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1 NUNAVUT IMPACT REVIEW BOARD
2 FINAL HEARING CONFERENCE FOR THE JERICO DIAMOND
3 PROJECT
4 JANUARY 8, 2004 VOLUME 4
5 LOCATION: KUGKLUKTUK COMMUNITY HALL
6 KUGLUKTUK, NUNAVUT
7
8 NIRB FILE NO. 00MN059
9
10
11 PANEL:
12 Elizabeth Copland Chairperson
13 Peter Paneak
14 Albert Ehaloak
15 Martha Akoluk
16 Mary Avalak
17
18 BOARD STAFF:
19 Bill Tilleman, Esq. Legal Counsel
20 Stephanie Briscoe Executive Director
21 Dionne Filiatrault Nunavut Water Board
22 Zainab Moghal Technical Advisor
23 Jordan DeGroot Technical Advisor
24 Gladys Joudrey Environmental Assessment
25 Officer
26

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1 (COMMENCED AT 10:45 A.M.)

2 OPENING REMARKS AND INTRODUCTIONS:
3 CHAIRPERSON: Good morning. Is everybody
4 ready? We better get started, we are 45 minutes
5 late.
6 And before we start, I am going to ask Peter
7 Paneak to give the opening prayer.
8 (OPENING PRAYER)
9 CHAIRPERSON: Good morning.
10 If you haven't signed in yet, please do so at
11 the front. And for presenters and people who are
12 going to speak, please wait for the translators to
13 finish, and don't speak too close to the mic.
14 Welcome Kugluktummuit.
15 Before we start, Mayor Stanley Anablak wanted
16 to say a few words.
17 MR. ANABLAK: Thank you very much,
18 Mr. Chairman.
19 I would just like to invite everybody to
20 Kugluktuk and wish everybody -- everyone a happy
21 New Year, a very successful year. Welcome.
22 Again, if you need anything just contact
23 myself, I will be here most of the day, or some of
24 the staff will be here, so if you require any
25 assistance, just contact me.
26 Thank you very much, welcome.

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1 CHAIRPERSON: Thank you, it is Ms.
2 Chairperson.
3 Hello, and happy New Year. Welcome to the
4 final hearing conference for the Jericho Diamond
5 Project. This is NIRB file number 00MN059.
6 The project being proposed by Tahera
7 Corporation is for a diamond mine, the Jericho
8 diamond mine located in the Jericho watershed at
9 the north end of Contwoyto Lake. I believe they
10 provided a map, so you can know where -- exactly
11 where Jericho is, they can clear that up a little
12 later this morning.
13 The goal of the project is to extract the
14 Jericho kimberlite reserves by way of open pit and
15 underground mining. Full scale extraction is
16 expected in 2005, with the mine to close and be
17 reclaimed in 2013. The mine will engage in
18 continued exploration and development of
19 prospective kimberlite pipes in the area, with a
20 possibility of extending the operation life of the
21 mine past the eight-year period currently
22 projected.
23 The project, while utilizing some existing
24 infrastructure, will require the construction of
25 additional elements associated with mining and
26 production.

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1 We are sorry about the recent delay in
2 proceedings for the original hearing dates in

3 December due to the flu situation in the Kitikmeot
4 region. We are happy, finally, to begin this
5 hearing.
6 My name is Elizabeth Copland. I am the chair
7 of the Nunavut Impact Review Board. I live in
8 Arviat, and have been with the Nunavut Impact
9 Review Board for just over eight years.
10 I will now introduce the Board members and
11 Staff. In attendance with us today are the
12 following Board members. Please note Peter
13 Akkikungaq has declared a conflict in participating
14 in these proceedings as he is the mayor of Gjoa
15 Haven.
16 To my left Peter Paneak.
17 MR. PANEAK: My name is Peter Paneak
18 from Clyde River. Thank you for your hospitality.
19 I feel welcome for being here.
20 I have been a member of the NIRB board for
21 going on three years. I am well, and I am very
22 glad to be here, and I enjoy what I do as a Board
23 member. Thank you.
24 CHAIRPERSON: Albert Ehaloak.
25 MR. EHALOAK: Hi, my name is Albert
26 Ehaloak. I am born and raised in Cambridge Bay,

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1 and I have been on the NIRB board for about a year
2 and a half.
3 CHAIRPERSON: Martha Akoluk.
4 MS. AKOLUK: Good morning, and happy New
5 Year.
6 I'm Martha Akoluk from Bathurst Inlet, and I
7 have been with the Nunavut Impact Review Board for
8 three years now.
9 CHAIRPERSON: Mary Avalak.
10 MS. AVALAK: Good morning everyone, and
11 happy New Year. I can recognize many people.
12 Koana. Thank you.
13 CHAIRPERSON: We also had a Board member
14 Zack Novalinga from Sanikiluaq.
15 The Nunavut Impact Review Board received
16 unfortunate news in December that Zack died during
17 surgery in Winnipeg.
18 And with us this morning, the Nunavut Impact
19 Review Board Staff members are executive director,
20 Stephanie Briscoe, our legal counsel, Mr. Bill
21 Tilleman, our technical advisor, Zainab Moghal,
22 technical advisor, Jordan DeGroot, our
23 environmental assessment officer, Gladys Joudrey,
24 she is in the back or in the front, our
25 interpreter/translator Josie Tucktoo-Lacasse,
26 interpreter/translator Mary Hunt,

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1 interpreter/translator Edna Elias,
2 interpreter/translator Henry Ohokannoak, and our
3 stenographer, Tara Lutz.

4 Official transcripts of the hearing will be
5 prepared for Board use only.

6 I would also like to make a special
7 introduction of Dionne Filiatrault who is the
8 senior technical advisor for the Nunavut Water
9 Board, Dionne, and Dave Honstein who is the
10 technical advisor for the Nunavut Water Board.

11 Dionne will be here to ask questions in
12 relation to the Water Board mandate issues, not to
13 gather evidence, but to coordinate with the Nunavut
14 Impact Review Board to make its decision better.

15 Our method of advertising, the Nunavut Land
16 Claims Agreement states that the Nunavut Impact
17 Review Board shall take all necessary steps by way
18 of notice, release of information and scheduling
19 and location of hearings to provide and promote
20 public awareness of and participation at hearings.
21 We have tried to do this in the Jericho case by
22 notifying all of you by writing and by public
23 advertisement of this final hearing conference.

24 A copy of the correspondence between Nunavut
25 Impact Review Board, the proponent and parties in
26 what we call a public registry is available at the

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1 back table, and also available at our Nunavut
2 Impact Review Board office in Cambridge Bay, and
3 you can see Gladys at the back or Zainab during our
4 break.

5 We are here to conduct this meeting under the
6 authority of the Nunavut Land Claims Agreement
7 Article 12 Part 5. Briefly, the Nunavut Impact
8 Review Board's work is to do impact assessment, and
9 its primary objective is to protect and promote the
10 existing and future well-being of the residents and
11 communities of the Nunavut settlement area, and to
12 protect the ecosystemic integrity of the Nunavut
13 settlement area.

14 To summarize Article 12, the Nunavut Impact
15 Review Board's mandate is to use both traditional
16 knowledge and recognized scientific methods in an
17 ecosystemic analysis to assess on a site-specific
18 and regional basis the environmental, cultural, and
19 socioeconomic impacts of those proposals for which
20 it has responsibility.

21 Nunavut Impact Review Board's steps to date
22 for the Jericho Diamond Project, on December 2,
23 2000 -- on November 2, 2000 the Nunavut Impact
24 Review Board determined that the Jericho Diamond
25 Project proposal was insufficiently developed to
26 permit proper screening and should be returned to

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1 the proponent for clarification.

2 On April 5, 2000, the conformity analysis and
3 final EIS guidelines were released by the Nunavut
4 Impact Review Board. On January 12th, 2001, Tahera

5 Corporation submitted the draft EIS. On February
6 7, 2001, the Board advised Minister Robert Nault
7 that the Jericho Diamond Project required review
8 under Part 5 or 6 of the Nunavut Land Claims
9 Agreement. In reply on March 14, 2001, Minister
10 Nault agreed to refer the project to NIRB for a
11 Part 5 review. The Nunavut Impact Review Board
12 then held public prehearings in Cambridge Bay,
13 Kugluktuk and Gjoa Haven in June of 2001.

14 Tahera Corporation submitted the final
15 Environmental Impact Statement in January 21st,
16 2003. Final public hearings were initially
17 scheduled from May 26 to 30, 2003, but were
18 postponed due to numerous requests for additional
19 information. Final public hearings were then
20 rescheduled for December 1 to 5, 2003, but were
21 postponed due to a flu epidemic in the Kitikmeot
22 region. Final public hearings have now been
23 scheduled for this week, January 5 to 9, 2004, and
24 will occur in the communities of Kugluktuk,
25 Cambridge Bay and Gjoa Haven.

26 There were certain matters that the Nunavut

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1 Impact Review Board wanted you to pay special
2 attention to, and we highlighted this in the
3 November 14, 2003 letter. First, we asked that all
4 documents be translated for the upcoming hearing.
5 Second, please share all written submissions with
6 other parties, this is not the responsibility of
7 the Nunavut Impact Review Board. Finally, where
8 NIRB makes information questions of parties, and,
9 in particular, the proponent, as it will do after
10 this hearing conference, make sure you provide all
11 information that you can.

12 Nunavut Impact Review Board's matters to be
13 considered at today's review are as per article
14 12.5.5 of the Nunavut Land Claims Agreement. If
15 you have any questions regarding this section,
16 please ask the Staff, and they can direct you to
17 the Nunavut Land Claims Agreement.

18 I will now do a roll call, and I ask all
19 parties to introduce themselves and witnesses, if
20 you have any. First, we will start with the Tahera
21 Corporation.

22 MR. MISSAL: Thank you, Madam Chair.

23 My name is Greg Missal, and I'm with Tahera
24 Corporation. I will be presenting a short
25 presentation in a few minutes.

26 We do have a number of consultants with us

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1 today, and I was wondering if you would like me to
2 introduce them now or as part of my presentation.
3 CHAIRPERSON: Maybe you can introduce
4 them now and before your -- and during your
5 presentation.

