

provide a written response to the information requests in order to complete an accurate assessment of the status of the project with respect to both the predictions made in the Final Environmental Impact Statement and the terms and conditions stated within the Project Certificate [No. 002]. A response was requested by January 13, 2009. To date no response has been received from Tahera on any of the requests by the Board. The NIRB understands that Jericho Diamond Mine is currently in Care and Maintenance; however, many of the items requested for the 2007 Annual Report previously occurred while the mine was in full operation and the data/information should be available for reporting purposes.

- Furthermore, Tahera's Annual Report for the 2008 monitoring year was due April 30, 2009 pursuant to Appendix D of the Project Certificate.
- Tahera's Wildlife Monitoring Report for the 2008 year, which is requirement of the Wildlife Mitigation and Monitoring Plan (WMMP), was due March 30, 2009.
- Tahera's quarterly reports (requirement of Appendix D) for the periods covering July 2008 – September 2008, October – December 2008 and January 2009 – March 2009 have also not been received by the NIRB.

In addition to the above, the Board also reviewed the *NIRB 2008-2009 Annual Monitoring Report for the Jericho Diamond Mine Project* (Monitoring Report) and the *2008 Monitoring Officer's Site Visit Report for the Jericho Diamond Mine Project* (Site Visit Report). Based on its review, the Board is now issuing the following direction to Tahera:

2008-2009 Monitoring Report Recommendations:

- 1) A response to the Board's directions issued on November 25, 2008 based on its review of the Monitoring Officer Site Visit Report (*2008 Monitoring Officer's Site Visit Report for the Jericho Diamond Mine Project*) and on the Monitoring Officer's Annual Report (*NIRB 2007 Annual Monitoring Report for the Jericho Diamond Mine Project*).
- 2) A response to the Board's directions issued on December 1, 2008 based on its review of Tahera's *Monitoring Program – 2007 Report* (2007 Annual Monitoring Program Report), as many of the items requested for the 2007 Annual Report previously occurred while the mine was in full operation.
- 3) Annual Report for the 2008 monitoring year.
- 4) Wildlife Monitoring Report for the 2008 monitoring year.
- 5) Quarterly reports (requirement of Appendix D) for the periods covering July 2008 – September 2008, October – December 2008, January 2009 – March 2009 and April 2009 – June 2009.
- 6) Summary of any air quality monitoring that has been conducted as per Condition #5 of the Project Certificate to date.

2009 Site Visit Report Recommendations:

- 1) Berming of the fuel storage areas to meet regulatory requirements, as per Condition #34 of the Project Certificate.
- 2) Submission of a plan of action on how Condition #34 will be met, especially in regards to the waste transfer containment area near the airport which was not completely contained during the site visit in July.

- 3) Contaminated soil was evident in the fuel containment areas (bermed areas) around site. It is recommended that a plan of action be prepared to address how and when the contaminated soil will be removed.
- 4) Wildlife incidents have resulted from improper or insufficient waste management procedures. Evidence must be provided that waste management procedures have been adequately improved to prevent future wildlife incidents.
- 5) Procedures for reporting wildlife problems/incidents immediately to both the Government of Nunavut and the NIRB as required by Term and Condition #18.

Again, the NIRB understands that the Jericho Diamond Mine is currently undergoing Care and Maintenance activities with intervention by Indian and Northern Affairs Canada (INAC) pursuant to Section 89 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the NIRB requests that Tahera provide in writing how it would meet the requests from above and how it would continue to comply with the Jericho Diamond Mine Project Certificate [No. 002] during this Care and Maintenance period. The Board respectfully requests a written response no later than **November 30, 2009**.

Please send any forthcoming correspondence to my attention at info@nirb.ca or via fax at (867) 983-2594. If you have any questions or require additional clarification on the Board's requirements, please do not hesitate to contact me directly at sgranchinho@nirb.ca or by telephone at (867) 983-4607.

Sincerely,



Sophia Granchinho
Monitoring Officer for the Jericho Diamond Mine Project Certificate [No. 002]
Nunavut Impact Review Board

cc: Michael Nadler, Regional Director General, Indian and Northern Affairs Canada
Ian Rumbolt, Water Resources Division, Indian and Northern Affairs Canada
Lee Staples, Mine Manager, Tahera Diamond Corporation
Mike Johnson, Director of Operations, Tahera Diamond Corporation
Andrew Gottwald, Chief Restructuring Officer, Tahera Diamond Corporation
Andrew Coster, Environmental Technician, Tahera Diamond Corporation
Thomas Pladsen, Chief Restructuring Officer, Benachee Resources Inc.

