DRAFT SCOPE LIST FOR THE NIRB'S ASSESSMENT OF THE PHASE 2 HOPE BAY BELT PROJECT

The scope of the Nunavut Impact Review Board's (NIRB or the Board) assessment of the Phase 2 Hope Bay Belt project proposal (the Project) is based on the requirements of Section 12.5.2 of the Nunavut Land Claims Agreement (NLCA), the NIRB's 10 Minimum Environmental Impact Statement (EIS) Requirements and the project proposal submitted by Hope Bay Mining Ltd. (HBML or Proponent) to the NIRB on December 21, 2011.

The process of "scoping" intends to identify the possible range of impacts from a project, including the physical works and activities proposed, and the factors to be assessed (i.e., the ecosystemic and socio-economic environments and components to be considered in assessing the effects of the project) in the context of spatial and temporal scales at various project stages including preconstruction, construction, operation, modification/maintenance, decommissioning, abandonment, reclamation and others. The NIRB will consult with the public and interested parties to identify Valued Ecosystem Components (VECs) and Valued Socio-Economic Components (VSECs) that should be addressed by the Proponent's Environmental Impact Statement (EIS). Through these efforts, including the solicitation of public comment and community consultation visits, the NIRB will finalize its Scope List for the Project. The following presents a draft of that list:

1) Project Description, including the purpose and need for the Project

The scope of the development under review includes the physical works and activities or undertakings that constitute the Phase 2 Hope Bay Belt project proposal as submitted to the NIRB by HBML on December 8, 2011. The temporal scope for the Project includes each stage of the project, including construction, operation, maintenance, temporary closure, final closure, post-closure periods and planned exploration to be undertaken in conjunction with the Project.

Project Proposal Summary

The Phase 2 Hope Bay Belt Project is a proposed gold mining and milling operation located approximately 125 kilometres southwest of Cambridge Bay in the Kitikmeot region. The Project will have an estimated milling rate of up to 2 million tonnes of ore per year, with anticipated total waste rock and tailings production of 350 million tonnes and 25 million tonnes, respectively. The Project would facilitate gold mining at the Madrid/Patch and Boston mineral deposits in the Hope Bay greenstone belt using both open pit and underground mining methods.

The project proposal includes the expansion of existing infrastructure at the Doris district[1], as well as the development of new infrastructure at the Madrid/Patch and Boston districts to support belt-wide mining operations. The Proponent has indicated that the number of personnel on the site at any given time is not expected to exceed 1,080 with a total of 720 on-site personnel during peak construction and 540 personnel during operations. Personnel at all project phases would be employed on a fly-in/fly-out rotational basis. HBML proposes to commence project development in 2014 – 2015, with a projected mine life of 15 years.

Project Components

(a) Doris North Mine Site[2]

Activities and Facilities: HBML proposes to use and/or expand existing facilities and associated activities at the Doris site including use of the existing camp to accommodate an anticipated 360 persons during future construction of the Project; establishment of a heliport; expansion of the existing all-weather airstrip; use of potable water to be sourced from Doris Lake (as previously permitted) with use of existing sewage treatment plants; expansion of maintenance shops, administration buildings, mine dry (to include lockers, sinks, and changing rooms for personnel); use of reagent storage; development and operation of a batch plant, crushing circuit and mineral processing plant in support of underground mining activities; waste rock and ore storage; surface water management (to include pollution and sediment control or supernatant ponds); use of previously permitted fuel storage facilities with capacity of up to 5 million litres (ML); tailings conveyance and storage (tailings storage and disposal options include sub-aqueous, sub-aerial, dry-stack and deep sea); development and operation of a landfill at quarried out areas; power generation and distribution; and the establishment and use of other miscellaneous support facilities.

(b) Roberts Bay Port Site

Activities and Facilities: Activities and facilities proposed include the expansion of existing deep sea and shallow water port facilities; construction of waste management buildings and maintenance shops; use of two (2) existing moored accommodation barges to house 100 personnel; and use of an additional 60 ML of diesel fuel to be stored at the existing site's main fuel storage facility as well as the establishment of additional dispensing systems.

(c) Madrid/Patch Mine Site

Activities and Facilities: Activities and facilities proposed include construction and operation of an all-weather airstrip; establishment of administration buildings, maintenance shops and mine dry (to include lockers, sinks, and changing rooms for personnel); diesel fuel power generation and related distribution infrastructure; establishment of fuel storage facilities; additional explosives storage facility; development of multiple open pit and underground mining operations; crushing circuit; potable water withdrawal from Patch

[1] The NIRB has previously reviewed the related but distinct Doris North Gold Mine project (NIRB File No. 05MN047) in accordance with Part 5 of Article 12 of the Nunavut Land Claims Agreement (NLCA). The Doris North Gold Mine project was allowed to proceed pursuant to the NIRB Project Certificate No. 003 which was issued September 15, 2006.