6 MR. MISSAL: Thank you, Madam Chair.
7 I would like to start off with Dr. Bruce Ott
8 on my left, AMEC. Starting on the back of the
9 room, Kelly Sexsmith with SRK; Andre Sobolewski
10 with Microbial Technologies; Cam Scott with SRK
11 Consulting; Robert Hornal of Robert Hornal &
12 Associates; Pete McCreath, Clearwater Consultants;
13 Bob Humphries with Levelton Engineering; Court
14 Smith with Nuna Logistics; Ben Hubert, Hubert &
15 Associates; and Rick Pattenden with Mainstream
16 Aquatics. Thank you.
17 CHAIRPERSON: Thank you. The Kitikmeot
18 Inuit Association?
19 MR. EVALIK: Good morning, and welcome
20 to Kitikmeot and community of Kugluktuk.
21 Today during these hearings I will have Geoff
22 Clark, our environmental screener, Jack Kaniak, our
23 lands manager from Kugluktuk, and we had our legal
24 counsel, John Donihee, who is in Cambridge right
25 now. He was at the hearings in Cambridge. He is
26 not available. And Stanley Anablak, our lands

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1 officer from Kugluktuk. He is also the mayor of
2 Kugluktuk.
3 I apologize for him saying Mr. Chairperson on
4 his behalf. He is on my staff, okay.
5 Thank you very much.
6 CHAIRPERSON: Tahera Corporation, your
7 legal counsel?
8 MR. MISSAL: Pardon me, Madam Chair.
9 Letha MacLachlan is Tahera's legal counsel
10 for the meetings today. She is just in the back of
11 the room right now.
12 CHAIRPERSON: Thank you. The Nunavut
13 Tunngavik Incorporated?
14 MR. LOPATKA: Thank you, Madam Chair.
15 On behalf of James Intuluk, our first
16 vice-president who sends his regrets that he could
17 not be here today, I would like to introduce our
18 team.
19 My name is Stefan Lopatka. I am the senior
20 advisor, environment, water and marine management
21 for Nunavut Tunngavik Incorporated lands and
22 resources department based in Cambridge Bay.
23 Accompanying me will be George Hakongak, who
24 is our environmental coordinator also with the
25 lands and resources department in Cambridge Bay.
26 Thank you.

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1 CHAIRPERSON: Government of Nunavut?
2 MR. MacISAAC: Good morning, Madam Chair.
3 My name is Bernie MacIsaac. I'm with the
4 department of sustainable development, and I'm the
5 manager of minerals and petroleum resources. And
6 today with me we have our manager of wildlife for

7 the Kitikmeot region, Monica Angohiatok.
8 CHAIRPERSON: Department of Fisheries and
9 Oceans?
10 MS. CRITCH: Good morning, Madam Chair
11 and Board members.
12 My name is Stephanie Critch, and I am with
13 the habitat sector of Fisheries and Oceans in
14 Iqaluit. And with me is Julie Dahl who works in
15 the habitat sector in DFO in Yellowknife.
16 CHAIRPERSON: And for the benefit of
17 shorter people, the taller people can just bend
18 down to the mic so we don't have to hear the mic
19 moving up and down so often.
20 Department of Indian and Northern Affairs?
21 MR. TRAYNOR: Thank you, Madam Chair.
22 Stephen Traynor, director of operations and acting
23 regional director general for Indian and Northern
24 Affairs in Nunavut, Iqaluit.
25 With me today is Carl McLean, manager of
26 lands; Paul Partridge, regional economic

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1 development analyst; Robyn Abernethy-Gillis,
2 environment assessment coordinator; Charles
3 Drouin, communications officer. We also have with
4 us today a few consultants, but first off I would
5 like to mention Norm Cavanagh is our Department of
6 Justice legal counsel.
7 We have Dave Osmond from Gartner Lee, we have
8 Eric Denholm from Gartner Lee, we have Holger
9 Hartmaier from BGC, we have also Ben Wheeler from
10 Nemo Consultants, oh, and, sorry, my apologies, and
11 he couldn't make it in Cambridge, but we do have
12 Pat Laroque, our resource management officer, here
13 in Kugluktuk here with us. Thank you.
14 CHAIRPERSON: A whole plane load.
15 And the Natural Resources Canada?
16 MR. DYKE: Thank you, Madam Chair.
17 My name is Larry Dyke. I represent Natural
18 Resources Canada, and I'm with the Geological
19 Survey of Canada, and I will have a short
20 presentation of some points of interest to the
21 geological survey and also the Canada Centre for
22 Mining and Metals Technology. Thank you.
23 CHAIRPERSON: Welcome the Kugluktummuit.
24 And, elders, if you have any questions or comments,
25 you may step up any time.
26 I will now read out the procedure. I would

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1 like to outline the procedures for today's hearing.
2 At today's hearing we wish to stress the
3 principles of flexibility in our procedure.
4 Section 12.2.24 of the Nunavut Land Claims
5 Agreements allows us to do this while giving due
6 weight to Inuits, communication and
7 decision-making.

8 In general, the Board's procedure for this
9 hearing is the applicant, Tahera Corporation,
10 presents its material first focusing, of course, on
11 the Environmental Impact Statement.
12 We should point out the evidence will be
13 sworn in or -- it will be sworn or affirmed. Our
14 counsel, Mr. Tilleman, will assist the Board in
15 this regard. Then anyone with questions will have
16 a chance to ask Tahera those questions after they
17 make their presentation.
18 The Board Staff may ask questions and,
19 finally, the Board itself may ask questions.
20 Intervenor will have a chance to present
21 their case, and then Tahera may ask questions, as
22 before, so may the Staff and the Board. Elders may
23 speak at any time if they have any comments. At
24 the end of the hearing, all parties will have a
25 chance to make closing remarks, first the elders
26 may comment, second the citizens and/or intervenors

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1 and then Tahera. I will then adjourn the hearing
2 for Gjoa Haven.
3 After Gjoa Haven, I will close the hearings
4 and we will send the Board's report to the Minister
5 as per Section 12.5.6 of the agreement.
6 Essentially, we will inform the Minister of our
7 assessment of the project and its impacts. We will
8 also determine whether or not it should proceed,
9 and if so, what terms and conditions reflecting our
10 ecosystem and other land claims objectives as
11 stated previously.
12 As far as timing is concerned, the Board
13 hopes to send its report and recommendations within
14 30 days of the close of the hearing in Gjoa Haven.
15 Upon receipt of the Nunavut Impact Review
16 Board report, the Minister has various options, and
17 these are found in Section 12.5.7 of the Nunavut
18 Land Claims Agreement. What this means is that the
19 final decision is for the Minister of Indian and
20 Northern Affairs to make.
21 Please keep your comments to -- for today of
22 a short summary of about 15 minutes or less, though
23 we have given -- we will give more time for the
24 proponent. Remember that we have read your filed
25 statements, so please do not repeat yourself except
26 to summarize.

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1 If the Board determines the project should
2 proceed, the Nunavut Impact Review Board will
3 recommend terms and conditions reflecting the
4 Nunavut Impact Review Board's objectives under the
5 land claim. Parties, if they wish, can offer
6 comments on the proposed terms and conditions, but
7 this should be done during this week's hearing.
8 We will now -- we will begin with Tahera

9 Corporation. Mr. Greg Missal.
10 PRESENTATION BY TAHERA CORPORATION:
11 MR. MISSAL: Thank you very much, Madam
12 Chair, Board members. With your permission, I
13 would like to present to the audience at this
14 morning's venue.
15 CHAIRPERSON: Yes, please, and show
16 exactly where Tahera is proposing.
17 MR. MISSAL: There is a map just in a
18 couple of slide, as I go through my presentation,
19 and I will come to that, okay? All right. Thanks.
20 Good morning, everyone. Better yet, I get to
21 move around more this way.
22 Good morning, everyone. As I mentioned
23 earlier, my name is Greg Missal. I am the
24 vice-president of Nunavut affairs with Tahera
25 Corporation. Tahera Corporation is based out of
26 Toronto, and on behalf of Tahera Corporation, I

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1 would like to say that we are very pleased to be
2 here this morning in Kugluktuk. Tahera has been to
3 this community on a number of occasions for
4 community consultations, and we have always enjoyed
5 the input and questions that have been asked in
6 Kugluktuk.
7 I would also like to just pass on a word of
8 thanks to NIRB for all their work in organizing the
9 meetings here in Kugluktuk. They were here last
10 night setting up this room, and it makes it very
11 easy for all the rest of us to just show up and do
12 the things we need to do, but the effort is
13 certainly appreciated, so thank you.
14 I have got a short presentation to go through
15 for you here today. As Madam Chair mentioned,
16 there will be an opportunity for everyone to ask
17 questions following. All our consultants are here
18 with us regarding the project, if you have any
19 questions for them as well.
20 Just in terms of Tahera Corporation, I just
21 want to tell you a very little bit about the
22 company. We are a publicly traded company on the
23 Toronto Stock Exchange. We have a very large
24 number of investors who have invested money in the
25 company, which allows us to do our exploration and
26 development work as well as allows us to come here

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1 and do this type of work as well. All those
2 shareholders obviously have a very large interest
3 in what happens here this week at these meetings.
4 Tahera has been working in Nunavut and the
5 Northwest Territories since the early 1990s. The
6 property which the Jericho kimberlite is located on
7 is -- was acquired in 1992, and the Jericho
8 kimberlite was discovered in 1995. We have also
9 discovered a number of other kimberlites on those

10 properties; however, the Jericho kimberlite is the
11 most economic kimberlite that we have.

12 In terms of what Tahera intends to do, we
13 intend to develop the Jericho Diamond Project for
14 purposes of extracting commercially saleable
15 diamonds. We will be developing the company's
16 first mining project; however, we are doing that
17 with the help of experienced mine builders such as
18 Nuna Logistics, SRK and DRA, who is a company that
19 constructs diamond mining plants and are located in
20 South Africa. We will utilize local labour and
21 services.

22 We have negotiated an IIBA, or an Inuit
23 Impact Benefit Agreement, with the Kitikmeot Inuit
24 Association. And we will develop the Jericho
25 project with minimal impact to the environment.

