

SECTION 1 • INTRODUCTION

1.1 PROPONENT INFORMATION

Cumberland Resources Ltd. (Cumberland) is the sole owner of the Meadowbank project and the proponent for the environmental review process. Contact information is as follows:

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Cumberland is committed to the sustainable development of the Kivalliq region and will strive to maximize the benefits of the project for all parties involved while minimizing or eliminating any negative impacts or long-term influences on the environment and local communities. This approach will continue through all phases of mine development and operation. Cumberland is also committed to the following:

- *Supporting the local community for procuring resources and personnel wherever possible.* During the 2002 field season, Cumberland was one of the largest private employers in Baker Lake, with local individuals comprising 54% of the project's workforce. Similar employment averages have been maintained since 1995 when exploration activities began. . Since 1995, 20% of Meadowbank project expenditures (\$4.0 M) have flowed through the Kivalliq district of Nunavut.
- *Maintaining open lines of communication between all parties involved.* Extensive traditional knowledge has been gained and community input has been solicited through meetings, personal interviews, site visits, discussions with local heritage associations, and traditional knowledge-based land use maps. Meetings and discussions are ongoing to ensure Cumberland has a significant knowledge base from the many generations and inhabitants in the project region.
- *Understanding and integrating the project within a context of ecosystem integrity, social health, and economic stability.* Cumberland's objective is to minimize disturbance to the local environment during operations, and leave the site in as natural a state as possible after closure. Post-closure monitoring will be a key component in ensuring this objective is realized.

1.2 PROJECT FACT SHEET

Project	Meadowbank Project
Property	Project property covers 28,888 ha and consists of ten grandfathered Crown mining leases and three exploration concessions from Nunavut Tunngavik Inc. (NTI). The grandfathered Crown mining leases, encompassing 7,370 ha, cover the area surrounding the four gold deposits near Third Portage Lake: Third Portage, North Portage, Goose Island and the Bay Zone. In 2000, the exploration program discovered the "Vault," a deposit on NTI exploration concession BL14-99-01 near Third Portage Lake.
Metals	Gold
Resource	3.0 million ounces, of which approximately 2.2 million ounces is to be mined (as of January 2002).
Mine	Five separate gold deposits to be mined by a combination of open pit and underground mining. Where necessary, water retention dykes will be constructed in 2 to 6 m deep lakes to allow open pit mining of shallow resources beneath the lakes.
Process	On-site processing of 4,700 t/d (1.7 Mt/a) ore to recover approximately 246,000 oz of gold annually. The currently preferred process option includes conventional single-stage jaw crushing, two-stage grinding (SAG and ball mills), gravity concentration, sulphide flotation, cyanide leaching, cyanide destruction, and refining to doré bars.
Life of Mine	Based on studies and reports to date, the mine life will be approximately 9 to 10 years. It is reasonable to expect this will be extended as a result of ongoing exploration.
Personnel	Approximately 250 personnel will be employed at the mine on a fly-in/fly-out rotation.

1.3 LEAD AUTHORIZING AGENCY & ROLE

The lead authorizing agency is the Nunavut Impact Review Board (NIRB), whose primary functions are to screen the project proposal to determine whether a review is required, to set the terms and conditions for the project to proceed, and to provide a Screening Decision Report to the Minister.

Screening will involve a review of all potential ecosystem and socioeconomic impacts of the project. Depending on the outcome of the Screening Decision Report, NIRB may be the lead agency throughout the entire permitting process.

1.4 REQUIRED APPROVALS, PERMITS & LICENSES

Developing the Meadowbank project requires Cumberland to obtain a Project Certificate from NIRB as required by NLCA Article 12 and other regulatory instruments identified in the NLCA, in addition to a Water License, issued under the authority of the Nunavut Water Board (NWB). It is anticipated that the NWB will require Cumberland to post a bond or other form of financial security to ensure compensation in the event of any accident that directly or indirectly results in major impacts by project activities on the environment, as well as to cover the cost of planned closure, whether temporary or permanent.

A Mineral Production Lease from the Department of Indian Affairs and Northern Development (DIAND) and Nunavut Tunngavik Incorporated (NTI) will be required to operate the project. As the project is situated on Inuit-owned land, surface land leases will also be required.

A fisheries authorization under Section 35 of the *Fisheries Act* will be required. Such authorization is needed to cover the deposition of a potentially deleterious substance (mill tailings) into Second Portage Lake and for altering fish habit. Included in this authorization will be the proposed causeway to the Vault deposit, for which a Navigable Water Protection Permit (NWPP) pursuant to the *Navigable Waters Protection Act* (NWPA) (Canada) will also be required. Permits associated with the transport, storage, and use of explosives will be obtained through the Ministry of Transportation.

It is anticipated that the Water License for the project will include authorization for planned project activities such as: domestic water use, and sewage treatment and disposal. Depending upon the nature and extent of the operational monitoring program, scientific permits will be required to conduct some of the environmental monitoring activities as well.

