

1 GREG MISSAL: Mr. Chair, Greg
2 Missal, Tahera Diamond Corporation. That's fine
3 with us.

4 VICE-CHAIRMAN: Has the plane left
5 Yellowknife now? Do we know that?

6 GLEN STEPHENS: Mr. Chairperson, Glen
7 Stephens. Yes, it is our understanding that the
8 plane left a little after 10 after 8.

9 Also, for further clarification, on that
10 plane was representatives from Environment Canada,
11 Department of Fisheries and Oceans Canada and the
12 Government of Nunavut representative.

13 CHAIRMAN: Thank you. Is there
14 anybody from the Hamlet who may want to ask
15 questions to KIA and NTI? Anybody from independent
16 consultants would like to ask NTI or KIA?

17 RAMLI HALIM: No questions,
18 Mr. Chairman.

19 CHAIRMAN: Water Board staff?
20 WATER BOARD STAFF QUESTIONS NTI AND KIA:

21 Q DIONNE FILIATRAULT: Thank you,
22 Mr. Chairman. Questions on the presentation that
23 you gave, you made reference or Mr. Donihee made
24 reference that NTI has a policy for water
25 management. I'm wondering if we could obtain a
26 copy of that? I know it is public information. I

1 have been referred to the website, but I forgot to
2 bring a copy. So I'm wondering if we could get a
3 copy of that to be tabled as an exhibit?

4 A JEANNIE EHALOAK: Thank you, Mr. Chair.
5 Jeannie Ehaloak. I can get a copy for you.

6 Q DIONNE FILIATRAULT: If the Nunavut Water
7 Board decides to approve a license for Tahera, what
8 role does NTI see having in the issue of the actual
9 license, once it is issued, as far as providing
10 review of plans, studies, reports, final design
11 drawings?

12 A JEANNIE EHALOAK: Thank you, Mr. Chair.
13 Jeannie Ehaloak. NTI and KIA work in joint work
14 together to prepare this, prepare a submission.

15 Q DIONNE FILIATRAULT: Thank you,
16 Mr. Chairman. The submission that was officially
17 filed by the deadline, actually it indicates that
18 it is from the KIA submission to the Water Board,
19 and I'm wondering does NTI agree with all of the
20 KIA recommendations that are found within KIA's
21 submission and the Rescan report?

22 A JEANNIE EHALOAK: Jeannie Ehaloak. Yes,
23 we do.

24 Q DIONNE FILIATRAULT: Thank you, Mr.
25 Chairman. One of the key recommendations that KIA
26 and NTI have provided is a recommendation that the

1 water license should be renewed for no longer than
2 six years after the effective date. I'm wondering
3 if you could provide a summary of why only six
4 years in relation to Tahera's request of -- for the
5 life of the mine of eight years plus construction?

6 A MICHAEL MCGURK: Michael McGurk. First
7 of all, we recommended a renewal, not a new water
8 license, just so there is no uncertainty there. We
9 gave -- in our submission we gave four reasons, the
10 first is the rapid change in the regulatory regime
11 for diamond mines in Canada. This is a new
12 industry for Canada, and it is new for the world
13 because of the unusual extreme climatic conditions
14 under which the mining takes place. There is not a
15 lot known, and we have to anticipate that there
16 will be changes over time and our understanding of
17 the physics and chemistry of processed kimberlite
18 and the effluent that comes from diamond mines.

19 The second reason was that there were
20 intended to be modifications to the initial mine
21 plan, and the best example was the ponds A, B and C
22 and their role in the water management plan. There
23 was going to be -- according to Tahera, there was
24 going to be a decision made whether the water would
25 be released into the PKCA or into the receiving
26 environment, and we felt that after five years, we

1 would know more about the real operating mine plan,
2 as opposed to the theoretical mine plan.

3 The third reason was that a license renewal
4 gives an opportunity for the regulators and for the
5 mine operator and for intervenors to come back and
6 review what's been learned after one year of
7 construction and five years of operation, and sit
8 down together and go over it again and see do the
9 conditions and the terms of the water license match
10 the reality of the operating mine.