26 This map shows you generally where we are

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1 located, I think everyone here probably knows that,
2 but most of the diamond -- or all of the major
3 diamond projects in the north are located on the
4 Slave craton, which is an area of rock that is most
5 conducive to hosting kimberlites or economic
6 kimberlites.

7 This map gives you an idea where the project
8 is located, it is right here in the centre of the
9 map near the north end of Contwoyto Lake. We are
10 also just 30 kilometres north of Lupin, and I know
11 that there is a number of citizens in this
12 community who have worked for many years at Lupin.

13 Here you see Kugluktuk to the northwest of
14 Jericho, it is about 220 kilometres, and we are
15 about 200 kilometres northeast to Bathurst Inlet.

16 As far as the proposal that we have made for
17 this diamond mining project, the project will have
18 an eight-year mine life. That means it will take
19 us eight years to take the rock out of the ground
20 and process it through our processing plant and to
21 recover those diamonds. We will be processing
22 approximately 300,000 tonnes of kimberlite each
23 year, and each tonne of that kimberlite will have
24 approximately 1.2 carats of diamonds in it. That
25 will total approximately 3 million carats of
26 diamonds to be covered over that eight years.

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1 In order to get those diamonds out of the
2 ground and out of the rock, we will be doing that
3 by open pit mining for four years, and once that's
4 completed, we will be moving on to underground
5 mining for another two years. During that whole
6 period and for another additional two years, we
7 will be processing the kimberlite rock which the
8 diamonds are in.

9 I already touched on a little bit of the
10 history, property acquisition in 1992. Jericho was

11 discovered in 1995, and it was in 1995 that the
12 baseline, the environmental baseline studies began
13 for this project, so we have a great deal of
14 information on the environment and those
15 environmental baseline studies.
16 In 1996 and '97, we gathered more information
17 on the Jericho kimberlite by means of a bulk
18 sample, which means that we took out a large
19 sample, it was just a small portion of all the rock
20 that's there, but it was about 10,000 tonnes is
21 what we removed at that time. But we call that a
22 bulk sample.
23 And we also did more drilling on Jericho to
24 better understand the size of the kimberlite. From
25 that bulk sample, we recovered 10,530 carats of
26 rough diamonds. That gave us enough confidence in

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1 order to move to the next step of this process,
2 which is the prefeasibility study, and what that
3 study does is it tells the company that this
4 project is economic to move forward with. That was
5 done in 1995, and in 2000, we completed that
6 feasibility study. In 2001, the draft EIS was
7 completed and prehearings were conducted in the
8 communities of Cambridge Bay, Kugluktuk and Gjoa
9 Haven.
10 And, of course, in 2003, the final EIS was
11 submitted. I have brought along a copy of the
12 final EIS which is on the table at the front of the
13 room. In terms of developing the EIS, this
14 document at the front, it was written based on
15 guidelines that were provided by the Nunavut Impact
16 Review Board.
17 The Nunavut Impact Review Board's consultants
18 also provided a conformity analysis of the draft
19 EIS, and the final EIS, or Environmental Impact
20 Statement, was completed to conform to guidelines
21 and comments received from NIRB's consultants.
22 Additional consideration was given to CEAA
23 requirements prior to finalizing the EIS.
24 Information requests were received in April
25 and May of 2003. We worked towards fulfilling
26 those information requests, and a supplementary

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1 document was submitted to NIRB in October of 2003.
2 That document is also at the front of the room on
3 the table if anyone would like to have a look at
4 that.
5 I just want to show you a little bit about
6 the site itself, it is to give you an idea of what
7 it looks like today and what it will look like as
8 the mine is developed.
9 This is a map of how the site looks today.
10 We have a one-kilometre long airstrip at the site,
11 we have 3.5 kilometres of all-weather roads, we

12 have a camp site, and down here at the bottom of
13 the picture is what we call the portal area, and
14 that's where the Jericho kimberlite is located, and
15 it was the location of where that bulk sample was
16 taken in 1997.

17 This is the picture of the camp site that
18 exists there today, it is a fairly typical -- a
19 little bit larger scale exploration camp site.
20 This is a picture of the portal area where the
21 kimberlite exists. It lies just on this side of
22 the picture. And this diagram shows you what the
23 main components of the mine site are going to look
24 like with the kimberlite being right here in the
25 centre of the page. These other piles, these are
26 piles of rock that you see here. Some of these

0703

1 piles such as this one and this one are waste rock,
2 and that's going to be some of the granite rock
3 will be removed while the open pit is being built,
4 and it will be piled and permanently left in these
5 locations.

6 We also have a low-grade kimberlite
7 stockpile, a coarse processed tailings stockpile,
8 and two ore stockpiles which are located close to
9 the diamond processing plant which is located right
10 here.

11 This is the accommodations and offices which
12 are connected by an all-weather tunnel to the
13 processing plant which will allow workers to go to
14 and from the processing plant without having to go
15 outside. This long narrow lake that you see at the
16 bottom of the picture is what we call Long Lake,
17 and that's the area that we will be using to store
18 our processed kimberlite -- it will be our
19 processed kimberlite containment area, and that
20 will be the wet gravelly portion of the kimberlite
21 which comes out of the processing plant and needs
22 to be stored somewhere. And we have selected this
23 long narrow lake as the best location for that to
24 be.

25 I have an animation or a short cartoon that
26 will show you how this site will be developed, what

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1 it will look like once it is developed, and also
2 the reclamation, which is how we are going to clean
3 away or take away things from the site once the
4 mining is completed.

5 This is starting at the most northern end of
6 the site where the airstrip exists today. We are
7 moving to the south, we see the exploration camp.
8 This is Carat Lake on the left side of the picture,
9 and we move south to the portal area, which is
10 where the Jericho kimberlite is actually located.

11 The Jericho kimberlite and a land-based
12 kimberlite, this is different from what we all know

13 about the Diavik project. It is 100 percent on
14 land. This picture shows how the kimberlite ore
15 goes down into the ground.
16 We now move further to the south, and this is
17 Long Lake from the south end, and it shows us a
18 picture of what the mine facilities will look like,
19 the accommodations and offices, processing plant,
20 the fuel farm, and it also shows where those rock
21 piles will be positioned as we build the open pit
22 and do the underground mining.
23 The open pit takes quite a long time to
24 build, you start off with a very small hole in the
25 first year, and you continually dig rock and
26 kimberlite out to make that hole become larger.

0705

1 You can see that there is a road leading down
2 into the pit and these ramps that spiral down into
3 the pit, that's how the trucks and the equipment
4 drive down into that hole, and, of course, are
5 hauling out the rock and the waste rock and the
6 kimberlite.
7 As I mentioned earlier, it will take about
8 four years to develop that pit, and by the time we
9 get to the bottom, it will be approximately 175
10 metres deep.
11 This shows you the kimberlite and the pit
12 from underground, as we move around it. The red
13 and the green are the kimberlite that we are going
14 to be wanting to extract, and that's the rock that
15 the diamonds are in. This is how the underground
16 mining will be done, it will be a tunnel down
17 beside the kimberlite.
18 After we are all done mining, of course, the
19 next step in all of this is how we are going to
20 reclaim this site to the best that we can. That's
21 done through reclamation work of the mine site. A
22 lot of the rock piles will no longer be there
23 because that rock will be processed. Eventually
24 the open pit will fill with water, the exploration
25 camp that's there will be removed, and the airstrip
26 that's there today would probably be left in place

0706

1 if we had an agreement on that with everyone
2 involved.
3 So that gives you a quick idea of what we
4 have in mind for this project, and I think it shows
5 it quite clearly. Sorry, I restarted this.
6 In terms of what benefit this project will
7 bring to the Kitikmeot region, I think first these
8 few things up here, these few items I have shown
9 here are the main items, the first one being jobs
10 and employment, of course, for people of the
11 region. Also training and also contracts or
12 business opportunities for businesses in the
13 communities, and also an Inuit Impact Benefit

14 Agreement, which as I have mentioned earlier, we
15 have reached with the Kitikmeot Inuit Association.
16 The Inuit Impact Benefit Agreement includes
17 provisions for these three items.

18 When this project is up and running, we have
19 a goal of achieving a 60 percent Inuit employment
20 within five years of startup. We recognize that a
21 lot of our Inuit employees will need training and
22 will need experience, so therefore, we feel that by
23 the year -- by year five, we would -- could reach
24 that goal of 60 percent of our employees being
25 Inuit. We will encourage our contractors to meet
26 the same employment standards, and we will

0707

1 transport Inuit employees directly from their home
2 communities to the mine site in the Kitikmeot
3 region.

4 In terms of a little more information about
5 the IIBA, we reached the agreement in principle in
6 December. The IIBA has been approved by the KIA
7 board of directors, and the KIA will be presenting
8 the Inuit Impact Benefit Agreement to the Kitikmeot
9 communities in the very near future.

10 We mentioned earlier about some -- about the
11 environmental baseline studies that we have done at
12 this site which we started in 1995. This is a
13 picture of some work being done, I believe, a
14 couple of seasons ago, but this is Barb Adjun who
15 worked for us during that summer season.

16 We have done a lot of studies, a lot of
17 baseline studies over the years. A lot of that
18 work was done by the people that you see with us
19 here today as Tahera consultants, but it includes
20 such things as, of course, water quality, water
21 chemistry, vegetation and wildlife, fisheries,
22 meteorology, hydrology, sediment work, geotechnical
23 work, it is quite -- it is a very extensive list,
24 and as you can see here, it has been done over many
25 years.

26 Another picture of some work happening it

0708

1 looks like in the spring or freshet.

2 Another very important part of our baseline
3 studies is the traditional knowledge that we gain
4 from elders and from citizens of the communities.
5 We have been fortunate enough to have two elders'
6 visits to the Jericho site in 1996 and in 1999.
7 This was the group in 1999.

8 Having elders' visits gives the elders an
9 opportunity to have firsthand knowledge of what the
10 site looks like. It provides opportunities for
11 elders to discuss any concerns that they may have,
12 it provides an opportunity to bring elders together
13 from a number of different communities. And during
14 the 1999 visit, the elders were able to see the

15 removal of an arrowhead in an archeological dig, so
16 that was -- it worked out very well at that time.

