

Executive Summary

Application for Amendment No. 2 of Water Licence No. 2AMDOH-0713

In this application, Hope Bay Mining Ltd. (“HBML”) is requesting that the Nunavut Water Board (“NWB”) amend Water Licence No. 2AM-DOH0713 to permit HBML to construct and operate the facilities described in the following paragraphs. Construction will occur in 2011. In order to meet project construction timelines, HBML respectfully requests permission to commence with construction of its revised Fuel Storage and Containment Facility no later than March 2011. Approval of other package components will not be required before June 2011. The changes described below arise from continued detailed project engineering and are designed to improve reliability, safety and access at the Doris North Project.

HBML requests that the NWB revise the definition of Fuel Storage and Containment Facility currently set out in 2AMDOH-0713 to permit the installation of four additional 5.7 ML total storage capacity diesel fuel tanks and one 1.5 ML tank for bulk storage of Jet A fuel (the “Proposed Additional Roberts Bay Tanks”) at a site near (approximately 100 m south) the existing 5.7 ML fuel tank at Roberts Bay. Once all tanks are filled, total diesel storage capacity at the Doris North Project site will be increased from 14 ML to 36 ML for diesel fuel and will allow for storage of 1.5 ML of Jet A fuel. The vast majority of the additional fuel capacity will be used for construction and operation of the Doris North Project and mining related activities. Some of the fuel stored at the Doris North Project will be used for exploration activities in other areas of the Hope Bay belt. An additional sump and monitoring point will be required in respect of this facility, but HBML has not identified any impacts on water that have not been previously assessed for the other tank farms that would result from the construction and operation of this facility. This expanded facility would allow HBML to move away from freezing in ice class vessels in Roberts Bay, which will improve the environmental risk profile of project fuel handling.

Using the rock quarried during the construction of the revised Fuel Storage and Containment Facility, HBML will construct a short all weather service road bypassing the airstrip (which currently operates as both airstrip and road) and also extend its airstrip to permit landing of larger aircraft at site. These measures will improve access from Roberts Bay to Doris because it will eliminate delays waiting for aircraft and improve safety because it will eliminate vehicle traffic from the airstrip. No water crossings have been identified in respect of the road and although some water will be required for dust suppression purposes, HBML believes that the water volumes already permitted under 2AM-DOH0713 will be sufficient to meet these needs.

HBML also requests permission to switch the Doris North camp water source from Doris Lake to Windy Lake as excessive ongoing algae production in Doris Lake has made it unsuitable for continued domestic use (HBML notes these algae production levels are due to natural processes and not related to the Project). HBML will be re-routing supply

pipelines accordingly from Windy Lake to Doris Camp along the Doris / Windy Road. HBML believes this change will improve system functionality and will ensure compliance with the parameters set out in 2AM-DOH-0713.

HBML also requests permission to construct purpose built secondary containment facilities for the relocated reagent and cyanide storage. The amount of on-site reagent and cyanide storage has not changed from the original design intent, but the proposed location of these facilities has changed from the Roberts Bay and Doris North Camp laydown areas to Lower Reagent Pad.

HBML also requests permission to amend condition D24 of 2AM-DOH0713, which states “The Licensee shall not use waste rock from underground for the construction of any infrastructure” to permit HBML to use waste rock from underground for the construction of infrastructure, provided such rock has been tested to ensure that all rock used in construction is non-acid generating, non-metal leaching and does not contain cyanide leach residue. This change was necessitated as recalculation of the waste rock produced by the Doris North Mine indicate it is not possible as was predicted in the original Miramar Project Description to place all waste material back underground as fill.