11 And the fourth reason and the last reason,
12 the least reason, was that the mine plans to run
13 for eight years, it may run longer. But after five
14 years of operation, there still would be
15 significant amounts of ore to be -- yet to be
16 processed, so Tahera would have an incentive to
17 seek renewal of this water license. So the choice
18 of the time period was a result of these four
19 factors.

20 Q DIONNE FILIATRAULT: Thank you,
21 Mr. Chairman. With respect to the presentation by
22 Geoffrey Clark, under water use and quantity of
23 water, I'm wondering if you can just clarify -- it
24 was a little bit late last night when we got to
25 that point, what you mean by a limit should be set
26 to the drawdown of the elevation of Carat Lake.

1 A MICHAEL MCGURK: Michael McGurk.

2 Q DIONNE FILIATRAULT: Slide 20.

3 A MICHAEL MCGURK: Nothing was spoken
4 about the effect of water withdrawal on the water
5 level at Carat Lake in any of the presentations
6 that we read. We talked about water quality, we
7 talked about changes in habitat as a result of the
8 causeway, but nothing was said about the fact that
9 the water level in the lake may actually change. I
10 don't know if it will. According to Tahera, their
11 expected withdrawals amount to no more than maximum
12 one percent of the total volume, but what if there
13 is a very low dry year, would we see large changes
14 in the elevation of the lake? I don't know. And
15 we don't want to see changes in the elevation of
16 the lake, and so I felt that there should be a
17 requirement to maintain Carat Lake in its present
18 state.

19 As to what level it should remain at, it
20 should remain within its natural range. And we
21 felt that we recommended that Tahera be asked to
22 provide the natural range of water levels in Carat
23 Lake so that the Board can choose a level within
24 that range below which the lake should not be
25 allowed to fall.

26 Q DIONNE FILIATRAULT: For the water flows in

1 the mine, you suggest that establishing additional
2 monitoring stations at Pond A, B and C and all the
3 sumps, and I'm just wondering why you are
4 classifying that as additional. It is my
5 understanding that ponds A, B and C already have
6 identified surveillance network stations at those
7 initially.

8 A MICHAEL MCGURK: I'm not sure that they
9 are covered by the surveillance network program. I
10 think the surveillance network program is for the
11 receiving environment. Ponds A and B and C are
12 within the mine footprint and are monitored for the
13 purposes of the mine's water management and not as
14 part of the regulatory regime. We put this in
15 because we just wanted to make sure that the water
16 management plan of Tahera, that they have modelled,
17 is an ongoing process, and I believe that they have
18 stated that, that they will continue to keep their
19 water management plan operating and their water
20 management model operating.

21 Q DIONNE FILIATRAULT: Thank you,
22 Mr. Chairman. In the table where -- I'm referring
23 to slide 23, where it refers to the purpose of
24 various stations' locations, there is reference to
25 near field, middle field, far field, and I'm just
26 wondering is that reference not subjective in

1 defining near field, middle field and far field?
2 Is there any industry standard by which we measure
3 the near field, mid field and far field?

4 A MICHAEL MCGURK: Michael McGurk. I'm
5 not aware of an industry standard as a -- it is
6 somewhat subjective near, mid, far is -- depends
7 upon the scale of the operation. So near, mid and
8 far for Jericho would all be near for some -- a
9 larger place like Diavik. We felt, though, that
10 this is more of a -- this is something for the
11 discretion of the Water Board if they choose to
12 label stations. They don't have to, but if they
13 choose to label stations by their purpose, we
14 thought that the station should be labelled a
15 little better than the way they were labelled by
16 Tahera.

17 And the biggest example was calling Jericho
18 River a downstream control station, SNP14, and it
19 is simply not possible to call a station that's
20 downstream of an effluent release point a control.
21 And it bothered us that they would use that word,
22 and we felt that we wanted to point that out to
23 help the Water Board. It is not something that
24 necessarily has to be in the water license itself.