17 We believe that the elders' knowledge
18 confirmed and complemented our scientific data for
19 the area.

20 In conjunction with traditional knowledge, we
21 also have had a very vigorous record of community
22 consultations in this community in Kugluktuk, in
23 Cambridge Bay, Gjoa Haven, Bathurst Inlet,
24 Umingmaktok, and we have also been to Pelly Bay and
25 Taloyoak. So we have been to all the Kitikmeot
26 communities to talk about our project.

0709

1 We have been -- we have been in Kugluktuk,
2 Cambridge and Gjoa Haven the most, and we have had
3 very good interest in all of the -- from all of
4 these communities. When we have our community
5 meetings, they provide valuable information
6 regarding Inuit culture and values.

7 In gaining knowledge through traditional
8 knowledge and our community consultations, we
9 have -- it has influenced our mine site
10 development. We have planned -- some of the mine
11 site infrastructure was altered due to the caribou
12 migration route.

13 Our management plans reflect the significance
14 placed on wildlife by the communities. We have
15 also built in such things as providing right-of-way
16 at the mine site to any caribou that are migrating,
17 special diversions to minimize any impacts during
18 any caribou migrations, and, of course, monitoring
19 committees to ensure that any of our traditional
20 knowledge is adhered to.

21 In conjunction with the knowledge that we
22 gain, there are other sources for gaining
23 traditional knowledge, and that one of them is the
24 Kitikmeot Traditional Knowledge Study which is
25 being worked on by the Kitikmeot Inuit Association
26 and was also originally sponsored by a number of

0710

1 mining companies.

2 Ongoing community meetings will help us gain
3 more traditional knowledge in the future. And
4 through the Inuit Impact Benefit Agreement, our
5 implementation committee will ensure that
6 traditional knowledge is upheld. And, of course,
7 we also are able to gain knowledge from other
8 mining companies.

9 Other work that has happened at the site is
10 the heritage work which was conducted by Gloria
11 Fedirchuk. She has gone a great deal of work in
12 the north and Nunavut, and the overall summary of
13 the work that she put together had -- was that
14 there was one significant artifact that was
15 located, which was the arrowhead that I had

16 mentioned earlier.
17 And just at the bottom here I would like to
18 point out that during our elders' visits, the
19 elders did not identify any sites that were
20 potential graves or express any special concerns
21 about the project development in that area.
22 I already introduced the group of consultants
23 that's with me here today, but I just want to
24 briefly mention the areas that they conduct their
25 work in, and, of course, geotechnical, water and
26 water quality, vegetation, water treatment,

0711

1 aquatics, air quality, wildlife, reclamation work,
2 and, of course, socioeconomics.
3 It is worthwhile, I think, showing everyone
4 here what our plans are for the Jericho project in
5 terms of the schedule. This is the line where we
6 are today, final hearings this week. We are
7 hopeful that the NIRB decision will be forthcoming,
8 as the Chair mentioned earlier, within 30 days.
9 We are looking for a Minister from Indian and
10 or Northern Affairs approval within 60 days of
11 that. And following that will be the permitting of
12 land and water phase.
13 By the summer of 2004, we will need to begin
14 ordering some of our equipment and supplies to go
15 up the 2005 winter road that runs north of
16 Yellowknife. We will require the use of that road
17 to get our equipment and supplies to the Jericho
18 mine site. If we are able to do that on the winter
19 road in 2005, we will then construct and build the
20 mine site during 2005 and be into full scale
21 diamond production early in 2006 or very late in
22 2005.
23 This is a picture of some of the diamonds
24 from the Jericho kimberlite. They are very high
25 quality diamonds. The diamond that you see in the
26 top of the picture was donated by Tahera

0712

1 Corporation to the people of Nunavut, and it is in
2 place on the territorial mace in the legislative
3 building in Iqaluit.
4 That ends my presentation, or my portion of
5 it, and I would certainly invite any questions that
6 anyone has. As I mentioned, we have all our
7 consultants here today, and they would be happy to
8 answer any questions that you have as well. So I
9 would like to thank you for your attention.
10 CHAIRPERSON: Any questions from the
11 elders to Tahera?
12 And, again, we will be holding a public
13 hearing tonight as well.
14 ELDERS QUESTION TAHERA CORPORATION:
15 MR. KILPAK: Koana. I would just like
16 to speak briefly as I am increasingly becoming an

17 elder. Thanks for coming to inform the community
18 of your project. While you will be mining, they
19 should do with the utmost respect to cleanliness
20 and environmental respect.
21 We have since -- when I just moved here to
22 Kugluktuk in 1960, our river was very clean. And
23 to date, there is, as more and more mining
24 companies open to the south of us that are
25 watershed, we have started to use, you know, like
26 solutions to keep our water clean. And we used to

0713

1 be able to just get ice from out in front here for
2 drinking water long ago, but nowadays, it gets
3 very, very -- lots of sediment in the water, and
4 sometimes it affects the stomach if you drink.
5 And near Bathurst, I would like consideration
6 there that keep the environment clean because it
7 has to be well looked after. We all know that the
8 rivers, our own rivers, our water systems are close
9 to potential mine site, the water travels. You
10 must think about that very carefully, all the
11 water, water systems and the thawing.
12 Thank you very much for allowing me to say a
13 few words.
14 CHAIRPERSON: Any comments from Tahera?
15 MR. MISSAL: I would just like to thank
16 him very much for his comments.
17 CHAIRPERSON: Bill?
18 MR. TILLEMANN: And also thank you very
19 much for the comments, and it would be nice if they
20 would also give us the name when they start
21 speaking so we make sure that we can identify
22 comments as important as those on the record, okay?
23 That's all. Thank you.
24 CHAIRPERSON: When you are going to
25 speak, please state your name, please.
26 Any question from the elders?

0714

1 MS. AHEGONA: Hello, everyone. And Anne
2 Ahegona is my name. One time from Cambridge Bay,
3 three elders and three from Bathurst Inlet and
4 three from Kugluktuk, we went down, we were able to
5 go to Tahera exploration site a few years ago. I
6 was one of those elders. There was caribou within
7 the area I saw for myself.
8 The caribou will continue to flourish if it
9 is well-respected and maintained.
10 We stayed there for only one day. Tahera, is
11 it? We saw many -- lots of caribou, and some were
12 in the waters and crossing the lakes and so on.
13 The elders from Cambridge Bay, Bay Chimo and here,
14 they said it was just like bubbling or if you can
15 call that to say -- describe the sound of the lake.
16 It was just -- they sang a song, an old time
17 elders' song, a drum dance song actually. Because

18 that was the name of the lake, it is like a gushing
19 or sound of the lake.
20 I have never lived there in that area. But
21 the elders know, they have a song about that area.
22 It would be nice to hear that song. I have heard
23 it before and they call it, you know, like a
24 gushing sound of the area in the lakes.
25 The area that we saw, if it is not destroyed
26 and damaged. That's, you know, many years ago

0715

1 that's where people depended on the caribou and to
2 get their food, their mainstay. There is many
3 lakes there.
4 However, you know, where we are, you know,
5 along the river in the summer, some of the water
6 is, you know -- some of the water has changed,
7 waters change, the systems -- when it is windy, you
8 know, it is -- the -- when it is really windy, just
9 like there is soap suds all along the banks of the
10 river, I mean that's -- you know, it used to never
11 be like that. You know, if our land doesn't come
12 to that in the lakes, it should be okay.
13 But also our river here, as I do, you know --
14 he is an outfitter and he takes tours up the river
15 by boat. You see, on occasion, dead fish floating
16 downstream. What is causing that? We have to be
17 very careful and start monitoring this. We don't
18 want to see contaminants flowing into our streams
19 and ending up in our river because we can't stop --
20 seem to stop the mining industry now. Thank you.
21 CHAIRPERSON: Thank you very much for
22 speaking. Any other questions from elders or
23 comments from elders? Any questions from KIA to
24 Tahera?
25 MR. PARTRIDGE: No, Madam Chair, no
26 question.

0716

1 CHAIRPERSON: Any questions from NTI?
2 MR. LOPATKA: No questions from NTI.
3 CHAIRPERSON: Any questions from GN?
4 GOVERNMENT OF NUNAVUT QUESTIONS TAHERA CORPORATION:
5 MS. ANGOLIATOK: Thank you,
6 Mrs. Chairperson. My name is Monica Angohiatok. I
7 am the manager for the DSD, manager of wildlife.
8 I have a question. In the proposed site,
9 there is some more outpost camps, I was wondering
10 if the people who live in these outpost camps near
11 the Lupin site have been consulted. Thank you.
12 MR. MISSAL: Madam Chair, Greg Missal
13 with Tahera Corporation.
14 Those -- from what we understand, those
15 outpost camps, the people who are there, they are
16 there some parts of the year but not all of the
17 year. And they have stopped by our camp on a
18 number of occasions, and a couple of times when

19 they needed fuel, they came over to our camp as
20 well.
21 So they certainly know that we are there, and
22 I'm not sure if they have ever attended any of our
23 communities meetings here, but we know where they
24 are at, and they know where our site is at as well.
25 CHAIRPERSON: Have they answered your
26 question?

