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Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
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Attention: Ms. Dionne Filiatrault, P.Eng.
Manager Technical Services

Dear Dionne:

**Tahera – Jericho Diamond Mine
Teleconference Meeting with Tahera –
November 9, 2004**

A teleconference meeting was held on November 9, 2004 between Acres International Limited (Acres), Dillon Consulting Limited (Dillon), and Tahera Corporation (Tahera). Ms. Ann Wilson of Environmental Canada (EC) also participated in the conference, as she was not able to attend the technical meeting and pre-hearing conference in Kugluktuk on October 28-29, 2004.

Messrs. Bruce Bennett, Paul Holmes and Ramli Halim represented Acres during this meeting, and Dr. Bryan Leece represented Dillon. Mr. Greg Missal, the VP of Tahera led the Tahera's technical team, consisting of Mr. Bruce Ott of AMEC, Ms. Kelly Sexsmith and Mr. Cam Scott of SRK, Mr. Don Hayley of EBA, and Mr. Rick Pattenden of Mainstream Aquatic. Greg indicated at the beginning of the meeting that Mr. Peter McCreath of Cleawater Consultants was not able to attend the teleconference because he was out of the country, but had replied to some of Acres' questions by an e-mail and submitted to Acres on November 2, 2004.

The meeting was intended to provide informal discussions on some technical issues related to the 2004 Tahera's submissions for the water license application to the Nunavut Water Board (NWB).

In NWB letter dated November 1, 2004 on the subject of final hearing schedule, associated deadlines and information, NWB requested that NWB should be informed of any conclusions reached during additional discussions between the various parties, regulators, consultants and Tahera. For this purpose, this letter is prepared to briefly summarize the discussions between Acres and Tahera on specific topics related to Tahera's submissions on The Abandonment and Restoration Plan (App. A), Operation Monitoring Summary (App.I), Waste Rock Management Plan (App. T), Design of PKCA

(App. W), Receiving Water Quality (App. U), Proposed Discharge Limits (App. V), and Site Water Management (App. X). However, this letter does not include discussions on issues raised by both Dillon and EC.

The format of the teleconference followed along the lines of some questions that Acres prepared and submitted for the technical meeting in October 2004. Some of these questions were subsequently answered by Tahera's technical team prior to the teleconference meeting.

Clarifications and discussions were made in the teleconference regarding Tahera's proposed plan for the mining operation related to development of waste rock stockpiles, water quality and PKCA facilities and structures. Some of the highlights include the following.

1. Divider Dyke – Tahera will provide additional information, design changes (optional plan to include fine filter layer on the upstream part of the dam), crest elevations and potentially raising the crest elevation to prevent overtopping of the Divider dyke.
2. Geochemistry of Waste and Processed Rocks - Tahera indicated that the waste and processed rock materials generally have non acid generating potential (relatively “benign”), and would have minimal detrimental effects on the environment. The covers to be placed on top of the waste rock dump sites/stockpiles during the mining reclamation would be intended mainly to promote vegetation growth. Total cover will be in the order of 0.5 to 0.8 m, 0.3 m of which will be a cover on coarse rocks which require soil cover for vegetation growth.
3. West Dam Design – Don Hayley indicated that final design will be carried out prior to the construction of the dam, as well as for other structures in the PKCA. Don subsequently provided Ramli with a technical paper related to dam building experience on permafrost foundations using thermosyphons at the Ekati Mine site. He stressed that the combination use of the GCL as secondary impermeable barrier, construction of the frozen core dam in winter and application of thermosyphons at the dam foundation will minimize the seepage through the dam.
4. Dam Stability Analysis - Tahera provided clarification that the stability analysis for the West Dam and confirmed that the stability analyses described in App. W utilized the latest design incorporating a Geocomposite clay liner (GCL) instead of a HDPE liner. Tahera further stated that the figure which shows a HDPE liner on App. B of the App. W (PKCA design) document was not correct, although the analyses had been revised and corrected using the GCL liner.
5. Permafrost and Potential Seepage Flow from the Eastern Dams to Ash Lake – Tahera provided explanations about the tailings depositional sequence at the east

end of the dam. Together with the two frozen dams built in the area (the East and Southeast Dams), this would minimize any seepage across these structures to the Ash Lake area.