25 Q DIONNE FILIATRAULT: Thank you,
26 Mr. Chairman. I guess I'm still trying to figure

1 out how putting -- and I will use the example that
2 you provided for SNP14, how including far field
3 water quality without understanding a range of near
4 field, middle field, and far field provides any
5 more clarity without some sort of range of what
6 that implies.

7 A MICHAEL MCGURK: If you don't see any
8 good reason, anything that adds value to assigning
9 a purpose to these stations, we don't object to
10 that. It is -- if you want to just label them by
11 their names and their numbers, that's fine.

12 We just felt that Tahera had to find purposes
13 for these stations, and we felt that their purposes
14 were labelled incorrectly, and we wanted to point
15 that out for the assistance of the Board.

16 Q DIONNE FILIATRAULT: Thank you,
17 Mr. Chairman. In reference to slide 28, you refer
18 to contingency plans that need to be developed and
19 list several points. I'm wondering, can these
20 various details be dealt with either as part of
21 final designs or as part of an overall adaptive
22 management plan, or are you looking for something
23 stand alone and more specific?

24 A MICHAEL MCGURK: Michael McGurk. We
25 were going to leave that to the discretion of the
26 Water Board. We wanted to point out two major

1 issues that we felt should be labelled under
2 contingency planning, one is what happens -- and
3 this is an issue that has been raised by other
4 intervenors, what happens if the expected
5 permafrost depth is actually lower than expected
6 and water enters the pit? And the other was the
7 sequence of events that would follow if discharge
8 limits could not be met. I leave that up to the
9 discretion of the Board as to how they actually
10 want to package that in the license.

11 Q DIONNE FILIATRAULT: Thank you, Mr. Chair.
12 You refer in slide 29 that the entire mine should
13 be reclaimed to Inuit standards. Does KIA or NTI
14 have standards or published standards or what the
15 expectations for reclamation are?

16 A GEOFF CLARK: Within the model that
17 we developed, KIA Board members and staff spent
18 many hours and days discussing reclamation
19 standards and objectives according to Inuit values.
20 This information is not published for the note of
21 the Nunavut Water Board.

22 As well, you should note, however, it is
23 unrelated to KIA's reclamation security model, that
24 NTI and the Kitikmeot Inuit Association and the
25 other Inuit associations are currently developing a
26 reclamation policy for Inuit-owned lands in

1 Nunavut. However, considering that KIA is
2 responsible for surface land management in the
3 Kitikmeot region, KIA has the authority to
4 determine the standards for reclamation in the
5 Kitikmeot. And not only the authority, but we have
6 the liability for reclamation as well. So this is
7 why KIA developed its own reclamation and security
8 model based on Inuit values, Inuit reclamation
9 objectives for the Kitikmeot.

10 Q DIONNE FILIATRAULT: Do you see
11 coordinating the review and ultimate approval of an
12 A&R plan jointly with the Water Board and/or the
13 federal government under the land leases to ensure
14 that we have eliminated duplication and any
15 potential verifications as far as abandonment and
16 restoration goes?

17 A GEOFF CLARK: Yes, KIA has already
18 been engaged in discussions with DIAND regarding
19 our mutual concern that we did not overlap in our
20 reclamation estimate, and that we work
21 cooperatively to ensure that our estimate is --
22 works for the entire site, as well for our
23 respective landholdings on each side of the
24 Inuit-owned land border.

25 CHAIRMAN: We just want to take a
26 moment here to recognize and introduce Ernie

1 Bernhardt (phonetic), former MLA and long-term
2 resident of the Kitikmeot. Welcome.

3 Go ahead.

4 Q DIONNE FILIATRAULT: Thank you,
5 Mr. Chairman. You spoke in reference to the model
6 and how it was developed. And I'm just wondering,
7 can you confirm this is the first instance that
8 this model has been applied?

