

# In the Matter of the Nunavut Land Claim Agreement, Nunavut Land Claims Agreement Act, S.C., 1993, c. 29 Article 12, Part 5

#### And

In the matter of an
Application by
Tahera Corporation Limited
for
Mine Development
of the
Jericho Diamond Project Proposal
in the
Kitikmeot Region of Nunavut

PROJECT CERTIFICATE NIRB [ NO.: 002]

### 1.0 Whereas:

- A. Pursuant to the Nunavut Land Claims Agreement (NLCA), the Board has considered the information submitted by TCL and has performed an environmental impact review of the Jericho Diamond Project;
- **B.** The Board has considered the verbal commitments made by TCL at the hearing, and assumes these commitments which are set out in Appendix A will all be fulfilled;
- C. The Board has determined, pursuant to Article 12.5.5 of the Agreement, that, taking into account the implementation of the mitigative measures proposed by TLC and set out in the conditions to this certificate this project proposal, is not likely to cause significant adverse environmental effects;
- D. The Board has found, pursuant to Article 12.5.5 of the Agreement and taking into account all matters relevant to its mandate including Article 12.2.5 of the NLCA, that the Jericho Diamond Project will enhance and protect the existing and future well being of the residents and communities of the Nunavut Settlement Area; and
- **E.** The Board has offered some General Recommendations as found in the NIRB Final Hearing Report on pages 78 to 80 of its report to the Minister

## 2.0 Procedural (Project) History

On May 7, 1999, TCL filed its initial Project Description for the Jericho Diamond Mine (the "Project") with the Nunavut Impact Review Board ("NIRB" or the "Board"). The Proponent filed a second Project Description on November 26, 1999. NIRB and the Nunavut Water Board ("NWB") released Environmental Assessment Guidelines for the Project on April 5, 2000. On September 5, 2000, the TCL filed its final Project Description with the Board.

On November 2, 2000, NIRB, by way of letter to then-Minister Robert Nault of the Department of Indian Affairs and Northern Development, determined that the Project Description was insufficiently developed to permit proper screening and was returned to the Proponent for clarification.

On January 12, 2001, Tahera submitted a Draft Environmental Impact Statement ("DEIS") to NIRB. On February 7, 2001, the Board advised Minister Robert Nault that the Jericho Diamond Project required a review under Part 5 or 6 of the NLCA. In reply, on March 14, 2001, Minister Nault referred the project to NIRB for a Part 5 Review. The Nunavut Impact Review Board and the Nunavut Water Board then held Public Pre-Hearings for the Project in Cambridge Bay, Kugluktuk and Gjoa

Haven on June 5<sup>th</sup>, 6<sup>th</sup> and 20<sup>th</sup> (respectively), 2001. The Pre-Hearing Decision for the Project was issued by NIRB and NWB on July 17, 2001.

Eighteen months later, the Proponent submitted the Final Environmental Impact Statement ("FEIS") to NIRB on January 21, 2003. The Final Hearings ("Hearings") dates for the Project were initially set for May 26-30, 2003.

On May 12, 2003, after receiving the parties' submissions on the FEIS, the Board noted that many parties identified substantive concerns or found significant deficiencies. As a result, the Board adjourned the Hearings until such time that the FEIS contained sufficient information to assess all of the potentially significant impacts of the proposed Project. NIRB subsequently released an Adjournment and Supplementary FEIS Decision for the Jericho Diamond Project on August 18, 2003.

Final Hearings were held in the Kitikmeot communities of Cambridge Bay, Kugluktuk and Gjoa Haven frin January 5<sup>th</sup> through 9<sup>th</sup>, 2004. The first three days were held in Cambridge Bay and focused on technical issues. The remaining two days were held in Kugluktuk and Gjoa Haven respectively.

The NIRB submitted its Final Hearing Report to Minister Andy Mitchell, of Indian Affairs and Northern Development, on February 3, 2004. Minister Mitchell approved the Terms and Conditions of the Report on June 7, 2004. The NIRB then held meetings between departments and agencies, for the development of Project Certificate, from June 29th to 30th, 2004. These meetings are contemplated by Part 9 of Article 12 of the NLCA.