6. Monitoring station on the Lynn Lake/Contwoyto Lake watershed - Tahera indicated that monitoring for water quality is planned at Lynn Lake, and they are convinced that there will be no contamination potential into the water streams on the eastern portion of the Jericho site.

Tahera also mentioned that there have been "mix-ups" on some drawings and related figures and tables for the proposed water quality monitoring sites in App. I.

7. Recovery Plant Rejects – Kelly Sexsmith provided additional information about the geochemistry of the rejects material, and is confident that this material can be blended into the coarse PK, which has high neutralizing potential. At the end of the mining period, it is assumed that all of the materials in the recovery plant reject stockpile would have been moved to the coarse PK stockpile.
8. Reclamation Cost Estimate – Tahera indicated that the estimate was provided by Nuna Logistic, a company which is familiar with working in various mining projects in the North. The cost was prepared using available information and assumptions which Tahera followed in their current plan for the mining operation. It is understood that this estimate will need to be updated as the mining operation progresses, and will further be used for determining the amount of security deposit for the A& R.
9. Additional questions related to the A& R plan and the design of the PKCA were also forwarded by Ramli Halim to Tahera prior to the teleconference meeting (November 8, 2004). All of these questions have been answered and/or covered in the meeting. The additional questions are attached to this report.
10. Questions which were provided by Paul Holmes on the hydrology and water balance of the proposed mining operation have been answered by Peter McCreath in his e-mail, and submitted to Acres on November 2, 2004. A few discussions and clarifications were added during the teleconference meeting.
11. Limits and Environmental Effect Monitoring (EEM) Related Issues on Effluent Concentrations which can be Released into the Environment – Bruce Bennett asked about the calculations on how these values were developed. Tahera indicated that a paper by AMEC (dated October 22, 2004) reviewed the treatment alternatives for metals in mine effluent at Jericho. A copy of the document was made available to Acres after the meeting.

12. Dilution into Lake C3 – Bruce Bennett asked to clarify the dilution process and selection of the alternative to reduce the effluent concentrations as the water from PKCA is released back into the environment. Discussions were further made on these issues.
13. Water Management and Effluent Concentrations/Loadings – Bruce Bennett asked a few questions on the effluent concentration loadings described in Table W1 and W3 of App. X. Kelly Sexsmith and Bruce Ott of SRK provided some of the answers. Additional discussions were made between Bruce Bennett and Kelly Sexsmith after the teleconference. Bruce Bennett intended to provide additional questions which require further clarifications from Tahera before the November 12 dateline for question submissions.

In closing, it was generally accepted that the teleconference has been very useful and has provided clarifications through the discussions and answers to the questions which were brought forward prior and during the meeting.

We hope that the above information is suitable for your purpose. Should you have any further questions, please contact me.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Ramli Halim', followed by a long horizontal arrow pointing to the right.

RAH:sep
Attach

Ramli Halim, P.Eng.
Senior Geotechnical Engineer

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P1380804 Nunavut Water Board 2004 Tahera's Submissions for NWB Water License Application

Additional Questions/Issues for Discussion – November 8, 2004

1. Abandonment and Reclamation Plan

What is Tahera's plan to ensure that the waste rock, fine and coarse PK piles do not continue to create leachate containing detrimental substances after the mine closure?

What is the basis for selecting 0.3m of cover? If this cover is required over coarse rock/coarse PK only to promote vegetation growth, what is the plan for covering of these stockpiles/piles for preventing leachate entering into the environment?

Considering that active layer in frozen stockpiles is more than 1m thick for the Jericho area, would any cover thickness which is less than 1m be subjected to thaws in the summer?

What information is available from nearby mining operations which can be use during reclamation of the waste rock stockpiles at Jericho? Tahera should conduct a study to obtain data on the effects of permafrost and its aggradations on soil covers using local materials.

The Aquatic Monitoring Plan (A&R Figure 6.1) should initially include monitoring stations on Ash Lake, Key Lake, Lynn Lake and Contwoyto Lake. It is understood that these lakes are located on a different watershed. However, close proximity of some of the stockpile areas, waste dump sites, PKCA and the various plants and storage areas to these lakes will necessitate monitoring requirements to ensure that no contaminant escapes into these lakes. If it is proven that the water quality on these lakes is not affected by the mining operation, monitoring can be subsequently reduced or eliminated.