Executive Summary

Application for Amendment No. 3 of Water Licence No. 2AMDOH-0713/ Amendment No. 1 of Doris North Project Certificate

Based on encouraging results from its continuing exploration in the vicinity of the Doris North Project, Hope Bay Mining Ltd. (“HBML”) now anticipates it will use the existing Doris North portal to begin mining the Doris Lower, Doris Central and Doris Connector ore bodies commencing sometime in 2012. HBML anticipates a mining rate of 1000 tpd (yearly average) and that ore from these deposits will be processed by the existing mill at 800 tpd (yearly average). Mining these deposits in addition to the Doris North/Doris Hinge deposit will extend the mine life of the originally estimated 2-year Doris North Project to an estimated 4-6 years. No changes are required to Doris North facilities in order to proceed with these mine plan changes, with the exception of expansion of the already approved waste rock and ore storage areas and Doris North camp. HBML anticipates that any ground water encountered in the talik under Doris Lake during mining of Doris Lower, Doris Central and Doris Connector can be managed using existing facilities. Following the deposit of tailings generated by mining Doris North, Doris Lower, Doris Central, and Doris Connector HBML anticipates that an adequate water cover will be maintained in its tailings impoundment area (“TIA”) to meet the current approved closure plan.

In this application, HBML is requesting that the Nunavut Water Board (“NWB”) amend Type A Water Licence No. 2AM-DOH0713 to permit HBML to construct and operate the facilities described in the following paragraphs. If regulatory approval is granted, construction and operational changes described in this application will occur in 2012-2013. HBML is also requesting in this application an early renewal of Type A Water Licence No. 2AM-DOH0713 which will permit a license expiry date of 2017, which will coincide with the now anticipated end of Doris North Project production.

Associated with the expansion in production, HBML is requesting permission to construct expanded ore and waste rock pad areas as illustrated in the enclosed engineering drawings. HBML also wishes to install an additional 180 person sewage treatment facility (“STP”) at the Doris North Camp. HBML will request a small increase in domestic water consumption corresponding with the installation of the additional STP.

Additionally, HBML is requesting permission to construct a water treatment plant on site to ensure that discharge from its TIA meets the required criteria. As such, the on site laboratory previously proposed by Miramar will not be required.

HBML will request amendments to NIRB Project Certificate No. 003 in addition to amendments to Type A Water Licence 2AMDOH-0713 as necessary to permit these changes.

Executive Summary

Doris North Phase 2 Project Description

Hope Bay Mining Ltd. (“HBML”) now views the Doris North Project as Phase 1a of the progressive development of the Hope Bay Belt. The Doris North Project will start limited gold production from one mine in the north end of the belt (it is noted HBML will shortly seek approval under a proposed amendment of Type B water licence 2BE-HOP0712 to commence advanced underground exploration of certain areas of the Doris and Madrid deposit in Q4 2011. This activity is considered “Phase 1b”).

HBML’s Phase 2 Project Proposal will describe the incremental development of the Hope Bay Greenstone Belt as a mining district through a series of underground and open pit mines, processing and tailings facilities, and infrastructure including but not limited to an expanded port, new airstrip, wind farm, camps and roads that connect the Roberts Bay port to the Boston property approximately 80k to the south. The Phase 2 Project will permit HBML to expand production mining and milling to include the Madrid and Boston deposits, and to complete mining of the Doris deposit.

The following information is designed to give a brief overview of the proposed Phase 2 Project:

- **Location** - The Hope Bay Belt is located within the Territory of Nunavut, Canada, approximately 685 km northwest of Yellowknife and 125 km southwest of Cambridge Bay. The closest communities to the Hope Bay Belt are Omingmaktok, located 75 km to the south west and Kingauk, located 110 km to the southwest.
- **Property** - Project property covers more than 1,000 square kilometres and is overlain by 100% Inuit Owned Lands.
- **Metals** – Gold, Silver, Zinc, Copper, Lead
- **Mine Method** - The already permitted Doris North deposit will start in October 2010 to be accessed from the Doris North Portal and decline. Depending upon the results of underground exploration and geotechnical studies, the Doris resource or may not ultimately need to be accessed by additional portals and declines during Phase 2. Madrid and Boston are to be mined primarily through a combination of underground development and small open pits. Development of the Boston open pit will require shallow dikes around the edges of the deposit near the shore of the lake. All other open pits are currently proposed to be on dry land.
- **Production Rate (Ore)** - Milling rate requirements for each district are nominally projected at 1-2 million tonnes per annum. Total tailings production is anticipated to be approximately 26 million tonnes for all three districts. By comparison, Con Mine produced about 30 million tonnes during its life. Ultimate tonneages will

not be determined until additional underground exploration takes place once mining commences.