### 2.1 Project Description

Tahera is proposing the Jericho Diamond Mine, which will be located in the Jericho Watershed at the north end of Contwoyto Lake, in the Kitikmeot (western) region of Nunavut. The location of the Project is approximately 60km south of the Arctic Circle, 350 km southwest of Cambridge Bay, 420 km northeast of Yellowknife and 170 km northeast of the Ekati and Diavik diamond mines.

The Project will extract the Jericho kimberlite reserves by way of open pit and underground mining, with full-scale extraction expected in 2005 and mine closure and reclamation in 2013. The Project, while utilizing some existing infrastructure, will require the construction of additional elements associated with mining and production.

The Jericho Diamond Project lies within a region of continuous permafrost. A mixture of dwarf shrubs, grasses, mosses, and lichens dominate the plant communities at the site. Regionally important wildlife habitats in the vicinity are the large esker complex to the east and north of the Project site and the cliffs and rocky hills to the east. Wildlife studies were completed and found

that species of significance were caribou, musk ox, grizzly bears, wolverines, wolves, foxes, raptors, waterfowl and other birds. Aquatic habitats are abundant both regionally and within the Jericho site study area. A water-quality monitoring program was started at the Jericho site in 1995.

The Kitikmeot Region is one of three administrative regions in Nunavut located in the Central Arctic. The Region's communities include the hamlets of Cambridge Bay, Kugluktuk and Gjoa Haven. It also includes the unincorporated settlements of Umingmaktok and Bathurst Inlet.

The Jericho Diamond Project will generate an average of 90 person years of employment for nine years (not including post mining monitoring). Tahera intends to work towards a goal of having Nunavummiut comprise 60% of its employees within five years of the commencement of construction activities at the Jericho site.

# 3.0 Implementation of Project Certificate

NIRB has the authority to reconsider the Terms and Conditions of the Project Certificate to ensure that the terms and conditions are achieving their purpose. While NIRB has every reason to believe Tahera will meet its obligations under this certificate, NIRB may nevertheless revisit this certificate if NIRB feels the terms and conditions are not achieving their purpose.

If there is a problem for whatever reason in the implementation of these terms and conditions, the KIA may at any time seek a determination before the appropriate court as to whether or not any term and condition of this project certificate has been implemented. Any person or body that the court deems appropriate may seek the same remedy.

A licence, permit, certificate or other governmental approval which implements or incorporates any term or condition of this project certificate may not be called into question in a court of law on the grounds that the issuing agency thereby fettered its discretion or otherwise acted without jurisdiction.

Now therefore, the Nunavut Impact Review Board pursuant to Article 12.5.12, issues this Project Certificate to Tahera Corporation Limited subject to the following terms and conditions:

### 4.0 Project Specific Terms and Conditions

In addition to the project specific terms and conditions below, Tahera must comply with or obtain all applicable licenses, orders, permits, directions, which may result from but not be limited to, legislation identified in Appendix B.

Tahera must implement the management and environmental commitments and project specific terms and conditions as more fully descried in Appendix C to this project certificate, which shall be updated annually or as otherwise required by the NIRB.

Tahera with be involved in the monitoring program as found in Appendix D to this project certificate. Appendix D will be provided by NIRB within six (6) months of issuance of all regulatory authorizations.