9 A GEOFF CLARK: Yes, this is the first
10 instance that this model has been applied. That is
11 Geoff Clark, sorry.

12 Q DIONNE FILIATRAULT: In the submission,
13 your detailed submission, do you feel there is
14 sufficient data that overviews the assumptions --
15 whenever you model anything, there is always
16 assumptions that are made and parameters to focus
17 the model and how it is interpreted -- that there
18 is sufficient information in your submission for
19 the Board to understand how you reach the eventual
20 cost estimate conclusions that you did?

21 A GEOFF CLARK: KIA's model uses
22 assumptions that are the same, largely the same
23 assumptions that are used by the other parties that
24 submitted a reclamation estimate and that we used
25 information provided by Nuna Logistics in the
26 Tahera estimate, and we -- and wherever there was a

1 lack of information, we used the values provided in
2 the reclaim model that is used by DIAND.

3 Q DIONNE FILIATRAULT: You have indicated
4 that the assessment has incorporated Inuit values,
5 and I'm just wondering how Inuit values actually
6 were incorporated into the assessment? And I use
7 this, and I can probably provide an example, is how
8 are Inuit values used when you are determining,
9 say, the movement of a volume of material? Where
10 was it incorporated more in a general sense?

11 A GEOFF CLARK: Inuit values -- this
12 is Geoff Clark. Inuit values aren't used to
13 determine the micro details of a reclamation plan.
14 So, for example, whether the -- whether a large
15 truck is used, compared to a smaller vehicle, for
16 moving material around is irrelevant. What is
17 important is the reclamation objective, what is the
18 end point? What is going to be on the land 10, 50,
19 100 years from now?

20 So in the model, there are three general end
21 points that Inuit can choose from, and in this
22 case, long-term closure was chosen for all
23 infrastructure components, except for some aspects
24 where Inuit would like to see an emergency airstrip
25 remaining and a small building for emergency
26 shelter.

1 I don't think this is the place to go into
2 the actual details of how the model works, because
3 we did not submit that as part of our submission.
4 But the outcomes or the reclamation objectives are
5 determined by Inuit, and they are based on the
6 guiding principles, and then those -- that
7 information is taken onward to the community
8 beneficiary committees in case there were any extra
9 issues or clarification required in our model.

10 Q DIONNE FILIATRAULT: Thank you,
11 Mr. Chairman. It may be useful for the Board to
12 understand how the values that you have determined
13 sort of the framework under which you came to those
14 numbers. It would be useful to sort of have that
15 for the framework. I'm wondering, without sort of
16 breaching any proprietary information, if that can
17 be provided? And if you feel that would be useful
18 to the Board, in your opinion?

19 A JOHN DONIHEE: John Donihee for KIA.
20 Mr. Chairman, we are happy to share that
21 information with the Board and with Tahera on the
22 understanding that it is to be done in a
23 confidential fashion in order to protect the
24 proprietary interests that KIA has.

25 I guess, Dionne, we would just want to know
26 how much or how little you would like to see. Do

1 you want to see the whole thing, or are you really
2 just wanting to focus on the way that Inuit values
3 were derived and used to draw the reclamation end
4 point or objectives?

5 CHAIRMAN: We need five minutes.
6 (BRIEF ADJOURNMENT)

7 CHAIRMAN: Welcome back. Any
8 more questions from the Water Board staff?

9 Q STEPHEN LINES: Thank you,
10 Mr. Chairman. Stephen Lines. With regards to the
11 monitoring at sump ponds A, B and C, I was
12 wondering if KIA could provide some of their ideas
13 on the frequency and parameters that they would
14 like monitored?

15 A MICHAEL McGURK: We don't have any
16 specific recommendations about the variables or the
17 frequency.

18 Q STEPHEN LINES: Thank you. My second
19 question, Mr. Chairman, is could KIA provide the
20 reclamation values of the Inuit standards for
21 reclamation which they would like seen applied to
22 to the water components?

23 A GEOFF CLARK: This is Geoff Clark
24 for the KIA. First of all I would like to
25 reiterate that KIA doesn't consider any of the
26 water-related reclamation to occur on Inuit-owned

1 land, and that it is all -- we believe this will
2 all be likely to occur on Crown land.

