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Your file - Votre référence NWB1JER0410/TR/D4 Our file - Notre référence **9545-1-1-JER-R**

May 11, 2005

Ms. Phyllis Beaulieu Manager of Licensing Nunavut Water Board Box 119, Gjoa Haven, NU. X0B 1J0

Dear Ms. Beaulieu,

Re: Jericho Diamond Project Borrow Management Plan

Thank you for providing INAC with an opportunity to review the above-mentioned plan.

Under the terms of the water licence (NWBJER0410), Part D, Item 4 states:

The Licensee shall submit to the Board for review, a revised Borrow Management Plan at least sixty (60) days prior to the extraction of any borrow material. This plan shall be developed in accordance with Schedule D, Item 4.

Schedule D, Conditions Applying to Construction, Item 4 requires that:

The Borrow Management Plan referred to in Part D Item 4 of the Licence, shall be revised to include an outline of the environmental management measures for at least the following:

- a. Implementation plan for use of the resource;
- b. Drainage and erosion control;
- c. Contingency options for dealing with massive ice;
- d. Air quality management;
- e. Wildlife management;
- f. Treatment and/or disposal of meltwater;
- g. Overview of reclamation measures; including
- h. Operational and post closure monitoring.

INAC's comments for this plan, which are based on a thorough review by our expert technical and scientific advisors, are provided with respect to the above licence conditions.

General Comments

- 1. Section 2.2.1, borehole 96BGC01, the depth interval shown is 0.15 m, not 1.5. Please verify the depths or calculation.
- 2. Section 2.2.2: Is there a stripping component for removal of surficial soils for stockpiling, to be used for final reclamation? This will reduce the volumes of esker material available.



Schedule D, Item 4 Conditions

a. Implementation plan for use of the resource

- 1. Section 2.3. Is the royalty net of entrained ice? What happens if some material is rejected due to high fines content (as noted in Section 2.2.1)?
- 2. The plan calls for borrow areas A1 and A2 to be exploited first, with area A3 not exploited until the summer of 2005. This assumes that unfrozen aggregate can be obtained from areas A1 and A2 during the spring. How will this be carried out with respect to saving the upper soil and vegetative layers and snow removal/disposal? Will the esker material be exploitable under winter conditions using a front-end loader, or will ripping be required?
- 3. The cross-section shown in Drawing 1CT004.06-G8 shows a 1 m depth of excavation.
 - Is this the maximum depth, or will the pit be excavated until frozen ground is encountered?
 - From a reclamation perspective is it better to have shallow pits over a wide area or deeper pits with a smaller footprint?
- 4. If the pits are excavated only to the 1 metre depth, the amount of esker material available is only 250,000 m3, compared with the 477,260 m3 required (Section 2.4). Note that in Section 2.5, the plan calls for the use of the top 2 metres of esker materials, which doesn't agree with Drawing 1CT004.06-G8. Please resolve this discrepancy.
- 5. Section 2.5, states that construction will commence in February 2005 and esker borrow will be used as soon as it can be handled. This Plan is dated March 2005. Presumably there has been no excavation of borrow materials yet on site, pending approval of this Plan?
- 6. In Section 2.5, the plan calls for the extraction esker materials from areas A1 and A2 initially, to make up the volume required. Only if required, will Area 3 be exploited. This would confirm the need to go deeper or over a wider footprint to recover the required volumes of material. It is recommended that Benachee confirm that the extraction of the esker materials is confined within the areas shown on Drawing 1CT004.06-G8, or else provide an outline of the maximum extent of disturbance.

b. Drainage and erosion control

- 1. Section 3.1, first bullet: ponding should be expected as water will not infiltrate into permafrost, therefore, a drainage ditch leading out of the final borrow area will be required. In the last paragraph of this section, the proposed set back of 10 metres from natural drainage courses may be too small, depending on how the excavation affects thawing of permafrost. Note that in Section 2.3 a setback of 30 metres was mentioned from permanent water bodies.
- 2. No mention is made in Section 3.1 about the effects of the removal of the active zone materials within the borrow pit on the underlying permafrost affected soils. The active layer will not be present and water will be ponding directly on the pit floor until a new active layer is formed due to exposure by mining.

c. Contingency options for dealing with massive ice.

No comments. Appears to be satisfactory.

d. Air quality management

In section 3.4, covering the final excavation surface to control dusting is discussed. This should be anticipated in Borrow Area A which is composed of even finer material.

e. Wildlife management

INAC has no comments to offer with respect to wildlife management. INAC defers to the Government of Nunavut, Department of the Environment on matters pertaining to wildlife.

f. Treatment and/or disposal of meltwater

INAC has no comments to offer.

g. Overview of reclamation measures

In Section 4.1, Progressive Reclamation, revegetation test plots are proposed on esker borrow areas. This should be described in greater detail. Will this entail native or imported species?

h. Operational and post closure monitoring

In Section 5.1, Operations, it is stated that environmental monitoring is the responsibility of Tahera Diamond Corp. How does this relate to the Water Licence which is held by Banachee Resources?

This concludes INAC's comments. Should the NWB or Benachee Resources Inc. have any questions or require clarification on any of the comments in this review, do not hesitate to contact the undersigned.

Robert Eno

Water Resources Coordinator

c. Greg Missal - Tahera Diamond Corporation