- **Production Rate (Waste)** - Anticipated waste rock production will be approximately 19 million tonnes in the Doris District, 19 million tonnes in the Madrid District, and 11 million tonnes in the Boston district.
- **Water Management** - Water will be managed in compliance with current Canadian and Nunavut standards. Water treatment will be required for potable camp water and the septic disposal system, mill, tailing underground, and open pit water will require monitoring, management and possibly treatment before release to the environment.
- **Access** –The primary access route to the site for fuel, equipment, and supplies will continue to be via sealift through the Arctic Ocean to Melville Sound and Roberts during the short ice free passage each summer. This will be supplemented by air support.
- **Infrastructure** - The development of Phase 2 of the Hope Bay Project is constrained by infrastructure development, including the need for:
 - expanded deep sea and shallow water port facilities;
 - additional airstrip;
 - additional winter and all weather roads, including extension of the existing all weather road from Roberts Bay to Doris to Madrid / Patch to Boston;
 - camp facilities in each district;
 - additional fuel storage;
 - expanded administration and assay laboratory buildings, which will continue to be located at Doris North;
 - maintenance facilities at each major mining location – Doris, Madrid / Patch - Boston - e.g. heliports, airstrips, reagent storage, quarries, and power generation;
 - portable self-contained (water, waste, maintenance, and supplies) temporary construction camps;
 - wind farm; and
 - expanded Phase I Doris North Project mill. Phase 2 may require construction of additional milling locations in the Madrid / Patch and Boston District, with total milling tonnages expected to be a nominal 1-2 million tonnes per annum during this phase of the project. Options of a central mill location at either Doris District or Madrid District vs. also placing a mill at Boston are under consideration to handle the bulk of the milling requirements for the entire Phase 2 development.

The development of each facility is planned to progress from the existing facilities in Roberts Bay and the Doris District southward into the Madrid and

Boston areas. To decrease the construction requirements on site HBML will to the degree possible use a modular approach to facility development.

- **Tailings disposal** - HBML is currently considering several tailings disposal options. A preferred option has not yet been selected. HBML is not currently considering making application to add any additional lakes to Schedule 2 of the *Metal Mining Effluent Regulations* to permit use as a tailings impoundment area. It is anticipated that flotation processes will be used to create a bulk tailings stream that will have relatively benign environmental characteristics, and a smaller tailings stream associated with other milling processes including cyanide, which will also likely be more highly mineralized. Capacity for tailings in the approved Doris North tailings impoundment area could be expanded by converting facility into a either a sub-aerial or possibly a dry stack tailings facility which would involve creating new water management structures to manage the expanded disposal requirements of the project. Additional flotation tailings land disposal options include dry stack facilities and new land based sub-aerial hydraulically tailings facilities. Some placement of cyanide and flotation tailings underground is possible. Cyanide destruction would be performed prior to any deposition of cyanide tailings above or underground.
- **Personnel** - During the peak construction phase, it is anticipated that up to approximately 500 personnel will be located on site and dedicated to the Phase 2 Project. The permanent camps will house approximately 400 people, which is only slightly larger than the Doris Mine at its peak but the staff will be spread over several operating mines. Approximately 400 personnel will be employed at the mine on a fly-in/fly-out rotation.
- **Phase 2 Life of Mine** - Approximately 15 years of operation, based on current geologic knowledge. Ongoing exploration is an important part of ensuring that maximum economic value is extracted from each deposit, while respecting the need for high standards of environmental stewardship and creating a sustainable operation that provides long term benefits for the Kitikmeot Region and Nunavut.