Based on review of the Jericho water license and the KIA recommend to the Nunavut Water Board that the duration of the water license no longer than six years in length. This will allow for one year construction and five years of operation.

In this presentation, KIA highlights issues related to the terms of the water license, water use, water flow monitoring of receiving environmental aquatic effects monitoring, discharge limit and planning, among others. The KIA also provide recommendation to address these other issues. The KIA also provide recommendation for security estimate for the entire site of the Jericho project, include Inuit-owned land, that KIA estimate in the base of Inuit value, Inuit recommendation, objectives and Inuit consultation.

We trust that our submission to the presentation will be addressed to the Nunavut Water Board. I now turn this presentation over to Geoff Clark who will present the remaining issue and the determination of the Nunavut Water Board regarding Jericho water license application.

GEOFF CLARK: Thank you, Raymond. Before I begin, I was wondering if I could borrow that pointer that I think Cam had. And, secondly, I would like to note that KIA was really counting

on that great projector that the Nunavut Water Board has, because the one that we have in our office, as you can tell, it is about three times bigger and it is about a third of quality of the projector that the Nunavut Water Board has.

So my apologies, if it is hard to read, it is because we found this projector just doesn't project well. So I will try to use this pointer, might help out in a few slides, but in others I might just have to explain a little more.

So KIA's first concern relates to water use and the quantity of water. And specifically KIA recommends that the water license include a provision that Tahera describe how it plans to measure or predict the total annual precipitation, including snowfall. Water balancing or water balance modelling of the Jericho project will require continuous measurement of precipitation and other meteorological or weather-related variables using instruments at the Jericho meteorological station. One variable that was not included in Tahera's list was snowfall.

Tahera predicts that the Jericho mine will use about 1 percent of the total annual outflow from Carat Lake. It is important to ensure that the water surface elevation of Carat Lake will not

significantly change in the event that Tahera's calculations are incorrect. So KIA recommends that the Nunavut Water Board set a limit to the drawdown of the water surface elevation of Carat Lake that should be based on the natural seasonal range of the water surface elevations of Carat Lake.

As well, KIA recommends to the Nunavut Water Board that a hydrometric station be established at the outlet of Lake C3 in order to confirm flows out of Lake C3. I will talk a little bit more about that later.

KIA has the following recommendations regarding water flows in the mine. And the first one is that it is important that the water flows from the mine be monitored at all key points in the Jericho operation, because this information can be used to predict the future water quality issues at the mine. With this in mind, the KIA recommends that additional monitoring stations be established at ponds A, B and C, if they are built, and all sumps and to monitor seepage around all dams surrounding the PKCA. And PKCA is processed kimberlite containment area.

As well, a PKCA dewatering plan or drainage plan will have to be developed in order to drain water from Long Lake before it can be used as a

PKCA, and dewatering should only begin after the dewatering plan is approved by the Nunavut Water Board.

Fish must be salvaged from Long Lake in consultation with local Inuit before Long Lake is dewatered.

KIA has reviewed Tahera's plans for monitoring the waters in the receiving environment and has the following concerns and suggestions. Firstly, KIA is confused by the proposed numbering system that is proposed by Tahera for the surveillance network program, or SNP, and the aquatic effects monitoring program, also called the AEMP. This is because some SNP stations were both listed as SNP and AEMP stations. And KIA recommends that the SNP, a prefix, only be used for water quality stations, and all other stations be listed as aquatic effects monitoring program stations.

This is one of the slides that didn't work out. And KIA found that the purpose of some of these SNP stations were confusing. And I will just describe it, instead of worrying about this table, but we found that, for example, SNP13 and 14 were listed by the company that were located in the Jericho River or in that area as downstream control

sites. And the KIA considers these sites to be far-field sights because they are located downstream from the effluent discharge, and so it can't be considered true controls. And so the water license should closely specify the purpose of each station and its surveillance protocol.

KIA also recommends two additional SNP stations be added to the 15 that are proposed by Tahera, and they are located in these two lakes that are adjacent to the mine site but do not receive any direct drainage from the mine site. These lakes are called Ash Lake and Key Lake, which flow into Lynne Lake, which is proposed to have a surveillance network program water quality station. These lakes are on Inuit-owned land and may be affected by seepage from dams or from other sources of pollution on the site.

