents occurring during times when the facility is not staffed (eg. evenings, weekends, holidays).

Original Signed

Kerry Morash
Minister of Environment and Labour