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May 10, 2005  
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Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU  
X0E 1J0

**Attention:** Ms. Dionne Filiatrault, P.Eng.,  
Manager of Technical Services

Dear Dionne:

**Jericho Diamond Mine  
Review of Mine Plan  
NWB Water Licence NWB1JER0410**

At the request of Nunavut Water Board (NWB), Acres International Limited (Acres) has conducted an independent review on the Mine Plan document that were submitted by Tahera Diamond Corporation (Tahera), on behalf of Benachee Resources Inc. (BRI). BRI is a wholly-owned subsidiary of Tahera and is the registered holder of the Nunavut Water Board Water Licence No. NWB1JER0410 (Water Licence). The document, which was dated February 23, 2005, was prepared as requirements of Part D, Item 1 of the Water Licence issued by NWB on December 21, 2004.

**Background**

Part D of the Water Licence describes the Conditions Applying to Construction. Item 1 of Part D specifically indicated that BRI shall submit to the NWB a detailed Mine Plan, which outlines timing of construction for all infrastructure components of the Mine operation, identifies measures to be taken in case of changes in the mine activities, and provide other developments in accordance with Schedule D, Item 1 of the Water Licence.

The Schedule D, Item 1 provides a list of items/issues which are to be included in the Mine Plan. The list includes, but is not limited to, the following:

- Schedule of commissioning of all facilities and infrastructure,
- Proposed schedule for mine development (open and underground pit),
- Plan dealing with pit water,
- Monitoring to be carried out during the construction and development of the Mine,
- Adaptive Management Strategy for construction phase, and
- Stability assessment planning.

In addition, Part B Item 2 of the Water Licence requests BRI to provide annual reports containing a summary report on construction activities and an update of the Mine Plan, as indicated in Schedule B – General Conditions, Item J. It is envisaged that the Mine Plan, which has been submitted by BRI, would be updated annually to report on the completed mine activities and on the upcoming proposed or scheduled construction activities.

**Acres Review and Comments**

On the basis of the requirements as stipulated in the Water Licence, and a review of the Mine Plan document, Acres has the following comments.

**1. General**

As indicated in the background section, the Mine Plan provides a guide for the proposed activities during mining development, which starts with a mobilization plan and a plan for the infrastructures construction activities in early 2005. The Mine Plan also provides a brief background information about the mine, its location, its geological setting, and a brief discussion about the mine design. A schedule of the proposed activities for the mine development was also included in the Mine Plan. The remaining contents of the Mine Plan, however, concentrated only on the proposed excavation of the mine pit. It does not contain detail plan activities for the infrastructure developments, as required by the Water Licence. Such infrastructure developments, which require detail plans and designs would include elaborate descriptions on the road, camps, mine buildings, water supplies, borrow area developments and other construction activities during start-up of the mine operation. It is understood that future activities will be developed as the mine activities progress throughout the years. Therefore, the Mine Plan should provide details of activities, which are planned in the immediate future, as well as descriptions of other future activities, which may need to be modified and detailed prior to the actual construction of those activities. In the coming years, the Mine Plan would be updated annually to include a summary of past activities, and updates for the future activities.

**2. Missing References to Other Submitted Documents**

It is understood that BRI has submitted other documents requested as part of the Water Licence conditions for the mine construction. Documents containing the contingency plan, borrow area management plan, fuel farm development, and the aquatic effects monitoring plan are the ones among others, which were requested as part of the conditions applied for construction. The above noted documents have been submitted to NWB. References of these documents should be made in the Mine Plan, as they form an integral part of the start-up mining activities.

References should also be made with respect to other documents, which are expected to follow. Such documents would include drawings and specifications, and details for construction activities, which require further approvals from NWB prior to construction.

**3. Missing Detailed Plan for 2005 Activities**

BRI has provided a plan for the mining operations, containing discussions on the drilling, blasting, and excavation for the mine pit development. The current schedule indicated that these activities would not start until the end of 2005, and that Nuna Logistics (Nuna) will be the prime open pit contractor. Other activities prior to the actual mining of the pit, however has not been discussed in greater details.