### **Monitoring**

- Based upon the authority of Article 12.7.1, NIRB will appoint a full time Monitoring Agent for the Tahera project, whose mandate is to monitor the Project as it proceeds and to analyze the success of these Terms and Conditions as the project becomes operational, and beyond, to Abandonment and Restoration. Information gathered by NIRB's Monitoring Agent is public information that will be shared with the proponent and regulatory authorities.
- 2. The responsibility of the NIRB Monitoring Agent is to give direction to the Proponent on its obligation to compile an annual report for the duration of the mine on major environmental impacts, especially wildlife, fish, and aquatic ecosystems. The Monitoring Agent's further assignments, and subject to direction from NIRB, include proposing, coordinating and suggesting studies, assessing the study results, undertaking action to follow-up, deciding on site visits, changes to the monitoring program, and recommending to NIRB any changes to the Terms and Conditions as appropriate under section 12.8.2 of the NLCA.
- 3. Tahera should work with regulatory authorities to monitor caribou in and around the project area. This caribou monitoring should not duplicate the work underway by other groups and authorities, for example for the Slave Geological Province, but instead will focus on the caribou migrating to the northern portion of the Slave Geological Province.
- 4. Tahera shall initiate a long term monitoring program regarding the health of fisheries in the Carat Lake systems as far down as the Jericho River, not only to protect this fishery, but also to enhance it.
- 5. The installation of an atmospheric monitoring station to be funded and installed by Tahera, to obtain site-specific meteorological data. This station shall meet the requirements of Environment Canada air quality experts and focus if possible on dust from roads and blasting, and windblown dust from stockpiles.
- 6. Tahera shall implement a site-specific ecosystem based water monitoring program, which it will fund. Tahera will also meet the requirements of regulators including the Nunavut Water Board and

- take advice from KIA as to site selection of this ecosystem based water quality monitoring program.
- Tahera shall re-evaluate data and options for the currently planned diversion, dams, and other hydrologic changes and reconsider mitigation options. This analysis could be made a condition of any federal approvals required by regulatory authorities.

#### Noise

8. For noise abatement, Tahera shall employ industry best practices to protect people and wildlife from mine activity noise, including vehicles and aircraft. The final noise abatement plan shall be filed with NIRB's Monitoring Agent. Industry requirements for low-level flying should be maintained.

#### Wildlife

- 9. Environmental effects of blasting on wildlife shall be kept to a minimum. Blasting cannot occur if it affects in any way migrating caribou and birds or local carnivores.
- 10. Tahera shall develop a plan with the GN to enhance wildlife data and to provide more details on caribou found in the Project area. This work shall begin in 2004 with Tahera taking a lead role.
- 11. In approving this Project, NIRB encourages all regulatory authorities (i.e. federal, territorial and KIA) to study the cumulative effects of any associated projects (e.g. Bathurst Inlet Port and Road) on regional caribou movements.
- 12. Tahera shall plan, construct, and operate their mine in such a way that caribou migration paths through the project area are protected. Maps of corridors shall be placed in site offices and upgraded as new information on corridors becomes available. This information shall be sent to NIRB's Monitoring Agent, GN and KIA.
- 13. Tahera shall submit plans to regulatory authorities to include measures that will ensure caribou are not harmed, entrapped, or frightened by any project activity. Tahera shall do everything it can to ensure that caribou do not fall into pits, or slip on roads; this includes the requirement that Tahera use whatever means it finds necessary including ramps and crossings to assist in the free movement of caribou and construction of berms or fences where appropriate to prevent accidents involving wildlife.
- 14. Tahera shall take special care to avoid disturbing nesting sites of any species in the Project area. Sites within 500 meters of the Project area should be also located, marked, and reported by Tahera to NIRB's Monitoring Agent.

- 15. For the greater protection of wildlife, wildlife must have the right of way, and this principle must be strictly enforced. This means all activity including construction, drilling, blasting, and traffic movements, be stopped in the presence of susceptible raptors, ungulates, and carnivores.
- 16. The highest protection shall be given to nesting and flightless birds or vulnerable wildlife including protection of all dens. Further, Tahera must submit a more detailed plan to NIRB's Monitoring Agent to list specific steps that Tahera will take to study and prevent losses of nests and eggs within the site and a buffer zone 500 metres surrounding the lease area.
- 17. For safety and other reasons, there shall be no hunting of wildlife in the Project area and 500 metres outside the project lease area.
- 18. Problem wildlife shall be reported immediately to the GN and to the NIRB Monitoring Agent.