0717

1 MS. ANGOHIATOK: Thank you, Ms. Chairperson.
2 From what I understand, there is at least one --
3 one family who lives out there throughout the whole
4 year, and I would just like to know if consultation
5 or if they have been invited to attend to public
6 hearings or any formal consultation. Thank you.
7 MR. MISSAL: Madam Chair, Greg Missal
8 with Tahera Corporation.
9 I don't believe that they have been to any
10 formal consultations, but as I have mentioned, they
11 have been to our camp before and they certainly
12 know about our company and our project that's
13 located there. Okay. Thank you.
14 CHAIRPERSON: Indian and Northern
15 Affairs? Department of Fisheries and Oceans?
16 Natural Resources Canada?
17 MR. DYKE: No questions.
18 CHAIRPERSON: Any questions from the
19 local Hamlet? And I would like to recognize Mr.
20 Donald Ahvioryak, MLA for this region, you are here,
21 welcome.
22 Any questions from the Nunavut Impact Review
23 Board Staff?
24 MR. TILLEMANN: Thank you, Madam Chair.
25 The Staff has just a few questions, but if it
26 would be possible just to maybe take a ten-minute

0718

1 break because I think we need to have one slide to
2 put up so Tahera can just comment on, and so on.
3 So with your permission, Madam Chair, that's what
4 we would like to do.
5 CHAIRPERSON: But we are 10 minutes to
6 lunch time, and we have to -- like the people of
7 Kugluktuk, they are here and they need to go for
8 their lunch as well.
9 MR. TILLEMANN: Obviously I didn't even
10 look at the clock, so I'm sorry, and so we are in
11 your hands. We will do whatever you want us to do.
12 CHAIRPERSON: How many questions do you
13 have?
14 MR. TILLEMANN: Well, we think it would
15 probably be best to go to lunch early because there
16 is more than the few.
17 CHAIRPERSON: Okay. Why don't we break
18 for lunch and come back to questions from Staff and
19 Board, and then we will go to other parties.

20 Thank you. We will break until 1 o'clock.
21 (RECESSED AT 11:53 A.M.)
22 (RECONVENED AT 1:02 P.M.)
23 CHAIRPERSON: Good afternoon. It is now
24 1 o'clock. We will be going until about 4:30,
25 break for supper and have the community involved
26 with the hearings tonight at 7 o'clock.

0719

1 Okay. I believe we are at number 10,
2 presentation by Tahera. Any questions to Tahera
3 from Indian and Northern Affairs? Department of
4 Fisheries and Oceans? Natural Resources Canada?
5 MR. DYKE: No questions.
6 CHAIRPERSON: Local Hamlet or elders?
7 Questions to Tahera from Nunavut Impact Review
8 Board Staff? Zainab?
9 BOARD STAFF QUESTIONS TAHERA CORPORATION:
10 MS. MOGHAL: Thank you, Madam Chair.
11 This is Zainab Moghal with the NIRB Staff.
12 Our first question is can Tahera Corporation please
13 explain for the benefit of the community what an
14 Environmental Impact Statement is and some of the
15 components within it?
16 MR. MISSAL: Thank you very much,
17 Zainab, Madam Chair, Board members.
18 The EIS stands for Environmental Impact
19 Statement, and that's the document that you see on
20 the table at the front of the room. Obviously it
21 is a very large document, and it needs to be large
22 for a very good reason, it contains all the
23 information mainly related to environment that need
24 to be addressed in order for the Nunavut Impact
25 Review Board to make its decision regarding the
26 Jericho Diamond Project.

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1 In the EIS, there is a large number of topics
2 that are covered, those would include such things
3 as air quality, wildlife, aquatics or anything
4 related to fish, anything related to monitoring
5 programs, socioeconomics and much more information
6 as well, but all related to different parts of the
7 environment related to the program.
8 Q Thank you. The second question is what are some of
9 the major challenges you have experienced in
10 development of the preliminary design of the site?
11 A There are many challenges with developing any
12 mining project, and there are even more challenges
13 developing a mining project in the north. The
14 extreme weather conditions make it difficult to
15 plan and develop a project working in the north, as
16 everyone here knows, is quite expensive, so it
17 takes a lot of time and a lot of money in order to
18 put all of this information together in a form that
19 is suitable to submit for all of the parties that
20 need to review that information.

21 It has taken Tahera Corporation some time to
22 do this, and we are finally there, and we are very
23 pleased to have completed putting this information
24 together for the Nunavut Impact Review Board.
25 Q Thank you. Zainab here. What types of waste do
26 you anticipate from the project?

0721

1 A Madam Chair, I would like to call on Cam Scott of
2 SRK to address that question.
3 MR. SCOTT: Cam Scott, SRK Consulting
4 for Tahera.
5 Madam Chair, in answer to that question, very
6 briefly the main waste types associated with this
7 project consist of mine waste from the development
8 of the open pit specifically. This would include a
9 thin deposit of soil overlying the rock of the open
10 pit, waste rock, primarily from around the
11 kimberlite pipe. This rock would consist of
12 granite primarily. In addition, there would be
13 low-grade kimberlite material which would be -- has
14 to be disposed of -- not disposed of, placed near
15 the processing plant.
16 CHAIRPERSON: Excuse me?
17 MR. SCOTT: Yes?
18 MS. FILIATRAULT: Madam Chair, I'm wondering
19 if Cam had venture to point some of these areas out
20 on the map for the benefit of the community.
21 A Cam Scott. I would be happy to.
22 Starting from the beginning then in terms of
23 the waste materials, the first being the
24 overburdened soil, that material would be deposited
25 generally in that location, that location being
26 immediately east of the open pit. Waste rock will

0722

1 be deposited in two dumps situated near the pit,
2 waste dump 1 to the northeast and waste rock dump 2
3 to the south. The other material is the low-grade
4 kimberlite stockpile situated immediately south of
5 the open pit.
6 The other materials, waste materials, are
7 associated with processing the kimberlite, which is
8 the rock in which the diamonds are found. There
9 are essentially two main products associated with
10 the kimberlite processing. The first is a coarse
11 kimberlite component, and it would be deposited
12 south of the low-grade ore, low-grade kimberlite
13 stockpile. The next is a fine crushed processed
14 kimberlite, and water is added to that material as
15 part of the processing in the processing plant, and
16 that material is disposed of as a slurry, which is
17 a mixture of fine waste and water, and that
18 material is deposited or will be deposited into a
19 facility known as a processed kimberlite
20 containment area, or PKCA. And it is situated --
21 it is coincident with a lake immediately southwest

22 of the processing facilities.
23 The containment of that material is achieved
24 by the depression of the lake as well as the
25 construction of a series of dams, some of which you
26 can see on this photo. There is another one down

0723

1 in this location, one over here as well. There is
2 some internal structures have been discussed
3 previously, but they are not essential to the
4 containment of this waste.

5 Those, Madam Chairman, would summarize the
6 main components of mine waste. There are some
7 other minor components associated with contaminated
8 soils, potentially the petroleum-contaminated
9 soils, but they are fairly minor in the scheme of
10 the total project.

11 CHAIRPERSON: Zainab?

12 MS. MOGHAL: Zainab here again.

13 Did you address municipal-type waste?

14 A No, I didn't mention that. There is a -- there
15 will, of course, be some municipal waste, and I
16 don't know if we will be able to see it on these
17 particular figures, but it is perhaps -- perhaps if
18 we put our focus to the left side of our building
19 here, the municipal waste would be situated
20 immediately north of waste dump site 1.

21 The hazardous material or contaminated
22 material that gets contaminated by petroleum or
23 other such contamination would be deposited in an
24 area, I believe, just north of what is shown on
25 this particular map.

26 Q And sewage?

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1 A There is a sewage treatment plant which would be
2 situated in the general proximity of the plant site
3 in camp, and the water from that treatment process
4 would report to the processed kimberlite
5 containment area along with the other waters
6 captured on the site basically.

7 MS. FILIATRAULT: Cam, this is Dionne
8 Filiatrault.

9 Just for more clarification, could you
10 possibly describe some of the main features of the
11 processed kimberlite containment area, please?

12 A The processed kimberlite containment area is
13 essentially a valley. The valley is largely
14 defined by a fault which runs through this area in
15 the bedrock. And as mentioned earlier, there is a
16 lake referred to as Long Lake which occupies a
17 portion of the valley.

18 The two dams or, sorry, the main dam for
19 containment is this west dam as the general flow
20 through this valley is to the west. The bedrock
21 occupies the ridges on either -- well, certainly on
22 the north side, soil over bedrock on the south

23 side, and then in the valley floor where the dam is
24 situated, there is a deposit of till which is a
25 mixture of silt, sand and gravel overlying bedrock,
26 and that material is found typically over at the

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1 locations of most of the dams.
2 So one thing just to mention to add to the
3 picture so that there is an appreciation of this
4 structure down -- this dam immediately west of the
5 west dam, is this is the settling pond which would
6 be part of the water management associated with the
7 primary treatment, if you will, of the water in the
8 processed kimberlite containment area.
9 MS. MOGHAL: Zainab here again.
10 What options are proposed for the treatment
11 of water from the processed containment -- PKCA?
12 MR. MISSAL: Thanks, Zainab.
13 I would like to call on Andre Sobolewski and
14 maybe get Bruce Ott to come forward as well,
15 please.
16 MR. SOBOLEWSKI: Thank you, Madam Chair.
17 Andre Sobolewski.
18 Tahera has identified two methods to treat
19 water from the PKCA, if that's necessary. The
20 methods include treatment of the water inside of
21 the PKCA and spray irrigation. The preferred
22 treatment method is spray irrigation.
23 Would you like me to describe spray
24 irrigation for everyone's benefit?
25 MS. FILIATRAULT: Yes, because while I may
26 know what spray irrigation is, I think for the

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1 benefit of the community, it might be important
2 realizing that it is a contingency and it may not
3 be used. If it is used, what is it? What
4 potential impacts are there to this particular
5 process and what monitoring is being processed?
6 A Okay. In spray irrigation, water is pumped through
7 a spray gun and it is sprayed evenly over a certain
8 area. You use many different pumps, many pumps and
9 hoses and spray guns to spray all of the water
10 evenly over a certain area of land. It is
11 essentially a -- it is essentially like a large
12 lawn sprinkler if you like. The contaminants,
13 primarily ammonia and also certain metals, are
14 removed as the water flows over the land.
15 The concern about impacts on the wildlife,
16 the ammonia is taken up by the plants, and it helps
17 them grow, in fact, because ammonia is a
18 fertilizer, it is used as a fertilizer. So the
19 impact would be positive, if you like.
20 The metals are retained in the soil, and we
21 would be concerned that there might be impacts from
22 that. Metals in the water, in the PKCA water are
23 present at quite low concentrations, so it is not

24 expected that there would be any impacts. Still,
25 we looked at the worst possible conditions that
26 might occur during the mine project, and when we