3 The reclamation activities that we have
4 included related to water on a site-wide basis
5 include what we call passive treatment and
6 monitoring of the open pit, which is the fertilizer
7 or nutrient addition that was discussed earlier in
8 the questioning. Additions would be related to
9 post-closure monitoring, related to water which
10 would include aquatic monitoring as well.

11 So when I say aquatic monitoring, I mean
12 biota, aquatic biota and water quality monitoring.
13 And then there are some minor activities related to
14 directing flows in water flows in the mine site at
15 closure. They have a much smaller contribution to
16 the reclamation amount. In a general sense, that
17 one percent to the overall cost is simply -- for
18 example, creating an outflow for Pond A, B and C or
19 rediverting flows from Stream C1 to pit, we
20 consider all of those costs minor.

21 The expensive costs are activities related to
22 the water treatment of the open pit and the
23 monitoring, long-term monitoring surrounding that,
24 and that is scheduled to happen after closure. And
25 we estimated that the monitoring would occur over
26 the life of the filling period of the pit, which is

1 estimated to be 20 years.

2 Q STEPHEN LINES: Thank you,
3 Mr. Chairman. For those components which were
4 mentioned, how do they differ from the reclamation
5 estimate provided by Nuna? Those components were
6 also included in that, so how do the ones presented
7 by KIA which go by Inuit values and standards
8 differ from those presented by some of the other
9 parties?

10 A GEOFF CLARK: This is Geoff Clark.
11 Related to water reclamation only, differences
12 would include in the estimate provided by Tahera,
13 there was a general estimate provided of \$20,000 a
14 year for ten years related to monitoring. I assume
15 that includes the passive water treatment.

16 KIA's review of that felt that those costs
17 were underestimated by Nuna for such a treatment
18 system. And also their time frame was shorter than
19 KIA had estimated. We estimated a 20-year
20 monitoring program, they estimated a 10-year
21 monitoring program. As a result -- pardon me for
22 one second. Our total cost of passive water
23 treatment plus pit water monitoring was estimated
24 at about \$498,000, compared to \$200,000 provided by
25 Nuna. As well, Nuna did not include monitoring of
26 the site in general for aquatic biota or water

1 quality, because it is just not the open pit that
2 should be monitored after closure in relation to
3 reclamation. So those would be additional costs.

4 Our total costs for water quality monitoring
5 post closure is \$386,000. And for the aquatic
6 environment monitoring, it was \$161,000. So that's
7 pushing up to close to a million dollars, whereas
8 Nuna provided an estimate of about -- well, a
9 general monitoring estimate of \$200,000, which I
10 assume some would be related to pit water related
11 reclamation.

12 In the DIAND estimate, DIAND used a different
13 method for calculated water-related security than
14 KIA did where they -- KIA looked at specific
15 activities that would need to be done in order to
16 reclaim certain components of the mine. And I
17 think that -- I can't comment specifically on what
18 DIAND did, but they -- in addition to what they
19 have done, they added a -- or they incorporated a
20 percentage split of which a percentage goes to
21 water and a percentage goes to land, KIA didn't do
22 that.

23 However, KIA and DIAND, I had mentioned we
24 worked -- we worked together to try and make sure
25 that our estimates are not duplicating any security
26 required for the entire site. And in our

1 discussions with DIAND, at the point in time when
2 we had those discussions, it didn't appear that
3 DIAND had accounted for any money related to the
4 passive water treatment that was proposed by Tahera
5 for the open pit. And I believe in their
6 submission they didn't consider -- they stated in
7 their submission that treatment of the pit water
8 would not be required. So that would be a cause
9 for a big difference between KIA's estimate and
10 DIAND's estimate for water only. So in this case,
11 we are talking probably about -- and also DIAND has
12 much lower monitoring figures.