### **Fish and Aquatics**

- 19. Tahera shall collect pre-construction data for water and sediments, aquatic biota (zooplankton, phytoplankton, and benthic invertebrates) to be submitted to regulatory authorities. The period for ongoing data collection shall be the subject of consultation with regulatory authorities.
- 20. Tahera shall ensure mitigation and compensatory measures meet the needs of regulatory authorities for fisheries or habitat losses, included but not limited to, the area of water intakes and outlets, Long Lake, and Streams C1 and C3. These programs should be adjusted based on long-term monitoring of fish in the Carat Lake systems, and further site specific studies be undertaken and submitted to the regulatory authorities prior to the final alignment for water crossings or diversions, with the proper development of mitigation measures more specifically detailed.
- 21. That Tahera meet the requirements of DFO as it relates to no net loss, further evaluation, and management of the Carat Lake and surrounding fishery. These requirements in concept form should be in place before the water license is issued. The Carat Lake causeway must be constructed to minimize disturbance and maximize development of fish habitat including benthic substrate.
- 22. That Tahera conduct a literature review, in consultation with DFO and NIRB's Monitoring Agent, of the effects of ice road travel, noise and vibration and to fish populations. The results of this review are to be reported to NIRB's Monitoring Agent. If there are potential problems identified in the review, NIRB's Monitoring Agent will notify Tahera and the Board of options including a biological study.

- 23. Tahera's blasting program must meet the needs of regulatory authorities regarding the protection of fisheries.
- 24. Tahera shall take the greatest caution to prevent any impact on fish and mammal populations, fish eggs, spawning beds, silt loading, offspring, and any wintering areas including carnivore dens and bird nest sites.

### **Environmental Management**

- 25. Tahera shall do a cost benefit analysis associated with the various options of water management at the Jericho site, including recycling. This information shall be provided to regulatory authorities.
- 26. Site-specific plans for blasting activities must meet federal government standards and blasting crews must be fully trained including being provided a copy of Tahera's final Project Certificate containing whatever terms and conditions are ultimately approved by the Minister.
- 27. All blasting constituents (dynamite, ammonium nitrate, or other components), and any accelerants besides fuel, shall be stored in covered and isolated buildings, well marked as being dangerous. Blasting materials buildings shall be protected according to industry standards. Ammonium nitrate that is spilled must be cleaned up immediately.
- 28. A blast management plan for Tahera's operations shall be submitted to the NIRB Monitoring Agent, regarding timing, location, and approximate amounts of blasting agents used on an annual basis or if plans change.
- 29. Tahera must provide greater detail to regulatory authorities on effluent options, including better information on ammonia and phosphorous levels.
- 30. Tahera must provide greater detail to regulatory authorities on total dissolved solids ("TDS") constituents and nutrient concentrations expected to be released to downstream waters.
- 31. Further detailed study by Tahera to ensure that water quality exiting the PKCA meets receiving water standards, including further study on the option of a divider/barrier or dyke in the PKCA to improve water quality. This information is to be provided to NIRB's Monitoring Agent, DFO, NWB and EC.
- 32. Any ice or snow road construction, stream or river crossing in Nunavut be conducted to minimize sedimentation and environmental disruptions, and that DFO, KIA, and the NWB be consulted well in advance of such construction. At a minimum, silt

- fences must be used where appropriate and all fuel truck drivers must carry spill kits.
- 33. That all movement of goods including hazardous materials across the winter or other roads be subject to a comprehensive materials handling, management, and environmental protection plan. This comprehensive plan shall be in place prior to the initial haul supply of the mine, and shall contain environmental terms at least as stringent as those currently incorporated into the Tibbett-Contwoyto Winter Road agreement, and shall be filed with NIRB's Monitoring Agent and other regulatory authorities as required.
- 34. All fuel storage areas shall be bermed and meet regulatory requirements.
- 35. Waste management must be controlled in such a way that reduces or eliminates the attraction to carnivores or raptors. Fencing and other suitable deterrents shall be employed in all landfills and waste storage areas. A final waste management plan shall be filed with regulatory authorities including the NWB and NIRB's Monitoring Agent.
- 36. Tahera shall immediately contact the NWB to provide greater detail on the PKCA, West Dam, spillway, settling pond, dumps, waste disposal, stockpiles, and quantities of fresh water needed at the mine site, reclamation plans and any other information needed to assist the NWB in its water license application.
- 37. Tahera shall work with regulatory authorities to combine where appropriate the Hazardous Materials Management Plan, Spill Prevention and Counter-measures Plan and Emergency Response Plan.
- 38. That Spray Irrigation, it if is incorporated as a project component in the future, is referred back to NIRB with further design detail to be dealt with under NLCA Article 12.4.3.
- 39. That the outflow Diffuser, it if is incorporated as a project component in the future, be referred back to NIRB with further design detail to be dealt with under NLCA Article 12.4.3.