2. Structures on PKCA

During the PKCA operation, it is not clear when the divider dyke will be constructed. In addition, the Settling Pond has been completely eliminated from the plan, and it will be constructed as a contingency.

Why is the Settling Pond now not required? What has changed in terms of water management, water quality requirements, or mining operations, which enables Tahera to eliminate the Settling Pond from the original plan in the EIS?

Is there a potential scenario where free water from the PKCA pond seeps through the East and/or Southeast dams, causing contamination into Ash Lake, then to Key Lake,

Lynn lake and eventually into Contwoyto Lake? Why are these dams not built using GCL as a secondary protection for seepage through their frozen cores?

Previous experience with dams built on permafrost foundation shows that these dams can fail, resulting in the release of contaminant water through the dam. One example is the horizontal cracks which developed at Kubaka Dam in Russia, resulting in seepage flows through the dam. What is the difference in the designs of the West Dam and Kubaka Dam, which would prevent dam failure such as what occurred at Kubaka Dam?

Is the thermosyphon only intended to freeze the area between the base of the dam and the underlying foundation soil? Is there a contingency plan to also freeze the core of the dam using the thermosyphon?

Part of the foundation of the West dam will be on overburden, and part (the northern part) will be on bedrock. Would differential settlement, which was one of the contributing factors resulting in the Kubaka Dam's failure, be a concern for the West Dam?

In the initial EIS Plan, the West dam's volume was significantly larger than the new design (fill volume was reduced by almost 50%). The relatively wide core and wide body of the dam in the initial EIS design was intended to allow for self healing of cracks if differential settlements are developed. What is included in the design of the West Dam, to minimize potential differential settlements? Have thaw consolidation tests, or calculations of potential settlements been performed for the West Dam?

The construction of the dams and dykes at the PKCA will require construction drawings to be signed and sealed by a professional engineer, together with the detail technical specifications on how these structures will be built.

The PKCA is designed to have an operating water level close to the original water level in Long Pond (el approx. 515). However, the design allows for water levels to increase to el 523, where water will start to be discharged through the spillway. During the operation of the mining (8 years), how often is it expected for such events in which high water levels above, say el 520 will occur? How long will such events happen? Will it happen over a short period of time (hours) or longer periods of time (days, months)?

In the case where high water levels occur, what happens to:

- A potential of overflow of fine PK to the eastern portion of the pond, overtopping the divider dyke (which was initially designed only to crest el 520). Will this subsequently reduce the water quality at the western end of the pond?
- A potential of water overflowing the tailings surface at the eastern end and directly stand against the East and Southeast Dams, and the potential to seep through these dams.

Drawing 1CT004.06 – P8

- Why is the thermosyphon radiator on the north abutment extended to the north side of the spillway? Will the pipes be located under the spillway?
- Are the numbers of radiators adequately designed to freeze a relatively large area of the foundation base on the West Dam?
- Will evaporators be placed on portions of the dam's foundation (under the core), but outside the key/trench area? Detail 1 on the drawings shows that evaporator is placed directly under the centerline of the core; however, Detail 5 shows that evaporators are located to the upstream of the core centerline.
- Will the base of the spillway be excavated entirely in bedrock for the whole length of the spillway alignment?

An old fault passes through the entire length of Long Lake. Boreholes which were drilled through the bedrock show that the upper portion of the rock is shattered and is assumed to be part of the fault zone. Has the fault zone under the lake been proven to be completely permafrost affected? If there is talik in the upper portion of the bedrock, would this be a potential for seepage of water through the fault and under the dams? Would lowering the water level at Long Lake in the summer of 2005 result in thawing part of the lake bottom and possibly the top of bedrock?

Thermal Modeling

- Does the thermal model assume that the foundation of the dam is initially frozen? If this is the assumption, is it realistic?
- Does the model also assume that the core of the dam is initially frozen?
- Is there a significant difference in the results of the analysis between the model previously run for the EIS and the new model? The old model shows a steady state case, where the new model only shows a period up to 10 years.

What is the advantage of using a GCL instead of a HDPE liner for the construction of the West Dam? Would a GCL liner, which will not be continuously in contact with free water (i.e. frozen most of the time) be prone to cracking? It was noted that the dam with HDPE liner is based on the design at Lupin Mine, whereas the dam with GCL follows the design at Ekati. From the experience at Lupin and Ekati Mines, which dam had a better performance and is less problematic?