Attachments: Appendix A-1: Summary of Recommendations based on the NIRB's 2007 Annual Monitoring Report for the Jericho Diamond Mine Project
Appendix A-2: Summary of Recommendations based on the NIRB's 2008 Site Visit Report for the Jericho Diamond Mine Project
Appendix B: Summary of Findings of NIRB's Review of Tahera's 2007 Annual Monitoring Program Report

APPENDIX A-1

Summary of Recommendations based on the NIRB's 2007 Annual Monitoring Report for the Jericho Diamond Mine Project¹

- 1) Prepare future annual reports such that they meet the requirements as outlined in the revised Appendix D of the Project Certificate (issued November 20, 2007).
- 2) Include additional items requested by the NIRB in future annual reports. The additional items requested can be found in correspondences from the NIRB to Tahera dated March 15, 2007² and August 7, 2007³.
- 3) Include incineration management procedures in future reports and provide a discussion on how the Proponent will meet the Canada-wide standards for incinerator emissions.
- 4) Provide a written response to the NIRB's correspondence dated August 18, 2008⁴ in which the NIRB requested that the Proponent respond to the comments and recommendations on the 2007 Wildlife Summary Report as well as on the status of the mine.
- 5) Respond to the NIRB's correspondence dated August 12, 2008⁵ in which the NIRB requested an update on the status of the Jericho Mine site during the Care and Maintenance period and how the Proponent will meet the requirements of the NIRB's Project Certificate.
- 6) Commence monitoring of air quality at the Jericho Mine site based on Tahera's Air Quality Model report (2007) and Air Quality Management Plan (2004). It is also recommended that the Proponent work with Environment Canada to commence the air quality monitoring program.
- 7) Continue monitoring Carat Lake and Lynne Lake for ammonia (as N), and provide mitigative measures if the values exceed the Canadian Council of Ministers of the Environment (CCME) guidelines.

¹ Letter dated November 25, 2008, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Recommendations based on the NIRB's 2007 Annual Monitoring Report for the Jericho Diamond Mine Project*.

² Letter dated March 15, 2007, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Guidelines for Tahera's 2006 Interim Monitoring Report to NIRB*.

³ Letter dated August 7, 2007, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Opportunity for Tahera to Respond to Parties Comments on the Annual Monitoring Report for 2006*.

⁴ Letter dated August 18, 2008, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Opportunity for Tahera to Respond to Parties' Comments on the 2007 Wildlife Monitoring Program-Data Summary Report*.

⁵ Letter dated August 12, 2008, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Status of Jericho Diamond Mine and Requirements to meet the Jericho Project Certificate [No. 002]*.

APPENDIX A-2

Summary of Recommendations based on the NIRB's 2008 Site Visit Report for the Jericho Diamond Mine Project⁶

- 1) Tahera Diamond Corporation (Tahera) to provide information on whether all fuel trucks at the Jericho site have spill kits as outlined in Condition #32 of the Jericho Project Certificate.
- 2) Tahera to meet the requirements of Condition #34, in that the fuel storage areas be bermed and meet regulatory requirements.
- 3) Tahera to prepare a plan of action on how they will meet Condition #34, especially in regards to the secondary containment unit at the airport that is damaged. In addition, Tahera should ensure that the liners within the bermed areas have not been breached and are in good conditions to prevent contaminated water in the bermed areas from entering the environment.
- 4) Contaminated soil was evident in the fuel containment areas (bermed areas) at the airport. A plan of action must be prepared by Tahera on how and when the contaminated soil will be removed.
- 5) Wildlife incidents have resulted from improper or insufficient waste management procedures. Evidence must be provided by Tahera that waste management procedures have been adequately improved to prevent future wildlife incidents.
- 6) Tahera to provide ammonia and phosphorus levels as required by Condition #29.
- 7) Tahera to provide the results of total dissolved solids (TDS) and nutrient concentrations released to downstream waters in 2007 as per Condition #30.
- 8) Tahera to provide further information on whether the reinforcement of the permeable barrier in the PKCA (Processed Kimberlite Containment Area) between East Cell and West Cell is working and that no further seepage have been seen beneath the barrier and no sedimentation have been seen in the West Cell.
- 9) Tahera is reminded that it should report wildlife problems/incidents immediately to both the Government of Nunavut and the NIRB as required by Condition #18.