#### Abandonment and Reclamation

- 40. Tahera shall enter into written arrangements with its contractors to ensure all site debris is cleaned up off the lands including windblown debris.
- 41. For abandonment and restoration, Tahera must comply with INAC's policy of full cost restoration and any related NWB requirements such that the Inuit and taxpayers are not liable for any cost associated with cleanup, modification, decommissioning, or abandonment. An updated report on progressive reclamation

and the amount of security posted, as required by KIA, INAC or the NWB, shall be filed with NIRB's Monitoring Agent annually.

#### Socio-Economics

- 42. Detailed safety requirements shall be met according to all workplace and safety regulatory requirements, including CO monitoring patches worn by all under ground workers.
- 43. Labour recruitment should take place as much as possible in the Kitikmeot communities and also elsewhere in Nunavut. Women should be included as much as possible in the work force. On-the-job training should also be a large part of Tahera's training program.
- 44. Prior to the commencement of operations, a Kitikmeot Socio-Economic Monitoring Committee be formed to supplement, not replace the IIBA. This committee includes GN, INAC, KIA and NIRB's Monitoring Agent and will involve the preparation of an annual report of the impact of the mine on the closest communities, including Inuit who live near the project area.
- 45. Tahera shall prepare an orientation program for any non-Inuit workers, to train them to be sensitive to the Inuit culture. KIA shall be consulted on the development of this program.
- 46. Tahera should make best efforts to find management positions for this mine from Nunavut.
- 47. Tahera's training shall include safety and emergency programs for all personnel.
- 48. Tahera shall take steps to ensure that all on-site personnel are drug and alcohol free.
- 49. That Tahera work with governmental social and health agencies to determine whether current governmental programs are adequate and can respond to Tahera's future mine in the West Kitikmeot. Attention should be given to the impacts of Tahera's Jericho mine in Nunavut and any government studies in this field should be posted in local government offices.

#### Other

- 50. Tahera must work proactively with the KIA to meet any requirements of Article 20 of the NLCA.
- 51. That any archaeological find that is discovered be immediately and concurrently reported to government agencies, KIA, and NIRB's Monitoring Agent. This includes grave sites, which if discovered shall be fully protected.

- 52. Tahera shall meet with respective licensing authorities as soon as possible before construction begins to discuss the posting of adequate performance bonding. Licensing authorities are encouraged to take every measure to require that sufficient security is posted before construction begins. This bonding should not duplicate other amounts of security required (e.g. NWB), but this condition is intended to ensure that firstly, full and complete performance bonding for all aspects of the construction, operation, abandonment/reclamation of Tahera's mine is a priority for any license or approval that is issued to allow this Project to proceed, and secondly, to fully protect the Inuit and other tax-payers if Tahera for whatever reason fails to perform or fulfill their commitments as promised.
- 53. Any additional mitigation measure proposed by Tahera that is not in conflict with, or covered by these terms and conditions, shall be fully implemented in accordance with regulatory licensing.
- 54. Regulatory authorities shall be entitled to impose additional or stricter licensing requirements if they are necessary or required.

Issued at Cambridge Bay, Nunavut on the 20 day of Joly 2004.

NUNAVUT IMPACT REVIEW BOARD

Afbert Enaloak Board A/Chairman