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1 looked at that, we found that there could be a
2 problem with a couple of metals.
3 We don't think that the worst conditions will
4 develop for the entire duration of the mining
5 project, maybe it will happen once or twice, but we
6 have proposed ways of avoiding problems, if the
7 worst conditions develop, to prevent any impacts on
8 wildlife. That ties in with the monitoring
9 program. To make sure that spray irrigation works
10 well and to make sure that there are no impacts on
11 wildlife, we will be monitoring the spray
12 irrigation.
13 We will be monitoring the soil and the water
14 to know that the contaminants are removed the way
15 they are supposed to. We will monitor plants and
16 small animals to see that they -- if they become
17 affected, to make sure they are not affected. We
18 will monitor permafrost to make sure that it is not
19 affected or not affected in any bad way, and
20 finally, we will be monitoring the lake, Lake C3,
21 to make sure that the plants and the fish in the
22 lake are not affected. Thank you.
23 MS. MOGHAL: Thank you, Zainab here
24 again.
25 What type of work was done on water quality
26 assessment by Tahera Corporation, and what concerns

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1 are there, if any, associated with it? And what
2 mitigation do you propose and what do you expect at
3 closure on water quality issues? Thank you.
4 MS. SEXSMITH: Hello, my name is Kelly
5 Sexsmith.
6 To characterize the water quality on the
7 site, we collected samples of the rock surrounding
8 the kimberlite pipe, of the kimberlite ore and of
9 samples that were produced during the exploration
10 phase in a pilot plant that was run at the Lupin
11 mine. Our tests measured what was in the samples
12 that could cause short or long-term effects on the
13 water quality. The tests were concluded,
14 laboratory tests on small samples as well as we
15 collected water samples from a rock pile that was
16 produced during the exploration work on the
17 property.
18 We also looked very carefully at monitoring
19 data collected at the Ekati diamond mine. The
20 reason this data was considered to be relevant to
21 the work that we will be doing at Jericho is that
22 the rocks there are very similar to the rocks that
23 will be produced at Jericho. We compared the
24 mineralogy of those samples, in other words, the

25 minerals that those rocks are made up of compared
26 to the rocks that are at the Jericho project, and

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1 we found that, indeed, they were very similar.
2 Because of those similarities, the monitoring
3 experience from the Ekati mine gives us a very good
4 idea of what the water quality at Jericho will be
5 like.

6 So based on the test work that we had from
7 specific rock samples from Jericho and the
8 monitoring data at Ekati, we estimated what the
9 water quality would be like at the site. In most
10 cases, we had a very high confidence in the results
11 for all of the parameters that we were estimating.
12 But wherever we had any doubts, we applied very
13 conservative assumptions in our estimates so that
14 the numbers that we predicted could be higher than
15 what they actually will be at the mine. This way,
16 we may be overestimating the impacts of our project
17 on water quality, but we are also being overly
18 protective and planning for worst-case conditions.

19 Even so, the results of our assessment showed
20 that there would be very few issues with respect to
21 water quality at this project. The issues that we
22 may have and need to plan for include nutrients in
23 the water from the blasting residues, and that is a
24 bit of ammonia in the water and very low levels of
25 uranium, nickel and cadmium.

26 We also may -- we have talked in the last few

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1 days about a parameter called total dissolved
2 solids. Those are parameters that are normal
3 components of all water, and if you -- we all have
4 bottles of water on our desks, some of the minerals
5 that are in our drinking water are part of total
6 dissolved solids. One of the components is the
7 salts that you put on your food, sodium chloride.
8 At low levels, those are important nutrients in our
9 body, but at higher levels, there is some chance
10 that aquatic organisms in the ecosystem may change
11 their communities slightly, so we want to make sure
12 that we don't put too much of that in the water so
13 that we would affect those communities.

14 The levels of these -- all these parameters
15 that we have predicted have been shown that they
16 would be okay in the receiving environment and that
17 the impacts to fish and aquatic organisms would be
18 minimal and very local to the point where we are
19 going to be discharging them.

20 We will monitor all of the sources of water
21 on the site, and if we need to treat the water, we
22 will have the option to use the land treatment
23 system that Andre just described to you.

24 I think your final part of your question was
25 what do we expect the water quality at closure to

26 be like? Our assessment is -- shows that we think

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1 the water quality will be no worse than what we
2 predicted it will be during operations. Some
3 things will be better. The ammonia from the
4 blasting in the rock is something that is taken up
5 by plants and is fairly soluble, so it will be
6 washed out of the rock over a relatively short time
7 period.

8 By the time the pit fills, and the pit will
9 be collecting the water after we stop operations
10 for approximately 20 years, after that time, we
11 fully expect that the ammonia will be gone from the
12 water.

13 Other metals in the water will probably also
14 be much lower after closure because based on
15 experience at Ekati, ice will come up into the
16 dumps and freeze the water in the dumps so that
17 there won't be any interaction between snow melt
18 and rain in the majority of the rock in those waste
19 dumps.

20 So we expect the water quality to improve
21 significantly in the postclosure period. Even so,
22 if the water quality does not improve to the level
23 where fish could live in it directly and not be
24 affected, their health be affected by this, we can
25 put a diffuser out into the lake to mix the water
26 with the water in the lake so that it is diluted or

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1 that the concentrations are reduced to levels that
2 will have no long-term chronic effects on fish.

3 Thank you for this opportunity.

4 Q It is Zainab here again.

5 Could you just explain just generally what a
6 diffuser is?

7 A I would prefer if Pete McCreath could answer that
8 question.

9 MR. MCCREATH: Madam Chair, Pete McCreath,
10 Clearwater Consultants for Tahera.

11 In simple terms, a diffuser is a means of
12 mixing one fluid with another fluid. It spreads
13 the incoming flow and mixes it with the receiving
14 water. In this case we are talking about the flow
15 that would be coming from the open pit in the
16 postclosure phase, relatively small flows being
17 directed through a pipe into Carat Lake and then
18 mixed at depth within the lake such that the
19 concentrations of any parameters of concern within
20 the pit water would be lowered to a level whereby
21 there would be no detrimental effects on aquatic
22 life as mentioned by Kelly.

23 MS. MOGHAL: Thank you. Zainab here
24 again.

25 The next question is what water management
26 measures has Tahera Corporation proposed for the

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1 site? What are the key issues with respect to net
2 water management? Thank you.
3 A Pete McCreath, Clearwater Consultants for Tahera.
4 The control of water, both processed waters
5 and natural runoff waters, is always a very
6 important component of any mine development. With
7 that in mind, Tahera has developed a comprehensive
8 water management plan for the Jericho project site.
9 If I could direct your attention to the
10 picture on the wall on the right. The essence of
11 the plan is that any runoff or water that is
12 generated from a waste dump, the overburdened
13 stockpile or any of the other project components
14 would be collected by a series of ditches and ponds
15 and controlled prior to release to the environment.
16 In particular, the ponds will control and
17 remove sediment that may be generated from the
18 waste dumps or the overburdened stockpiles.
19 For the first two years of operation, all
20 water, runoff water will be collected from all site
21 components and directed to the processed kimberlite
22 containment area in Long Lake.
23 When releases begin of site water from the
24 PKCA, these releases will be timed such that
25 maximum dilution will occur in the receiving
26 waters. In other words, when they are the highest

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1 flows due to the melting of snow in the springtime,
2 that is when maximum dilution will occur and waters
3 can be released from the property, again, to ensure
4 that there are no damages to aquatic resources.
5 So the key issues with regard to water
6 management are first and foremost, the protection
7 of aquatic resources both from a water quality
8 perspective and from the control of sediment on the
9 site.
10 As mentioned, there will be water quality
11 monitoring of all site components to determine
12 exactly what parameters may be of concern, and
13 there is the contingency available of using spray
14 irrigation as described by Andre to provide further
15 final treatment of the water prior to release to
16 the environment.
17 CHAIRPERSON: Dionne?
18 MS. FILIATRAULT: Dionne Filiatrault. You
19 mentioned and Greg mentioned in his presentation
20 geotechnical engineers. When you are dealing with
21 a site like this, there is a lot of issues dealing
22 with the movement of the earth and using earth
23 materials in construction, and that's the specialty
24 of a geotechnical engineer.
25 Can Tahera provide me with a brief summary of
26 some of the different types of monitoring that is

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1 going to be done, for example, by a geotechnical
2 engineer, and specialized engineer?
3 MR. MISSAL: Thanks very much, Dionne.
4 Greg Missal with Tahera.
5 I would like to call on Bruce Ott to address
6 that question, please.
7 MR. OTT: Madam Chair, Bruce Ott,
8 AMEC. I should start out by letting everybody know
9 I am not a geotech engineer, although we do have
10 some here. I can generally explain what would be
11 done for geotech monitoring, and I am sure that
12 Mr. Scott could fill you. I'm more comfortable
13 with the other general monitoring that would be
14 carried on.
15 I should start out by saying that the
16 stability of structures for handling the waste and
17 to ore at a mine site, at any mine site, are of
18 considerable concern to the mine operator and also
19 to regulatory agencies. And one of the unique
20 things about geotech monitoring at a mine site,
21 almost any mine site I am familiar with certainly
22 in Canada and almost anywhere in the world, is that
23 a completely independent geotech engineer or firm
24 of engineers is required to review the structures,
25 the earth structures, the rock storage structures
26 at a mine site to ensure and provide a report to

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1 regulators or to the government to ensure that an
2 independent evaluation is made of these structures
3 as to their integrity.
4 I believe Mr. Scott could fill you in a
5 little bit more with respect to geotech aspects,
6 and I will turn the mic over to him, if I may,
7 Madam Chair.
8 MR. SCOTT: Cam Scott, SRK Consulting
9 for Tahera.
10 I think specifically in relation to
11 geotechnical monitoring, the monitoring would
12 largely be directed to the performance of earth
13 slopes and foundations. Typically that would
14 entail the slopes associated with the waste dumps
15 and overburdened stockpiles, the pit slope
16 stability, and the third main element would be the
17 performance of the dams at the processed kimberlite
18 containment area. Very simply, insofar as the
19 waste dumps and stockpiles are concerned, it is
20 common in this sort of a setting to -- and bearing
21 in mind that the slopes are going to be
22 relatively -- I'm sorry, just the question has been
23 mentioned, I should just highlight the issue of
24 stability. And by stability in this context, it
25 effectively means zero or very limited deformation
26 or movement so that the dump or dam or whatever