KIA reviewed Tahera's proposed aquatic effects monitoring program, or AEMP, and suggested the following changes to the Nunavut Water Board. First of all, the combination of SNP and AEMP shouldn't be combined to avoid confusion.

And as specified in the NIRB certificate, fish should be added to the sampling program in Jericho Lake. And all biological components, including fish, should be sampled in the Jericho

River.

Here are examples of some of our suggested additions to the aquatic effects monitoring program. So in the north basin of Jericho Lake, that fish are added to the aquatic effects monitoring program, and that in the Jericho River, as per the NIRB certificate, that all parameters are monitored in the Jericho River. As well, more benthic invertebrate sampling should occur in Lake C3 and Carat Lake at AEMP sites.

When KIA reviewed Tahera's proposed discharge limits, KIA used a general guide, discharge limits from the Jericho mine should not be any higher than any other diamond mine in Canada, sorry, in Canada's Arctic for the following reasons: the dilution capacity of Lake C3 is no higher than any other diamond mine in the Arctic.

The Nunavut water Board should use precedents set by Ekati, Diavik and Snap Lake due to the efforts spent to set these limits. It is unlikely the discharge limits from other mines will increase in the future, and this license will set a precedent for other Nunavut mines.

Unfortunately, what this table shows is the proposed discharge limits for four parameters, one as nitrate N, total chromium, total nickel and

total zinc. And these are parameters that KIA specifically wanted to focus on. And what we showed in this table was Tahera's proposed limits, KIA's proposed limits, and then the limits for these four parameters at Ekati, Diavik and Snap Lake. And KIA found that 4 of the 18 discharge parameters proposed by Tahera for the Jericho mine are higher than the highest discharge limit by any other diamond mine in Arctic Canada.

KIA recommends to the Nunavut Water Board that the proposed discharge limit for nitrate N, total chromium, total nickel and total zinc should be reduced so that they are not higher than other diamond mines in the Arctic.

KIA is concerned that Tahera's dilution modelling of the discharge from Stream C3 into Lake C3 will not be accurate during periods of very low flow into Lake C3. The key to managing the discharge of effluent from Stream C3 is based upon effective dilution in Lake C3.

Tahera's discharge limits are based on a predicted ten-fold dilution in Lake C3. During periods of very -- or during very low flow periods, the ten-fold dilution factor may only be achievable by including the entirety of Lake C3 and perhaps parts of Carat Lake. Thus KIA is not convinced

that the ten-fold dilution factor will always be achieved through the life of the mine. To help manage this issue, KIA recommends to the Nunavut Water Board that discharge from the PKCA can only be proportionally one-tenth of the flow that is measured leaving Lake C3. At no time should the company allow less than a one-to-ten ratio of PKCA discharge to Lake C3 outlet flow.

KIA is also concerned that the dilution will not always be met with the 200-metre mixing zone in Lake C3 proposed by Tahera. KIA recommends that a verification study using field sampling should be conducted by an independent third-party contractor paid by Tahera, and that the terms of reference be developed by the Nunavut Water Board, and that the results would be reported to the Nunavut Water Board.

Baseline toxicity tests of water in Long Lake, Lake C3 and Carat Lake should be conducted prior to mine construction so that any observed effects can be factored out of later tests on PKCA effluent. Tahera should be encouraged to develop and conduct these tests on species native to the Arctic.

Tahera suggests that if water quality in the PKCA does not meet discharge criteria, that

flocculent will be added to the PKCA prior to discharge to remove suspended material in the water of the PKCA.

We have already heard some discussion today about possible or whether flocculents are toxic -- have toxic effects on fish. However, we don't believe it is advisable to add flocculents to the PKCA because it may go in unbound forms through Stream C3 into Lake C3. And, therefore, KIA recommends that flocculents should not be used to treat PKCA effluent.

KIA recommends that the Nunavut Water Board instruct Tahera to prepare plans for the following contingencies in case that Tahera's predictions are wrong.

Tahera should describe to the Nunavut Water Board the contingency plan in case permafrost depths are less than the predicted 540 metres. And Tahera should describe as a first contingency how a water treatment plant would be developed and operated if PKCA discharge does not meet discharge limits.

The Jericho mine and its abandonment and reclamation. The Jericho mine is about 40 percent on Inuit-owned land. And Kitikmeot Inuit Association beneficiaries are the primary users of

all the land around the Jericho site, including Inuit-owned land and Crown land. Thus, KIA has a strong interest in ensuring that the entire site is reclaimed to Inuit standards, and that KIA does not incur residual reclamation liability on Inuit-owned land as a result of the project.