⁶ Letter dated November 25, 2008, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Recommendations based on the NIRB's 2008 Site Visit Report for the Jericho Diamond Mine Project*.

APPENDIX B

Summary of Findings of NIRB's Review of Tahera's 2007 Annual Monitoring Program Report⁷

General

- 1) In general, the annual report conforms to the NIRB's Final Interim Monitoring Report Guidelines and to some extent to the original Appendix D (issued October 3, 2006). However, Appendix D was revised to incorporate monitoring report guidelines in accordance with Section 12.7.1 of the Nunavut Land Claims Agreement (NLCA). The revised Appendix D, issued on November 20, 2007, provided clear direction to the Proponent as to what information the NIRB requires and expects with regard to the content of Tahera's Annual Monitoring Report. Following review of the 2007 Annual Report it appears that the Proponent did not follow the revised guidelines in the preparation of the report.
- 2) It is also noted that some key recommendations and items requested by the NIRB following review of Tahera's 2006 Annual Report were not evident in the 2007 Annual Report (correspondence dated March 15, 2007⁸ and August 7, 2007⁹). The NIRB is therefore requesting that the Proponent provide this information as an addendum to the 2007 Annual Report.
- 3) As noted for the 2006 Annual Report, no discussion or comparison of the relationship between the data collected and the impacts predicted were presented in the 2007 Annual Report. The Proponent did not report on the complete suite of impact predictions as outlined in their 2003 Final Environmental Impact Statement (FEIS). This information is required to provide a clear understanding of the evidence to support the Proponent's post-environmental assessment monitoring conclusions.
- 4) In addition, the 2007 Annual Report did not include results of all regulatory monitoring as required. Parameters such as solids geochemistry, ground ice, thermal monitoring and toxicity testing were not included in the report (in accordance with your *General Operational Monitoring Plan*). Although the above-mentioned parameters may satisfy the monitoring requirements for the water licence, the data and analysis conducted for the water licence will be paramount to the verification of the project's impact predictions, as reported in the FEIS.

Wildlife (Section 4.3)

- 1) Recommendations and comments regarding wildlife were previously submitted to the Proponent on August 18, 2008¹⁰ based on the NIRB's review of the *2007 Wildlife Monitoring Program Data Summary Report* submitted by Tahera,
- 2) Information was included in the 2007 Annual Report regarding wildlife that was not mentioned in the 2007 Wildlife Summary Report. For example, the report mentioned that "...during the summer 'resident' male caribou were herded off site roads."

⁷ Letter dated December 1, 2008, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Opportunity for Tahera to Respond to Parties Comments on the Tahera's 2007 Annual Monitoring Report*.

⁸ Letter dated March 15, 2007, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Guidelines for Tahera's 2006 Interim Monitoring Report to NIRB*.

⁹ Letter dated August 7, 2007, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Opportunity for Tahera to Respond to Parties Comments on the Annual Monitoring Report for 2006*.

¹⁰ Letter dated August 18, 2008, from Sophia Granchinho, NIRB to Greg Missal, Tahera, Re: *Opportunity for Tahera to Respond to Parties' Comments on the 2007 Wildlife Monitoring Program-Data Summary Report*.

Aquatic Effects (Section 4.4)

- 1) No dates were provided to indicate when the sampling programs for the aquatic effects monitoring program (AEM) occurred during the 2007 monitoring period.
- 2) No maps were provided to indicate the location of the monitoring stations for sediment deposition and lake profiles.

Sediment Deposition

- 1) It was mentioned in the annual report that sediment deposition was found to be higher in 2007 compared to 2006. In addition, the sediment deposition rate appeared to be higher at Carat Lake stations compared to other stations in other lakes. The Proponent states that the increased deposition was due to erosion occurring near the causeway. No mitigation measures were provided other than indicating that the effectiveness of the rip-rap will be re-examined once the mine recommences operations.

Lake Profiles

- 1) No comparative analysis of historical baseline data with the Proponent's 2007 lake profile data was provided in the annual report.
- 2) It was mentioned in the annual report that dissolved oxygen concentrations at all lakes increased with depth with the exception of Lake C3 and Jericho Lake (decreased with depth). No explanation was provided by the Proponent for the differences observed.