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1 stays in place relative to its original, planned
2 construction.
3 So thinking of the waste dumps, they have
4 flat slopes. It would be likely that we would
5 establish survey monuments using conventional
6 survey equipment to identify the toes (phonetic),
7 and then you check those periodically over time
8 along with visual inspections.
9 At the open pit, it would be a similar sort
10 of methodology, visual inspections, survey hubs and
11 that type of methodology. At the dams, probably
12 you would have -- you would expect a higher level
13 of monitoring. Again, survey hubs likely coupled
14 with thermistors.
15 One of the things I neglected to mention is
16 in addition to the dams being containment, the
17 foundations at the processed kimberlite containment
18 area, and for that matter, all of these facilities
19 is underlain by permafrost to a depth of several
20 hundred metres, so the dams will be built with an
21 ice core which will connect to the permafrost. So
22 one of the aspects of the geotechnical monitoring
23 will be the valuation of the performance of the
24 permafrost in and around each of the dam
25 structures.
26 I think that would summarize the main

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1 elements of geotechnical monitoring.
2 MS. FILIATRAULT: Maybe I will just -- Madam
3 Chair, Dionne.
4 I will just ask a yes or no question here and
5 you can maybe point out on the diagram exactly what
6 components I am talking about. A geotechnical
7 engineer, when he comes onto this site, he is going
8 to do an assessment of the dam stabilities, where
9 are the dams, a diversion ditch, a C4 ditch, waste
10 dumps and stockpiles; is that correct?
11 MR. SCOTT: That would be correct.
12 Q And can you just show me where those are on the
13 map, please?
14 A Just to recap, the waste dumps, each of these
15 facilities, likewise over here, that would be the
16 waste dumps. The C1 diversion which basically
17 takes the water which currently flows over the open
18 pit location and out to Carat, the diversion takes
19 the water around the open pit and down to Carat
20 Lake. So that diversion and the dams, as mentioned
21 earlier, this map isn't complete, but it shows the
22 approximate location.
23 Just on the left wall to identify those dams,
24 these dams here, here, here, here, C1 diversion
25 around there, and then the toes, the main toes of
26 each of these structures.

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1 Q Thank you, Madam Chair.

2 I'm just wondering if I can get some light so
3 I can read my questions. Thanks.
4 My next question actually relates to
5 wildlife. We heard that Tahera has done some work
6 on other components of the site with respect to
7 Ekati. Has the assessment been done to compare
8 some of baseline work that -- basically the data
9 that you have collected with respect to baseline,
10 and has it been compared to the Ekati project
11 baseline data that would have likely been available
12 prior to 1997? I'll start with that.
13 MR. HUBERT: Ben Hubert for Tahera.
14 The baseline data that we used for caribou
15 are for the Bathurst herd which also ranges through
16 the area of the Ekati project, includes data from
17 late 1996 and all of 1997. And it shows that the
18 caribou herd ranges through the Ekati area in late
19 fall and early winter, past Ekati during spring
20 migration and then spreads into the Ekati area in
21 mid to late summer following calving.
22 That distribution is a little different from
23 the Bathurst herd's use of the Jericho area where
24 it passes the Jericho area in April and May on
25 spring migration to the calving grounds, and then
26 on the caribou's return from the calving grounds,

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1 they might be present in the Jericho area in June
2 and July, and by mid-August, there are very few
3 caribou in the Jericho area. And it stays that way
4 through to spring migration.
5 Q So I guess maybe just a yes or no, so the data that
6 -- the prebaseline data from Ekati which would show
7 migration routes prior to 1995 was not used by
8 Tahera?
9 A No, the pre-1995 data for the Bathurst caribou were
10 basically general information that described the
11 herd's distribution but wasn't specific to either
12 site. But we do have a very good understanding of
13 caribou use in relation to both Jericho, Diavik and
14 Ekati, and so we are comfortable that we have an
15 understanding of what the potential interactions
16 between the Bathurst herd and the project are.
17 With respect to other wildlife, the only
18 other species that ranges far and wide that could
19 interact with more than one project is the grizzly
20 bear, and we feel that we are prepared for
21 interactions with the grizzly bear and that there
22 will be effective mitigation to prevent unfortunate
23 interactions and encounters to the maximum extent
24 possible.
25 Q Thank you. My next question relates to air
26 quality. I'm actually going to add to this a

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1 little bit. What type of work has Tahera done with
2 respect to air quality? Why is it important to

3 collect air quality, and under what conditions is
4 there potential concerns with respect to air
5 quality?
6 MR. HUMPHRIES: Bob Humphries, Levelton for
7 Tahera.
8 There are three steps in looking at air
9 quality issues in any industry or a mine, first one
10 is to understand the background. And the ambient
11 background concentrations of pollutants in that
12 area are fairly low. The second one is to
13 understand what the emissions sources are, and at
14 the mine, there are a combination of combustion
15 sources caused by vehicles or power plants or
16 whatever, and then the other is what we call
17 fugitive sources, and this case it is dust, dust
18 that would be stirred up by vehicles going along
19 the roadways or by stirring up -- dropping material
20 on the various stockpiles and the like.
21 To understand how those emissions then are
22 dispersed, we use computer models that would then
23 predict what the concentrations will be around the
24 general area as a function of various weather
25 conditions.
26 You will have to repeat the second part of

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1 your question, please.
2 Q Actually, I think for the most part you have got
3 it. I guess maybe what are some -- like, you have
4 the assessment, I'm assuming some of this was by
5 done by modelling, and are there potential or any
6 issues related to how it was undertaken with the
7 modelling?
8 A Okay. The one issue with the modelling, of course,
9 is using weather data, and we didn't have the best
10 of weather data to use, so we generated a set that
11 used every possible combination of weather event
12 that could occur. And the results we found was
13 that of the various types of emission, fugitive
14 dust is potentially the most concern, and so
15 efforts are directed at mitigating fugitive dust by
16 watering roads, for example, or watering
17 stockpiles; secondly, by monitoring dust in the
18 area, and Tahera will be endeavoring to put in a
19 monitoring program in consultation with
20 stakeholders.
21 Q I am getting there, two more questions. This one
22 is with respect to the blasting for the pit that
23 will be required and what impacts are expected from
24 this blasting to generate this huge pit, and what
25 mitigation measures are being proposed?
26 MR. PATTENDEN: Madam Chair, Rick

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1 Pattenden, Mainstream Aquatics. Blast charges are
2 needed to dig out the mine pit. The potential
3 problem with using blast charges that fish may be

4 harmed in nearby water bodies.
5 If you look at the map on the left, I don't
6 know if we can get the lights down, but here is the
7 mine pit. If you use blast charges, the nearest
8 water bodies are Lake C1, Stream C1 and then Carat
9 Lake, of course. So there is the possibility to
10 harm fish. You can mitigate that arm by trying to
11 reduce the blast charge as much as possible. You
12 can to that in two ways, you can reduce the amount
13 that you use for the blast, and you can do
14 something called increasing the detonation
15 frequency, just stretching out the blast. So if
16 that mitigation measure is implemented, the blast
17 zone shrinks and moves it away from fish. If this
18 mitigation measure is used, the blast zone
19 basically would affect a very small piece of
20 shoreline on Carat Lake and Stream C1.
21 So the other thing about reducing the blast
22 is that it becomes small enough that it only
23 affects fish eggs and not fish. Our baseline work
24 in the area shows that the only fish that deposits
25 eggs in that area is slimy sculpin, which is a
26 small species that lives along the lake shore and

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1 in Stream C1.
2 The other thing that is going to happen
3 during the life of the mine is that as the pit, the
4 mine pit deepens, the blast zone will move away
5 from the fish-bearing waters and the impact will be
6 lessened.
7 Thank you, Madam Chair.
8 Q Thank you. The next question relates to the road
9 infrastructure. We understand there will be an ice
10 road to supply the mine. Can you explain any
11 problems you might have with it and what you plan
12 to do about it?
13 MR. SMITH: Thank you, Madam Chair. It
14 is Court Smith with Nuna Logistics.
15 For the past number of years, Nuna Logistics
16 has operated the ice road that runs between Tippet
17 Lake which is north of Yellowknife, about 70
18 kilometres north of Yellowknife, running from there
19 to Lupin. The Jericho property is about 30
20 kilometres north of that and would likely use the
21 winter road as part of the supply chain to move
22 fuel and supplies to the mine.
23 The road has undergone quite a bit of change
24 over the years. It started as only a supply loop
25 to Lupin, now it supplies Ekati and Diavik.
26 When Lupin was operating, the road ran about

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1 800 loads up it, and now it runs about 8,000, so it
2 is a tenfold increase, or it peaked at around
3 8,000. During that time there has been -- the
4 risks to the road are spills and safety of people.

5 During that time, there have been a number of minor
6 spills. Each of the truckers have spill
7 containment kits, the companies, and they use those
8 to clean up the spills. Quite often the spills are
9 dripping valves on a fuel truck, that type of
10 thing.

11 I would like to clarify one point that was
12 made yesterday about a 15,000 litre fuel spill. I
13 was concerned because I wasn't aware of that spill
14 having happened, so I phoned our office to inquire
15 about it, and what I was told is that they believe
16 that there was a spill, it wasn't on the winter
17 road, it was on the highway that goes, that
18 70-kilometre highway north of Yellowknife that goes
19 to the winter road.

20 The activity on the highway is quite a bit
21 different than on the road, for instance, the
22 highway -- the vehicles travel at highway-type
23 speeds, and on the winter road, the maximum speed
24 for a loaded truck is 25 kilometres an hour
25 generally speaking, which is quite slow, you can
26 almost walk that fast.

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1 So those are the types of issues. There has
2 been a lot of mitigation, this is a lot of
3 protection measures, there is very extensive spill
4 prevention and containment programs and those types
5 of things. It has operated very well for quite a
6 number of years and has proven to be a valuable
7 support to the mining industry.