The KIA has developed a capacity to independently analyze and assess reclamation security by developing its own proprietary model for assessing security. This model generates security estimates that are based on Inuit values and specific reclamation objectives. KIA staff and board members, with the help of computer modelling and mine reclamation experts, developed this model.

The guiding principles of KIA's reclamation security model are to protect the environment, to be sure the site is safe for future use by people and animals, to restore the site for future use by people and animals, and no perpetual care.

During the preparation of the reclamation security estimate for the Jericho project, KIA consulted with elected representatives of the Nunavut Land Claim Agreement beneficiaries who represent Inuit from Cambridge Bay, Kugluktuk, Bay Chimo, Bathurst Inlet and Contwoyto Lake. These are called community beneficiary committees

or CBCs. Thus KIA received feedback from Inuit on reclamation from those who have lived in the area of the proposed mine site.

When consulting the CBCs, the KIA received guidance on several issues related to closure of the Jericho project. Some examples of the advice received from the CBCs include the project at closure should resemble the surrounding landscape, meaning that highly engineered closure designs are not acceptable. For example, jump slopes should look like slopes in mature landscapes with convect shoulders and concave feet, compared to slopes with uniform angles. So this is a diagram showing a slope that's more of a mature and natural profile, and this is an example of a slope with a flat top and a uniform slope angle.

Other advice included that slopes of all dumps should be covered with overburden, and all reclaimed sites should be revegetated with plant species adjacent to the mine site.

Other advice is that long-term monitoring of many parameters, such as wildlife, vegetation, geotechnical monitoring, water monitoring, and aquatic monitoring should continue long after the mine closes.

Other advice is that the open pit edge should

be contoured to a low angle so that the open pit minimizes risks to people and wildlife at closure. Another example is that an emergency and local-use air strip and emergency shelter should remain at the site after closure.

KIA's reclamation assessment approach using our security model is three-fold. Firstly KIA has used Tahera's estimate in KIA's model, including the commitments made, but not necessarily accounted for in Tahera's security estimate. Then KIA input Inuit values and objectives for reclamation of the Jericho project, including community beneficiary consultation, to develop a final reclamation estimate for the entire site. Then KIA split out though parts of the reclamation estimate that will occur on Inuit-owned land.

In our analysis, KIA accepted the costs provide by Nuna Logistics. We went through this estimate, and we found that these -- the estimates for these costs were fair. And this table says the reclamation activities in Tahera's reclamation plan estimated by Nuna Logistics, and that's $8.4 million. That $8.4 million is before any contingency factor.

In our review of Tahera's reclamation plan, we noted some activities that were stated in the

Tahera's reclamation plan but were not quoted in Nuna's cost estimate. So the first thing that we did is KIA estimated and added these new costs to Nuna's estimate, which increased Nuna's estimate by about $1 million to $9.4 million, before a contingency was applied. So this is our addition of $1 million, accounting for items in Tahera's reclamation plan that weren't quoted in Nuna's estimate.

Then what KIA did was added the KIA reclamation objectives to this estimate, based on Inuit values and Inuit consultation. And this reclamation estimate increased to $12.5 million before a contingency. The increased costs related primarily to costs related to reclaiming dump slopes, additional post-closure monitoring and reclamation of the open pit. So this is an addition of about $3 million.

Then KIA split out the portion of the security that applies to Inuit-owned land based on the reclamation activities that will be required for Inuit-owned land. And when this is split out from the reclamation on Crown land, when it is split out from Crown land, this equals about $3.3 million for Inuit-owned land.

The next thing that KIA did is added a

contingency factor of 20 percent to our estimate for the entire site and for the Inuit-owned land portion. We felt that the 10-percent contingency was too low, particularly compared to security estimates for other northern mines.

KIA also added what is called a discount rate to the reclamation estimate that reduces the cost of reclamation in today's dollars. We added a 2.5 percent discount rate, and when this is applied, it generates a net present value in today's dollars that recognizes that many of these reclamation activities occur many years in the future and that Tahera would have to pay for the majority of the security early on in the mine life. So this provides a discount or a cost in today's dollars of what it will cost to fund those activities in the future.

