



## **Proponent's Project Description**

By way of an updated project summary, Miramar plans to construct and operate a short-life underground gold mine (the "Doris North Project"), on Inuit Owned Land at the north end of Doris Lake in Nunavut, about 160 km southwest of Cambridge Bay in the West Kitikmeot Region. The nearest communities are Umingmaktok (65 km to the west) and Bathurst Inlet (110 km to the southwest). The site is 5 km south of the Arctic Coast. The Doris North Project is the first commercial mineral development proposed for the Hope Bay greenstone belt; it will be a small gold mine, extracting 458,000 tonnes of ore and processing it at a rate of 690 tonnes per day to yield 307,000 ounces of gold over a 24-month operating period.

The Doris North Project is a small mining project. During operations it will generate an average of 150 person years of employment for two years (a quarter of the employment created at the Ekati Mine). Major socio-economic impacts will relate to jobs and business opportunities and these will be positive throughout the life of the mine. Miramar plans to negotiate an Inuit Impact and Benefits Agreement with the Kitikmeot Inuit Association. This agreement will address socio-economic impacts from the Doris North Project and will accentuate the positive impacts. As part of the negotiated agreement, a community liaison officer will be employed to provide feedback to communities and to the company on progress with job training and hiring, other socio-economic issues, and on environmental management at the Project site.

Access to the underground mine will be through a tunnel into bedrock and ramping downwards approximately 36.5 m below surface. The mine entrance will be located close to the ore processing and other surface facilities. The processing plant will consist of modularized pre-fabricated processing equipment, shipped to site and re-assembled. The ore will be crushed, conveyed to an ore stockpile and then fed to a single ball mill. Gold recovered from both the gravity and leach circuits will be smelted on site and shipped in the form of ore bars.

Tailings discharged into Tail Lake will be kept under water. A rockfill dam will be constructed at the outlet from Tail Lake to contain the deposited material. When practical, water will be reclaimed from Tail Lake as mill process water. All water discharged will be in accordance with discharge criteria set by the Nunavut Water Board in the project's water use license.

The Doris North Project site is remote. Materials and supplies will be transported to site by annual sealift using conventional tug and barges. A 6 million-litre capacity fuel storage tank farm, supply laydown area and a barge off-loading causeway will be constructed at the south end of Roberts Bay. A 5 km all-weather road will be constructed to transport materials from Roberts

Bay to the Doris North Project site. Employees will travel to site by aircraft landing on a new 914 m long all-weather airstrip built as a widened section of the all-weather road from Roberts Bay.

A non-hazardous solid waste disposal site will be constructed at one of the quarries used to provide broken rock for the construction of the site infrastructure. Potable and process water will be pumped from Doris Lake. A boat and floatplane rockfill dock will be constructed in Doris Lake. With current ore resources, the mine will have a 24-month operating life and employ approximately 150 persons. The Doris North Project is situated entirely on land owned by the Kitikmeot Inuit Association (KIA). The Hope Bay greenstone belt lies within the seasonal ranges historically used by three barren ground caribou herds: the Bathurst; the Victoria Island; and the Queen Maud Gulf herds. Seven fish species occur in the Doris North Project area: Arctic char, broad whitefish, cisco, lake trout, lake whitefish, least cisco and ninespine stickleback.

Local hydrology will be affected in four ways, changes to existing runoff patterns due to infrastructure development, interruption in normal flow from Tail Lake, through process water use from Doris and Tail Lake, and seasonal discharge by siphon pipe from Tail Lake directly into Doris Creek. Mill effluent will be treated for cyanide detoxification before discharge into Tail Lake but will result in impacts on water quality.

The Doris North Project is located approximately 250 km northeast of Echo Bay's Lupin Mine on Contwoyto Lake, the closest operating mine. The Doris North Project is one of several potential developments in the West Kitikmeot. Others include proposed mines the Jericho Diamond Project, Ulu, Izok Lake, George Lake and Goose Lake projects as well as continued mineral exploration throughout the area. The Jericho Project is located approximately 240 km southwest of the Doris North Project.

Post-closure plans are to remove all of the buildings and associated infrastructure. The water within the Tail Lake tailings impoundment area will be treated until water quality meets licensed discharge criteria.

Miramar Hope Bay Limited will require approvals including surface land leases to allow their project to proceed on Inuit owned land. Also, a fisheries authorization under section 35 of the Fisheries Act will be required to cover the deposition of a deleterious substance (mill tailings) into Tail Lake and for alteration of fish habitat covering the proposed use of Tail Lake as a tailings impoundment. Included in this authorization will be the stream crossing at the Doris Lake outflow and the proposed causeway in Roberts Bay. A Navigable Water Protection Permit

pursuant to the Navigable Waters Protection Act (Canada) is required to construct the causeway in Roberts Bay and the water crossing over Doris Lake outflow. Current plans will require the issuance of a number of quarry permits. KIA, the land owner, is the designated authority for the approval and issue of these quarry permits. Permits associated with the transport storage and use of explosives, if required, will be obtained through the appropriate agency.

It is anticipated that the Nunavut Water Board (NWB) water license for the Doris North Project will include authorization for "...planned project activities such as: freshwater for camp and industrial activities, disposal of waste from camp, mining and milling operations, minewater and tailings management, ore and waste rock management, financial assurance and water use fees, monitoring and reporting requirements, abandonment and restoration, etc.

For further information on water licensing proceedings, please contact the NWB.

### **Proposed Next Steps**

NIRB proposes to conduct a Pre-Hearing Conference (PHC) beginning April 1, 2003 in Cambridge Bay and ending on or before April 10, 2003. Additional one-day PHC meetings would be scheduled for Kugluktuk, Gjoa Haven, and Taloyoak during this same time period. Roughly two weeks following the PHC, NIRB would issue final directions for the public hearing allowing for at least 60 days to review the final EIS and 45 days notice for the final hearing.

The purpose of the April 1<sup>st</sup>, 2003 PHC would be to:

- 1) Discuss, at least in general, the adequacy of the *draft* EIS and how it meets NIRB's requirements including the 10 additional issues identified for Part 5 Reviews referred to above;
- 2) Discuss the deadline for the *final* EIS;
- 3) Date, time, form and venue(s) for final hearing;
- 4) Deadlines for hearings' submissions, witness lists;
- 5) Identification of major issues;
- 6) Identification of parties, and
- 7) Who translates which documents and how long will this take?
- 8) Etc.

NIRB would like your written comments on these “Proposed Next Steps” **by February 24, 2003**. Following that and in consultation with our sister Board, the Nunavut Water Board, we will finalize the parameters of the PHC.

If you have any questions, please do not hesitate to call me at (867) 983-2593.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Stephanie Briscoe', with a large, stylized flourish at the end.

Stephanie Briscoe  
Executive Director

cc: Minister Nault