Phytoplankton

- 1) No discussion was provided regarding why diversity indices for phytoplankton were higher in 2007 compared to 2006.

Water Quality

- 1) No comparative analysis of historical baseline data with the Proponent's 2007 water quality data were provided in the annual report.
- 2) The annual report mentioned that some increasing trends were observed in the water quality, notably in ammonia and nitrate in the PKCA discharge and in water bodies close to the mine. It was noted that other parameters also showed an increasing trend when compared to data collected from 1995 through 1999 including ammonia, nitrate, arsenic, molybdenum and uranium. No evidence was provided by the Proponent to support this increasing trend

Loss of Aquatic Habitat/Fish Habitat Enhancement

- 1) No discussion or schedule was provided in the annual report on the remaining fish habitat compensation measures that require completion as per the *Fisheries Act* authorization (amended on November 28, 2007 by Fisheries and Oceans Canada (DFO)).
- 2) The annual report did not indicate if the rock shoals were performing effectively and are providing suitable spawning habitat for slimy sculpin as well as rearing and feeding habitat for other fish species.

Quality Assurance/Quality Control

- 1) No summary was provided in the annual report regarding the results of the QA/QC program for the 2007 monitoring period.

Socio-Economics (Section 4.5)

General

- 1) No discussion was provided on the results of the socio-economic monitoring period for the 2007 year in the annual report.

Work Place Safety

- 1) No information was provided on any incidents that occurred at site for both the Proponent employees and contractors.

Hiring

- 1) There is no discussion in the 2007 Annual Report on how many current employees are Inuit and how the goal of 60% Inuit employment might be achieved.
- 2) The annual report notes that principal contractors are “encouraged” to adopt the same employment target. Some clarification of what “encouraged” entails would be helpful.

RECOMMENDATIONS – PART A & PART B

It is difficult for the NIRB to provide a conclusion on the 2007 Annual Monitoring Report as per Section 12.7 of the NLCA and the Project Certificate as the information previously requested were not included in this report. Therefore, the NIRB is requesting the following information be provided to assist in completing the review of activities that occurred in 2007.

The NIRB understands that Tahera is currently in Care and Maintenance; however, many of the items requested for the 2007 Annual Report previously occurred while the mine was in full operation and the data/information should be available for reporting purposes.

PART A – ADDITIONAL INFORMATION REQUESTS

- 1) Tahera mentioned that a Care and Maintenance Plan will be released to regulatory agencies upon completion. The NIRB request a copy of this plan.
- 2) Higher sediment deposition rates were observed at the Carat Lake monitoring stations compared to other stations from 2005 to 2007 with rates being lowest in 2006. The NIRB would like the Proponent to continue to monitor Carat Lake to ensure that the increased sediment deposition does not affect the aquatic benthic communities within Carat Lake. The Proponent also indicated in the annual report that the higher sediment deposition rates observed in 2007 versus 2006 were due to the erosion occurring near the causeway and the “effectiveness of the rip-rap will be re-examined once the mine recommences operations. It is recommended that the rip-rap be closely monitored while the mine is in Care and Maintenance. If any significant erosion occurs, in order to properly mitigate the impact, necessary re-assessment of the functionality of the rip-rap should be done prior to any resuming of the mine operations.
- 3) The Proponent reported that monitoring will be conducted during Care and Maintenance (sections 4.2.6.5, 4.2.6.6, 4.2.6.7, 4.2.6.8). The NIRB is requesting further information on the monitoring proposed during this phase. It should include when the monitoring would begin, how the proponent plans on monitoring and how often.