[2] HBML currently owns and operates the Doris North Project (NIRB File No. 05MN047), a prospective gold mining and milling operation located within the Hope Bay greenstone belt, which has yet to commence full mining and milling operations.

Lake; establishment of sewage treatment plant and sanitary landfill; ore and waste rock storage areas; and other miscellaneous support facilities.

(d) Boston Mine Site
Activities and Facilities: Activities and facilities proposed include establishment of camp facility for up to 180 personnel; establishment of heliport and all-weather airstrip; withdrawal of potable water from Aimaokatalok Lake; establishment of sewage treatment plant; establishment of maintenance shops, administration buildings, mine dry (to include lockers, sinks, and changing rooms for personnel); reagent storage; additional explosives storage facility at Tail Lake and Boston Site; development of an open pit (to include the diking of a portion of Aimaokatalok Lake) and multiple underground mining operations; establishment and operation of a crushing circuit and a mineral processing plant; waste rock and ore storage; surface water management (including pollution and sediment control or supernatant ponds); fuel storage; tailings conveyance and storage (land-based dry stack or sub-aerial tailing facilities and/or placement of some tailings underground); development of a landfill at emptied quarry areas; power generation and distribution; establishment of sewage treatment plant; establishment of mine water conveyance and treatment facilities; and other miscellaneous support facilities.

(e) Mid-belt Site
Activities and Facilities: Activities and facilities proposed include the installation of a mobile exploration camp to accommodate 180 personnel; temporary fuel storage at cache location (location to be determined); establishment of heliport, administration buildings and maintenance shops; and installation of potable water and sewage treatment plants using a number of lakes in the region as water sources.

(f) Mobilization and Shipping
Activities and Facilities: Activities and facilities proposed include annual sealift of fuel, equipment and supplies via the Arctic Ocean to Melville Sound and then to the port facility at Roberts Bay during the ice-free (open water) season in the summer months; transport of some equipment and supplies to project site using Lockheed 382 Hercules, Boeing 737, and other aircraft; use of laydown areas at various locations at the project site; use of floating line to deliver fuel from barges and/or ships to land-based storage tanks; and shipment of gold concentrate (via sealift) and/or doré gold bars (via airlift) off site; construction of either or both all-weather or ice/snow roads from the pre-existing roads at Windy Camp to the Boston site, including several proposed water crossings, to allow for material hauling, facilitate site services, and access for exploration.

(g) Abandonment, Decommissioning and Reclamation
Activities and Facilities: Activities and facilities proposed include mine decommissioning and removal of infrastructure and equipment from site; remediation of contaminated areas; reclamation of disturbed areas; enhancement of natural re-vegetation; and post-closure environmental monitoring, including installation of monitoring equipment.

2) Anticipated ecosystemic and socio-economic impacts of the Project

The assessment of the potential for ecosystemic and socio-economic impacts by the proposed project components and activities as outlined in the section above, and extending through all the phases of the Phase 2 Hope Bay Belt project, must refer to the environmental

and socio-economic factors listed below. The scope of potential impacts caused by the project components, activities, and undertakings to environmental and socio-economic factors shall take into account the appropriate temporal and spatial boundaries and is expected to draw upon relevant information from scientific sources and traditional knowledge.

a) Air quality
b) Climate and meteorology
c) Noise and vibration
d) Terrestrial environment, including
    i. Terrestrial ecology
    ii. Landforms and soils
    iii. Permafrost and ground stability
e) Geology (including geochemistry)
f) Hydrology (including water quantity) and hydrogeology
g) Groundwater and surface water quality
h) Sediment quality
i) Freshwater aquatic environment, including
    i. Aquatic ecology
    ii. Aquatic biota including representative fish as defined in the *Fisheries Act*, aquatic macrophytes, benthic invertebrates and other aquatic organisms
    iii. Habitat including fish habitat as defined in the *Fisheries Act*
    iv. Commercial, recreational and Aboriginal fisheries as defined in the *Fisheries Act*
j) Terrestrial vegetation
k) Terrestrial wildlife and wildlife habitat, including
    i. Representative terrestrial mammals to include caribou, caribou habitat migration and behaviour, muskoxen, wolverine, grizzly bears, polar bears, wolves and less conspicuous species that may be maximally exposed to contaminants
    ii. Wildlife migration routes and crossings
l) Birds and their habitat, including
    i. Raptors
    ii. Migratory birds
    iii. Seabirds
m) Marine Environment, including
    i. Marine ecology
    ii. Marine water and sediment quality
    iii. Marine biota including fish and benthic flora and fauna
    iv. Marine habitat
    v. Commercial, recreational and Aboriginal fisheries as defined in the *Fisheries Act*
n) Marine Wildlife
o) Terrestrial and Marine Species at Risk
p) Socio-Economic Factors, including
    i. Economic development opportunities
    ii. Employment
    iii. Education and training
    iv. Contracting and business opportunities
    v. Population demographics

vi. Revenue (tax, royalties, etc.)