A detail plan of the start-up construction should be included in the Mine Plan, and should contain but not limited to the following activities:

- Field survey bench marks establishment.
- Road constructions, including culvert design, ditches, embankment slopes, erosion protection, etc.
- Camp development.
- Air strip rehabilitation, if required.
- Pipelines construction (fresh water, sewage, and others).
- Creek diversions.
- Tank farms construction (require a summary description, with reference to related document already submitted by BRI).
- Borrow area development (require a summary description, with reference to related document already submitted by BRI).
- Mining infrastructure construction (processing plant, emulsion plant, and other associated buildings).
- Storage buildings construction (chemicals, explosives, etc.).
- Preparation of activities for waste rock disposal areas, lay-downs, ore stockpiles, waste dumps, (including construction of ditches, sumps, pump stations, etc.).
- Earth embankments construction (require a summary description, with reference for additional construction details, drawings and technical specifications to follow).
- Plans for monitoring (require a summary description, with reference to related document already submitted by BRI).

A bar chart showing the above activities would help BRI and site contractors in planning and organizing during start-up development to be carried out in 2005. The bar chart would also indicate the dates for commissioning of those structures and infrastructures.

#### **4. General Mine Plan Maps and Drawings**

In connection to Item 3 above, detailed drawings that provide clearer information about the activities to be carried out in the near future will help the execution of the 2005 construction of the various structures at Jericho. The detailed drawings showing the various structures to be constructed would provide information on how the existing site will be developed, such as section of roads to be constructed, pipeline routes, preparation of waste rock pads, excavations for building foundations, etc. for the 2005 activities. Drawings ICT004.06 G10 to G13 inclusive were included in the Mine Plan, and they are useful in providing general site arrangement for future years (2006 to 2013). However, a similar map showing detail activities in 2005 should be included to show the start-up mining operation.

**5. Mine Plan to be Updated Annually**

It is understood that the Mine Plan report will need to be updated annually. Consequently, the general format of the Mine Plan would include a report on the completed activities, upcoming activities within the year (to be provided in details), and descriptions of future activities as the mine transforms from the construction, operation, and closing phases (which may need to be changed or modified as required).

**6. Mine Pit Operations**

Further details or references for follow up investigations should be included for the stability analyses of the open pit mine walls. Detail analyses would also include potential toppling, sliding or wedge instability of the pit walls. The analyses should recommend measures on how to maintain a safe working environment during rock excavation. The Mine Plan has mentioned that additional investigations will be carried out. The water licence indicated that the design, drawings and specifications including slopes, blasting requirements, etc must be submitted for review prior to the actual excavation work. The construction details should also include technical details on measures to deal with pit water, seepage, etc.

The Mine Plan should also include the recommendations on how to handle the waste rock from the pit, or make reference to other documents related to the waste rock management plan. Summary tables showing the material balances during the mining development should also be included in the Mine Plan. This would show the quantity and locations where all of the excavated materials will be stored.

**7. Adaptive Management Strategy**

This section of the Mine Plan should elaborate on activities in which potential deviation may occur, and to address alternative actions that BRI may carry out. As an example, a table showing a list of potential deviations that may be encountered during the construction activities as a result of change in site conditions, delays, etc. should be provided, together with consequences that may affect the schedule, and alternatives or actions to be carried out to overcome or minimize such deviation from the Mine Plan. This would show that BRI management strategy is not only adaptive, but also has alternative plans or options to keep the mine activities on schedule.

**8. Other Minor Comments**

- Sources/References of Tables 1 and 2 of the Mine Plan should be included.
- The various standards/procedures related to Health and Safety Plan, spill contingency, spill report, etc. as discussed in Section 9.1 of the Mine Plan should be in place, and references should be made in the document.

In summary, Acres is encouraged by the commitment that BRI has made in providing the Mine Plan as well as other accompanying documents. These documents are required and essential for the start-up construction activities for the mining development this year. We recommend that the above comments would be included during the NWB review process through the written hearing, together

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with other issues that may be requested by other parties. Should you have any further questions or concerns regarding the above, please do not hesitate to contact me.

Yours very truly,

A handwritten signature in black ink, appearing to read 'R. A. Halim', followed by a long horizontal line that ends in an arrow pointing to the right.

RAH:sep

R. A. Halim, P.Eng.  
Senior Geotechnical Engineer

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