13 KIA's water quality monitoring estimates in
14 total are about 660,000, DIAND's are around
15 400,000. And KIA also has monitoring for aquatic
16 biota, which we mentioned, and DIAND does not
17 propose to monitor for that in the current
18 estimate. So those cause differences to occur in
19 the water-related estimate.

20 It is clear in KIA comparing these three
21 estimates that there are three very different ways
22 of completing this estimate. KIA feels that we
23 have as accurate as you can have, and also a robust
24 method because we look at the actual activities
25 that have to happen on the site to reclaim a
26 certain component of the mine, compared to other

1 methods which are splitting out percentages for
2 attributing a percentage of the overall mine costs
3 to water in some other fashion, aside from just
4 actually looking at what needs to be done and
5 costing it.

6 STEPHEN LINES: Thank you, that's all.

7 BILL TILLEMAN: Thank you,

8 Mr. Chairman. And so before the break there was an
9 offer made by KIA to submit their information in
10 total, but that it be done confidentially. I think
11 it is the staff's position that it is not -- that
12 actually wouldn't be necessary, although we thank
13 them for the offer.

14 What might be helpful, Mr. Chairman, and we
15 can ask this, if I could ask Mr. Donihee to comment
16 or Mr. Clark, if they could just simply give a
17 little bit more of an explanation, put a little bit
18 more meat on the bones, so to speak, of the slide
19 number 34, as soon as they could today, and that
20 then would be the final request. I would ask
21 Mr. Donihee how that might work for them.

22 JOHN DONIHEE: John Donihee for KIA.

23 Mr. Chairman, we can do that. We probably need to
24 get access to a printer, but it should be possible
25 during the day. I will copy Tahera as well and
26 DIAND as well, because they both have interests in

1 the reclamation and abandonment reclamation of the
2 site.

3 BILL TILLEMAN: Thank you, Mr.
4 Donihee, and thank you, Mr. Chairman, those are the
5 staff's questions.

6 CHAIRMAN: Thank you.
7 Mr. Missal?

8 GREG MISSAL: Greg Missal. I guess
9 if I understood counsel for the Water Board
10 correctly, you are declining getting a copy of the
11 proprietary model; is that correct?

12 BILL TILLEMAN: Yes, that's correct.

13 GREG MISSAL: Greg Missal with
14 Tahera. If possible, Tahera would still like to
15 have a copy of that, even though the Water Board
16 has declined. I believe the offer was made. Thank
17 you.

18 JOHN DONIHEE: Yes, Mr. Chair.

19 CHAIRMAN: Go ahead.

20 JOHN DONIHEE: Thank you, sir. John
21 Donihee. Yes, we will provide the details to
22 Tahera.

23 CHAIRMAN: Okay. Is the Water
24 Board staff done with questions?

25 BILL TILLEMAN: Yes, sir.

26 CHAIRMAN: Thank you. Okay. I

1 would like to acknowledge the arrival of DIAND,
2 Environment Canada and DFO. As a matter of fact,
3 if I can ask DIAND if they have any questions to be
4 addressed to joint submissions by NTI and KIA, you
5 are more than welcome to do so. Thank you.

6 DIAND QUESTIONS NTI AND KIA:

7 Q JOHN BRODIE: Good morning,
8 Mr. Chairman. John Brodie. I have a number of
9 questions concerning the abandonment and
10 reclamation aspect of the KIA intervention.

11 I would like to start with just a general
12 question first. In the context of the philosophy
13 of what has been addressed in the KIA scope of
14 reclamation activities, I'm wondering, is the scope
15 of the reclamation work that is included in your
16 estimate, would you say that it is equivalent to or
17 more stringent than what is called for in the
18 Nunavut Mine Reclamation Policy?

19 A GEOFF CLARK: Geoff Clark, KIA.
20 Since the KIA model is based on Inuit values for
21 reclamation, first thing I can say is it is
22 different from DIAND's policy for mine abandonment
23 and reclamation for Nunavut. It may be more
24 stringent; however, it depends on how one
25 interprets the policy, the mine site reclamation
26 policy that is developed for Nunavut.