With the contingency and discount rate applied, the cost to reclaim the site is $12.6 million for the entire site, which is down here, and $3.3 million for the Inuit-owned land portion.

The security identified by KIA for Inuit-owned land reclamation, which will have to be part of the land lease with KIA for the lease of IOL, has yet to be completed.

In regards to any proposed split of land versus water-related reclamation security on Inuit-owned land, KIA notes that virtually all water from reclamation components runs towards Carat Lake or Lake C3 watersheds from the project footprint. As well, there are a few obvious control points to claim any potentially contaminated water on Inuit-owned land. Thus KIA considers that none of the $3.3 million assessed for security on Inuit-owned land relates to water-related reclamation.

In conclusion, KIA supports appropriate mining development in the Kitikmeot because it has important responsibilities to Kitikmeot Inuit to balance economic development with environmental protection to protect the land, wildlife and Inuit lifestyles.

The KIA continues to support the development of Tahera's proposed Jericho diamond mine. Tahera and KIA have signed an Inuit Impact and Benefits Agreement related to the Jericho project, and the IIBA has been reviewed and approved by the Minister of Indian and Northern Affairs Canada and now is in legal force.

As part of IIB negotiation, KIA and Tahera addressed the impact of the project on Inuit water

rights under Article 20 of the Nunavut Land Claim Agreement, resulting in a water compensation agreement between KIA and Tahera. KIA is satisfied the compensation concerns identified by Tahera that are related to water have been resolved.

KIA is involved in surface land management, including licensing and leasing on its lands. The Jericho project is partly on Inuit-owned land.

An important item that remains outstanding is the completion of a land lease that Tahera will require for infrastructure on Inuit-owned land parcel CO-05. This will be required before construction on the project begins on that land.

In this presentation, KIA identifies issues and provides recommendations to the Nunavut Water Board related to duration of the water license, water use, flows, monitoring, aquatic effects monitoring, discharge limits, discharge protocols and verification and contingency planning, among others. KIA also provides a reclamation and security estimate for the entire site of the Jericho project. KIA also provides an estimate for reclamation of Inuit-owned land only.

This estimate is based on our proprietary reclamation security estimation model that is based on Inuit values, Inuit reclamation objectives and

Inuit consultation.

KIA's reclamation estimate for Inuit-owned land is $12.6 million for the entire site, of which $3.3 million is for Inuit-owned land. The reclamation security identified for Inuit-owned land will have to be furnished as part of the land lease for Inuit-owned land, which is yet to be completed between Tahera and KIA.

The KIA hopes their input has been helpful to the Nunavut Water Board, to the public and to the other intervenors. And this concludes our presentation. And Dr. Mike McGurk and myself are now available for questions. Thank you.

BILL TILLEMAN: Thank you, Mr. Chairman. And as part of the presentation or at least normally what I would do for the Board is suggest, and I'm now doing that, is we file as exhibits a hard copy and also electronic version of their presentation. So they will be marked as numbers 13 and 14 accordingly. Thank you, sir.

EXHIBIT NO. 13:

HARD COPY OF PRESENTATION BY NTI AND KIA

EXHIBIT NO. 14:

ELECTRONIC COPY OF PRESENTATION BY NTI AND KIA

CHAIRMAN: We will take a

ten-minute break.

(BRIEF ADJOURNMENT)

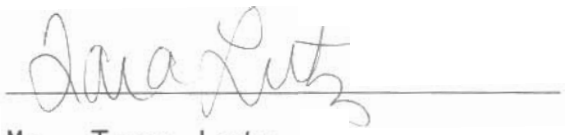
CHAIRMAN: Welcome back. I have got good news for all of you. We are going to call it a night. We are going to start 8:30 sharp in the morning with the question periods. I'm fair.

(HEARING ADJOURNED AT 11:20 P.M.)

CERTIFICATE OF TRANSCRIPT

I, TARA LUTZ, hereby certify that the foregoing pages are a true and faithful transcript of the proceedings taken down by me in shorthand and transcribed from my shorthand notes to the best of my skill and ability.

Dated at the City of Edmonton, Province of Alberta, this 11th day of December, A.D. 2004.



Ms. Tara Lutz,
Court Reporter

EXHIBITS ENTERED IN THE WATER LICENSE HEARING OF

BENACHEE RESOURCES INC.

DECEMBER 7, 2004

PAGE NUMBER:

EXHIBITS CONTINUED