q) Traditional activity & knowledge including
    i. Land use
    ii. Food security
    iii. Language
    iv. Cultural and commercial harvesting
r) Non-traditional land use and resource use
s) Heritage Resources
    i. Archaeology
    ii. Palaeontology
    iii. Cultural
t) Health and Well Being
    i. Individual and community wellness
    ii. Family and Community Cohesion
u) Community infrastructure and public services
v) Health and safety including employee and public safety
w) Residual and Cumulative Effects including to wildlife such as barren-ground caribou populations
x) Transboundary Effects

3) Anticipated Effects of the Environment on the Project

The scope of the assessment will include the potential anticipated effects of the arctic environment on the project throughout the project's life. The scope of these factors is to include:

a) Climate and Meteorology
b) Permafrost
c) Geotechnical hazards (including slope movement, differential or thaw settlement, frost heave, and ice scour)
d) Subsidence
e) Flooding
f) Unfavourable geological conditions

4) Steps which the proponent proposes to take including any contingency plans, to avoid and mitigate adverse impacts

The scope of the assessment will include any contingency plans or risk management plans to avoid and mitigate adverse impacts caused by the proposed project components and activities. These plans must extend, where relevant, through all project phases. These plans shall take into account the appropriate temporal and spatial boundaries and are expected to draw upon relevant information from scientific sources, best practice and traditional knowledge and are to include, but not be limited to:

a) Emergency and spill response
b) Hazardous materials management
c) Accidents and malfunctions
d) Regulatory requirements
e) Mitigation measures

5) Steps which the Proponent proposes to take to optimize benefits of the Project, with specific consideration being given to expressed community and regional preferences as to benefits

The scope of the assessment will include steps which the Proponent proposes to take to optimize benefits of the project, and should include, but not be limited to:

a) Compensation and benefits
b) Health benefits
c) Human health and well-being
d) Employment
e) Education and training
f) Land use
g) Contracting and business opportunities
h) Any non-confidential details from the Inuit Impact Benefits Agreement

6) Steps which the Proponent proposes to take to compensate interests adversely affected by the Project

The scope of the assessment will include the steps which the Proponent proposes to take to compensate interests adversely affected by the project including all non-confidential process and content details pertaining to any Inuit Impact Benefit Agreement pursued in connection with the Project.

7) The monitoring programs proposed by the Proponent to identify and manage ecosystemic and socio-economic interests potentially affected by the Project

The scope of the assessment will include any programs that will be established to monitor the potential ecosystemic and socio-economic impacts caused by the proposed project components and activities.

8) The interests in lands, waters and other resources which the Proponent has secured or seeks to secure

The scope of the project under review will include any interests in lands, waters and other resources which the Proponent has secured or seeks to secure based on the proposed works and activities or undertakings that constitute the Phase 2 Hope Bay Belt project proposal.

Nunavut Impact Review Board	Project Certificate
Nunavut Water Board	Type 'A' Water Licence
Kitikmeot Inuit Association	Land Use Licences, leases, easements, right-of-ways, Quarry Concession Permit(s) and various other permits
Mineral Production Lease	Nunavut Tungavik Inc.
Government of Nunavut-Community and Government Services	Quarry approval and Right-of-Way approval
Government of Canada – Department of Culture and Heritage	Archaeology Permit(s) and Palaeontology Permit(s)

Nunavut Research Institute	Socio-economic & Traditional Knowledge Research Licence, Scientific Research Licence
Aboriginal Affairs and Northern Development Canada	Class 'A' Land Use Permit, rights-of-ways, Land Lease, Waterlot Lease and Quarry Permit(s)
Environment Canada	Schedule 2 Amendment to Metal Mining Effluent Regulations Disposal at Sea Permit required for upgrading the existing deep water and shallow water port.
Fisheries and Oceans Canada	Section 35 authorization under the fisheries protection provisions of the *Fisheries Act*
Natural Resources Canada	Licence for a Factory and Magazine
Transport Canada	Navigable Waters Approval(s) and/or Exemption(s) and Oil Pollution Prevention/Emergency Plan as per the *Canada Shipping Act*
Workers Safety & Compensation Commission	Permit to Store Detonators, Explosives Use Permit

9) Options for implementing the Project

The scope of the assessment will include project alternatives including alternatives to individual components/activities, alternate timing and development options, as well as presenting the "no go" option as it pertains to the overall Project.

10) Any other relevant matters

The scope of the assessment will include any other matters that the NIRB considers relevant, including:

a) Technical innovations previously untested in the Arctic including new technology for mine design, operation, and tailings management;
b) Traditional knowledge;
c) Statement of consultation principles and practices;
d) Significant effects analysis;
e) Sustainability analysis;
f) Interactions between Valued Ecosystem Components and Valued Socio-Economic Components;
g) Discussion of similar resource development projects in other jurisdictions; and
h) Planned future development and the associated level of uncertainty.