The required approvals, permits, and licenses for all phases of the project are shown in Table 1.1 (overleaf). For an explanation of abbreviations, see the table notes or the glossary in Appendix A.

1.5 INTERACTIONS BETWEEN THE EXISTING ENVIRONMENT & THE PROJECT

The key interactions between the existing environment and the project may include:

1. potential land disturbance and the loss of vegetation resulting from the construction of the project
2. potential noise, dust, and air emissions from project activities
3. potential for release of sediment and other contaminants from project activities
4. use of fresh water from Third and Second Portage Lakes for project activities such as milling, mining, and domestic use.
5. deposition of mine rock, tailings, and treated camp discharge into Second and Third Portage lakes.
6. potential interactions between wildlife and the project
7. risk of contaminant release from accidents and/or malfunctions of the project components or during transportation of materials.

Table 1.1: Required Approvals, Permits & Licenses

Assessment & Feasibility Phase	Construction Phase	Operations Phase	Closure & Reclamation Phase
KIA	NTI – Mineral Production Lease (complete)	KIA – Land Use License, Surface Lease, Execution of IIBA	KIA Association – Closure & Reclamation Plan
NWB	DIAND – Mineral Production Lease	NWB – Water Use License	NIRB – Reclamation Plan & Certificate of Approval
NRI	KIA – Land Use License, Surface Lease, IIBA	NTI	NWB – Closure & Reclamation Plan
NIRB	NPC – Project Review	NIRB	DFO
Nunavut Department of Sustainable Development	NIRB – Project Screening; EIS Guidelines; Project Certificate	DIAND	DIAND
Nunavut Department of Culture & Heritage	NWB – Project Review; Water Licence	DFO	
	DFO – Authorization for Works Affecting Fish Habitat; Approval to Construct Water Crossings; Designation of Lake(s) for Tailings Disposal, Navigable Waters Protection Act	Environment Canada – EEM & Air Quality	
DFO			
NPC	Transport Canada	Transport Canada	
Baker Lake HTO	Environment Canada	Health Canada	
Baker Lake CLARC			
Baker Lake Elders			
Hamlet of Baker Lake			

Note: NRI = Nunavut Research Institute; DFO = Department of Fisheries & Oceans; HTO = Hunters' & Trappers' Organization; CLARC = Community Land & Resources Committee; IIBA = Inuit Impact & Benefits Agreement; NPC = Nunavut Planning Commission; EEM = Environment Effects Monitoring.

1.5.1 Project Impacts

Overall, the project is projected to have a minor impact on the existing environment in a regional context, and a low to moderate impact in a site-specific context. This will be confirmed in the EIS. The majority of project interactions with the environment will be mitigated either through project design or through an environmental management system (EMS), which Cumberland is committed to developing (see Section 6 for more details). The components of this EMS will form the primary tool for managing project interactions with the environment to minimize residual project impacts.

No significant impacts on the local or regional climate are expected to result from the proposed mine. Cumberland has designed the project such that the terrain disturbance or "footprint" of the project will be small and the effects on landscape and terrain will be restricted as much as possible. No adverse affect on permafrost is expected from any project activities or facilities.

Air quality and noise impacts from mining will be minor, both regionally and locally. Air quality impacts will be associated with engine exhaust emissions from diesel-powered generators/mobile equipment and from dust generated by project activities (vehicles, crushing, loading, and dumping of rock at the stockpiles).

1.5.2 Sustainable Development & Precautionary Principle

The Nunavut Planning Commission (1997) defines sustainable development as: "the management of natural resources and the environment in such a way that economic, social and cultural needs are met and ecological processes and natural diversity are maintained."

The Commission further states:

"The people of the region have stated clearly and consistently over the years that there must be a balance between industrial development and other human activities in order to guarantee the long-term preservation and conservation of the land, wildlife, and wildlife habitat."

Mining involves the exploitation of non-renewable resources. The objective for Cumberland is to carry out this exploitation in a way that allows post-mining use of the land for other purposes. For the Meadowbank project this will be accomplished by minimizing disturbance (consistent with economic development of the project and safety of operations) and by the thorough and progressive reclamation of the site.

A requirement of the NWB for issuing a Water License will be the application of the *precautionary principle*, which means environmental stewardship whereby potential environmental impacts that may occur, but for which there may be no scientific certainty, are addressed. The EIS will address all known potential effects of the project on the environment, economy, culture, and heritage of the region. Mitigation measures and an adaptive management system will be key operational components, the latter of which will be comprehensive in its approach, and flexible enough to respond to any unexpected change. Follow-up monitoring programs will provide the information necessary to implement corrective measures addressing any unwanted changes as a result of project-specific activities.

For more information on management plans, mitigation measures, and monitoring programs, see Section 6.