- 4) The Proponent reported that the University of Alberta was contacted regarding vegetation research at Jericho for 2008 and that discussions were ongoing as to what may be feasible given that Tahera is in Care and Maintenance. The NIRB requests an update on the status of the vegetation research program.
- 5) The NIRB requests that the Proponent provide an explanation with supporting evidence for the following:
 - a. Decrease in dissolved oxygen concentrations with depth for Lake C3 and Jericho Lake compared to other lakes.
 - b. Higher phytoplankton diversity indices in 2007 versus 2006. What is the reason for this?
 - c. Increasing trends observed in several water quality parameters (ammonia, nitrate, arsenic, molybdenum and uranium). What are the reasons for this?
- 6) In addition, the NIRB along with INAC would like to know if the Proponent is considering updating or modifying the current aquatics effects monitoring program (AEMP) in order to identify, mitigate and monitor the causes of the increasing trends observed in the water quality parameters. The current AEMP for the Jericho project was developed to monitor sources of effluent to detect unanticipated effects on aquatic biota so that appropriate mitigative actions can be taken.
- 7) Please verify whether station WQ-16 is within Lynne Lake or Ash Lake. In the 2007 Annual Report, the station was within Lynne Lake, but the 2007 AEM report identifies this location as Ash Lake.
- 8) The NIRB requests an updated schedule on when the remaining fish habitat compensation works will be completed as required by the *Fisheries Act* authorization (amended on November 28, 2007).
- 9) DFO noted that certain areas of rock shoals LCA03, LCA04 LCA05 and LCA06 have less than two meters water cover (Appendix I – Tahera's 2007 *Fish Habitat Compensation Monitoring Program Report*). The *Fisheries Act* authorization requires that rock shoal be placed in water with a depth of at least two meters below the normal summer water levels. Please provide an explanation on why certain areas of rock shoals have less than the required water cover and if the constructed rock shoals are performing effectively.
- 10) INAC request that the following information be provided as part of the annual report:
 - a. Provide Inuit employment reached in 2007 (by month, semi-annually, or annually). The report should include employment figures for 2006, for both the Proponent and its contractors.
 - b. Provide information on the kinds of cultural awareness activities conducted in 2007, including the number of participants. Testimonials from employees who received training would be beneficial.
 - c. Evidence of community consultation should be included in the report ("Community Outreach"). It should include evidence of input, information and/or concerns received from community members about the operations at the Jericho Mine.
 - d. Provide additional input on impact predictions on 'Current Employers'. Provide information that substantiates this prediction.
 - e. Tahera predicted in the annual report (section 4.5.5.2) that there will be no increased pressure on existing community infrastructure and services as a result of the Jericho Project. As the project evolves, the Proponent will need to test this prediction and provide empirical evidence for any conclusions reached on community-level impacts.

INAC suggests that employment of individuals from a community should form the basis for the initial assessment of the project's impact on a community. INAC recommends that the Proponent track the community of origin of its Nunavummiut employees in order to provide an empirical base from which to identify impacted communities.

- f. While it is possible that the project has had negligible impacts at the community level to-date, the Proponent's monitoring report should attempt to describe the process by which such conclusions were reached. INAC requested receiving anecdotal evidence (or qualitative data) in this regard as a result of the Proponent's discussions with community members and the Kitikmeot Inuit Association (KIA). The discussion should include both construction and operation phases.
- g. Include an update on economic activities stemming from mine operations. This should include information related to how many Nunavut based and/or Inuit owned businesses the Proponent had contracts with for the year.

Please provide the above requested information for the 2007 year and include the information in future annual reports.

PART B – INFORMATION REQUESTS TO BE INCLUDED IN FUTURE ANNUAL REPORTS

- 1) Future annual reports should meet the monitoring requirements as outlined in the revised Appendix D of the Project Certificate as well as any guidelines (Section 12.7, NLCA) provided by the NIRB Monitoring Officer.
- 2) It is recommended that the Proponent include a discussion/comparison of the relationship between data collected and the impacts predicted in future reports. In addition, future annual monitoring reports should present further information in the presentations of evidence to support the Proponent's post-environmental assessment monitoring conclusions.
- 3) Include incineration management procedures in future reports and provide a discussion on how the Proponent will meet the Canada-wide standards for incinerator emissions.
- 4) It is recommended that effectiveness monitoring of the Carat Lake fish habitat feature in future monitoring reports include discussion/rationale for lack of its use by other targeted fish species (i.e. burbot, slimy sculpin).
- 5) It is recommended that effectiveness monitoring of the Stream C1 fish habitat feature in future monitoring reports include discussion/rationale for not finding other targeted species (i.e. burbot) in the annual survey.
- 6) The Proponent should include 'Work Place Safety' information for contractors as well as for the Proponent's employees.
- 7) The annual report stated that the data available at the time of writing suggest that no mitigation is currently required to address socio-economic issues. Future reports should include empirical data to support any conclusions made and/or any adaptive strategies implemented.