20 October 2006
VE51295

Tahera Diamond Corporation
130 Adelaide Street West,
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Attention: Greg Missal, VP Government and Regulatory Affairs

Re: Response to NWB Information Request – Waste Rock Management Plan Part 2

Greg,

AMEC is pleased to provide Tahera Diamond Corporation (Tahera) with our response to Nunavut Water Board information request 061016 2AM-JER0410 NWB Addendum to WRMP Pt 2 Review – OTAE. The subject information request is derived from Environment Canada's review of Waste Rock Management Plan Part 2: 060303NWB1JER Waste Rock Mngt Plan Part 2 EC Comments-ILAE.

1. Pursuant to **Schedule D.10(f)** of the water licence **2AM-JER0410** (formerly NWB1JER0410), the WRMP shall "*ensure maintenance of a 200 m buffer between the toe waste rock dump site 1 and Carat Lake*". Has this provision been achieved? The Board requests additional detail or direction to the appropriate reference document and section where this provision has been satisfied.

Waste rock dump site 1 has not been developed. Waste Rock Management Plan, Part 1 indicates a 200 m buffer will be maintained between Carat Lake and the toe of the dump as illustrated in Drawing 1.

2. Pursuant to Schedule D.10(h) of the water licence 2AM-JER0410 (formerly NWB1JER0410), the WRMP shall include detailed design within the report on "monitoring to be done during construction". TDC stated that volumes and masses of waste rock will be reported. What are the details and methods of analysis for water quality and quantity drained/collected from the stockpile area, stockpile dimensions, density, and any other parameters that will be monitored during construction? How will this information be provided to the Board?

Waste rock volumes are provided in the annual report. Water quality from seepage is reported in annual seepage surveys (the 2006 survey report was provided to NWB 5 October 2006). Waste dump 2 water reports to the pit and pit sump water is sampled and reported monthly in SNP reports (JER-SW2) and reported in monthly SNP reports. Rock geochemistry is sampled

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every two weeks and is reported annually. An annual geotechnical inspection by an independent geotechnical engineer is conducted (the 2006 inspection report was submitted to NWB September 2006.

Water quality methods analyses follow Schedule K of the Water Licence.

3. Further to bullet point #7 in Document (ii); what efforts are in place to separate contact of the coarse processed kimberlite (PK) from the underlying tundra soils? The granite waste rock will provide some separation of these materials; however, is it sufficiently thick to ensure isolation?

PK waste rock pads were (and will be) constructed during the winter when the ground is frozen. Pads extend beyond the toe of PK piles. Coarse PK will freeze during the winter further isolating any potential seepage from the PK from the underlying tundra. The reason for the pads is to isolate coarse PK from acidic bog soil. PK storage areas 1, 3 and 4 are located on rocky tundra areas with little or no boggy soils.

The existing coarse PK pile (Stockpile 4 – Waste Rock Management Plan Part 2, Drawing 1) is upslope from East Sump and any seepage would flow to the East Sump and not to the surrounding tundra. There has been no seepage from the pile to date. Coarse PK stockpiles 1, 2 and 3 are within the drainage basin of the PKCA, as shown on Drawing 1. Coarse PK stockpile 2 is deposited on the upstream face of the East Dam. The pads for stockpiles 1 and 3 will be constructed similar to stockpile 4. Stockpile 4 granite pad is approximately one m thick.

4. Further to bullet point #8 in Document (ii); has there been sufficient flow available to obtain a sample for water quality analysis and annual seepage surveys that are proposed for July or August? In the event of limited flows during this time, does TDC plan to complete sampling during an earlier point in the year or following rain events? The NWB also requests that TDC formally responds to EC Intervener comments "While the water license provides very general guidance on the seepage surveys, EC recommends that the proposed seepage monitoring plans be drafted and circulated for review. Environment Canada would like to flag to the NWB the potential for pH depression associated with residual iron that may be contained in coarse PK from the dense media separation" and indicate what measures will be installed by TDC in response.

The design for seepage surveys is based on several years experience by SRK at Ekati. Surveys are undertaken at a time when leachate concentrations are likely highest, i.e., worst case conditions. Seepage is limited to months when the average air temperature is above freezing, i.e. mid June to mid September. Jericho environmental staff will monitor seepage amounts and vary the time for the survey to coincide with higher seepage levels. However, short-term precipitation events, as are normal during summer months, are unlikely to result in measurable changes in seepage rates. Seepage rates are more a characteristics of the dumps and PK piles rather than the short-term precipitation regime.

The water licence may only provide very general guidance, however, the seepage monitoring plan was developed by SRK for the water licence application and was thoroughly reviewed by

Environment Canada, other government interveners, including NWB, and their consultants. There is, therefore, no reason to revisit the plan unless actual field experience suggests modification would benefit data collection and analysis, i.e., improve adaptive management at the Jericho Diamond Mine. Monitoring and verification are discussed in Waste Rock Management Plan Part 1, Section 7 and Waste Rock Management Plan Part 2, Section 7.

5. Further to bullet point #14 in Document (ii); What will be the frequency of testing and how long will testing be carried out for from the recovery circuit rejects pile? What are the potential geochemical interactions that could occur when recovery rejects are combined with coarse PK and Waste Rock Dump #2?

All recovery rejects are planned to be stored in the PKCA watershed; some of the rejects have been reprocessed and storage of these materials will remain within the PKCA watershed. The part of the coarse PK pile 4 that may abut on Waste Rock Dump 2 will not contain recovery rejects; in fact recovery rejects are stored on the western side of Area 4 currently separated by over 200 m of coarse PK from the east side of Area 4. There is therefore negligible risk that recovery rejects will interact with waste rock in Dump 2. Testing of recovery circuit rejects has been and will be as per the proposed monitoring plans discussed in Section 7 of the Waste Rock Management Plan Part 2.

> Coarse PK, fine PK and coarse kimberlite rejects samples will be collected once every two weeks during the first year of processing operations, with the frequency reduced to once per month for the remainder of the operations if it can be demonstrated that there is limited variability in the data. Samples will be submitted for testing of paste pH, reactivity with HCl, and total sulphur. Full ABA analyses, ICP-metals and uranium analyses would be performed on every 5th sample. Results of the solids characterization work would be reported in an annual seepage and waste rock monitoring report.

With respect to coarse PK interacting with granitic waste rock in Waste Rock Dump 2 if PK pile 4 abuts on the dump, this is no different from coarse PK being placed on a granite pad, the idea being to isolate PK from acidic bog soils, not from granitic rock which is largely unreactive. The issue for bog soils is acidic conditions; the pH from seeps (from the 2006 survey) and from the pit sump and East Sump are all neutral, or close to neutral (Table 2 and 3 in the 2006 seepage report).

Sample Site	pH
Seep 5	7.3
Seep 13	6.42
JER-SW2 (pit sump)	7.15 – 7.73
JER-SW8 (East Sump)	7.68 -7.7

I trust this response meets your immediate requirements. Please do not hesitate to contact me should you require additional information or clarification.

Yours truly,

Bruce Ott
Senior Associate

/bo

c: D. Johnson, C. Wray, M. Tanguay