8 The people who are responsible for the road,
9 being the diamond mines, are -- collectively work
10 together with all of the stakeholders in the road,
11 including us, the maintainers of the road, plus all
12 the truckers that actually transport all of these
13 equipment and supplies, and they work on safety,
14 they work on the environment, and it seems to be
15 quite a good success story in those sorts of ways.

16 Thank you.

17 Q Is there an impact of the road when the trucks are
18 driving over on the ice, is there an impact to the
19 fish, say, that live on those lakes?

20 MR. SMITH: I will have to ask Rick
21 Pattenden. I don't know very much about fish.

22 MR. PATTENDEN: Madam Chair. To my
23 knowledge, truck traffic on ice and the vibrations
24 caused by the truck traffic don't harm fish and
25 shouldn't bother fish. If a fish is bothered by
26 the vibration caused by a truck as it goes, it

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1 simply would move to the side, and if it wants to
2 go back once the truck is past, it will return to
3 where it was. But truck vibrations will not harm
4 fish.

5 Q And my final question relates to the water flow

6 throughout the site. I sort of forgot all about
7 water, which is my area of expertise, so can you
8 maybe just sort of describe the water flow paths
9 through the site and the actual discharge paths
10 from Long Lake goes through Stream C3, Lake C3.
11 Just sort of describe that flow path route.
12 MR. McCREATH: Can we have the lights
13 turned down?
14 Madam Chair, Pete McCreath, Clearwater
15 Consultants for Tahera. We draw your attention to
16 the drawing on the left wall. Starting with the
17 open pit, water will be collected within the open
18 pit and pumped to the processed kimberlite
19 containment area. From waste dump number 1, there
20 will be a Collection Pond A which will collect all
21 the runoff from that dump. That water will also be
22 pumped to the processed kimberlite containment
23 area. Similarly, Collection Pond C located below
24 the overburdened -- excuse me, the ore stockpiles
25 will collect all runoff from the plant site, the
26 ore stockpiles, and that will also be pumped to the

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1 process kimberlite containment area.
2 Waste dump number 2, all runoff from that
3 dump will be collected in Pond B, and pumped to the
4 kimberlite containment area.
5 Starting in approximately year three, water
6 will be released on a seasonal basis on the west
7 end of the kimberlite containment area, through the
8 settling pond, into Stream C3, and then into Lake
9 C3, which is on the wall just beyond the drawing.
10 From there, the water flows into Carat Lake and
11 then north into the Jericho River.
12 There is a diversion of the system comprising
13 Lake C2, Lake C1. This channel carries water
14 around the open pit and into Carat Lake. The
15 purpose of the diversion is to prevent water from
16 entering into the pit and interfering with mining
17 operations.
18 Water supply for process use and domestic use
19 will be taken from Carat Lake at approximately this
20 location.
21 I think that is probably enough for now,
22 Dionne.
23 Q Actually, we would like to sort out another
24 question that we forgot to ask.
25 We are aware that the project site is on both
26 IOL lands and Crown lands. I'm just wondering if

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1 you could just show the people of the community
2 just exactly where that falls and just, sort of,
3 there is -- we will start with that.
4 MR. MISSAL: Thank you, Dionne, Madam
5 Chair. Greg Missal, Tahera Corporation.
6 I think I will refer to the map on the left

7 wall again. It is shown on this map appropriately.
8 The line between Crown lands and IOL lands is this
9 dotted red line, it comes down here and then it
10 travels up across the side in a V shape.
11 Everything on this side of that line is Inuit-owned
12 land, and everything on the north side of that line
13 is Crown land.
14 MS. FILIATRAULT: Madam Chair, that concludes
15 the questions.
16 CHAIRPERSON: Before the Board asks any
17 questions, do any of the elders or local hamlet
18 have any questions to Tahera? Any questions from
19 the Board? Peter Paneak?
20 BOARD QUESTIONS TAHERA CORPORATION:
21 MR. PANEAK: My name is Peter Paneak.
22 The first question that I would like to ask, how
23 many times a day do you expect that they will be
24 blasting? That's my first question, and I will ask
25 another question after that's answered.
26 MR. MISSAL: Madam Chair, I would like

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1 to ask Court Smith to answer that question.
2 MR. SMITH: Thank you for the question.
3 The blasting times can vary depending on when the
4 material is ready to be blasted. When the holes
5 have been drilled, then they prepare the holes and
6 then they do the blast. Generally speaking, you
7 would blast every two days to maybe five days,
8 something like that.
9 If it is a very large pit, it can happen one
10 per day. It is usually at a particular time of
11 day, and usually there are always -- there are
12 guards that guard the site before the blast, they
13 go to all of the access points around where the
14 blast is going to be to make sure that nothing is
15 impacted from the blast, meaning that people don't
16 go wandering into the area or animals or anything
17 like that. Thank you.
18 Q Thank you. I just wanted to ensure that the public
19 was aware of my question. Can you hear me now? I
20 just wanted to make sure that you public was aware
21 of my question.
22 I also think that --
23 MR. MISSAL: I am sorry, Madam Chair, we
24 can't hear the translation.
25 MS. TUCKTOO-LACASSE: First of all he wanted to
26 make sure that the public was aware of his

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1 question, and he wanted an answer to make sure that
2 the public was aware of the times of blasting
3 during the day. And then his second part -- the
4 second part of his question is will there be any
5 job opportunities for people of Nunavut?
6 MR. MISSAL: Thank you for that
7 question, Madam Chair. Greg Missal with Tahera

8 Corporation.
9 There certainly will be job opportunities for
10 people from the Kitikmeot region, yes.
11 CHAIRPERSON: I understand he asked not
12 only for the Kitikmeot, but for all of Nunavummut.
13 A Right. The opportunities will be there for all
14 people from Nunavut; however, it is only the
15 communities in the Kitikmeot region that have been
16 designated points of hire as a result of the Inuit
17 Impact Benefit Agreement done with the KIA.
18 MR. PANEAK: I was asked by my community
19 people the last time when we had a meeting, and I
20 was asked from my region if there is going to be
21 some job opportunities as well for the Baffin or
22 eastern Baffin area, that was one of the reasons
23 why I asked that question.
24 CHAIRPERSON: Albert? Mary? Martha?
25 MS. AKOLUK: Yes, I have a couple of
26 questions. Martha Akoluk, Bathurst Inlet.

0752

1 I was just wondering if bigger fish eat slimy
2 sculpins or any kind of animals?
3 MR. MISSAL: Madam Chair, I would just
4 like to call on Rick Pattenden to perhaps address
5 that question.
6 MR. PATTENDEN: Madam Chair, Rick
7 Pattenden, Mainstream Aquatics.
8 Yes, definitely larger fish will eat slimy
9 sculpin and maybe some birds like loons. So the
10 answer is yes.
11 Q Okay. Thank you.
12 And also about the stockpiles, like there is
13 going to be stockpiles, and we do have strong
14 winds, I mean, blizzard winds sometimes. I was
15 just wondering if it is safe for animals and
16 peoples if all those dust, if they start scattering
17 all over the land or even into the water?
18 MR. MISSAL: Madam Chair, I would like
19 to ask Bob Humphries to address part of that
20 question, please.
21 MR. HUMPHRIES: Thank you, Madam Chair.
22 Bob Humphries, Levelton.
23 Wind erosion from the stockpiles, when the
24 stockpiles are fresh or when they are being
25 disturbed because there is vehicles digging them up
26 or putting material onto them, they will be most

0753

1 susceptible to dust being stirred up. However,
2 when they are left for a while, a phenomenon called
3 crusting over occurs, and then the stockpile that
4 is not active or being worked upon will tend not to
5 emit as much dust in the future. So the area of
6 the stockpiles that will emit dust over the time
7 will become limited depending upon what part is
8 active.

9 The dust then can, of course -- that is
10 stirred up, will be distributed over the land and
11 the water, and then, of course, whatever impacts
12 will be, will be. We are expecting that the
13 concentrations won't be that high.
14 Q And also will that be monitored, and how many
15 times? I mean, you know.
16 A The plan is to put in monitors. There is two types
17 of monitors that you can put in place, but one of
18 the types that you are looking at can monitor
19 continuously and provide you with average
20 concentrations on a daily basis, because it is the
21 daily average for particulate matter which is of
22 greatest concern, and so that's one of the types of
23 monitors that Tahera is looking at.
24 MS. AKOLUK: Okay. Thank you.
25 CHAIRPERSON: I have a couple questions.
26 In regards to the truck vibration, the truck noise,

0754

1 I believe Rick answered that question. I have got
2 a question, how do you know that the truck noise or
3 the truck vibration does not harm fish under the
4 ice when the trucks go on the winter road?
5 I have heard, for example, Greenland, they do
6 not even allow Skidoos to go on the ice because it
7 scares away the fish, what do you know about this?
8 MR. PATTENDEN: Madam Chair, Rick
9 Pattenden, Mainstream Aquatics.
10 When trucks go across ice, they cause
11 vibrations which go into the water. The work that
12 I have done hasn't looked at truck vibrations, but
13 has looked at much stronger vibrations by
14 underwater blasting and seismic work, that's
15 stronger vibrations. The truck vibrations are much
16 less, and my work with seismic blasts shows that
17 the truck vibrations wouldn't hurt fish.
18 But your question also asked would the fish
19 be scared away. It depends on how deep the water
20 is and what kind of fish there are. But, in
21 general, it is unlikely the fish would be scared
22 away, but sometimes that would occur, but because
23 the fish isn't hurt and the traffic doesn't occur
24 all the time, the fish would simply move away to
25 where it feels better and then it would move back.
26 Q I believe there could be traffic all the time. I

0755

1 was concerned how deep would Contwoyto Lake be?
2 A Well, Contwoyto Lake can get rather deep, it
3 depends where you are, but I think 20 or 30 metres.
4 Q And would that scare fish away with the truck
5 vibrations?
6 A When fish are that deep? I really don't think so.
7 It is possible that some other persons in the
8 audience, such as Department of Fisheries and
9 Oceans, may have more information than I do, but

10 I'm not sure.
11 Q Would Department of Fisheries and Oceans have an
12 answer before I move on to the next question?
13 MS. DAHL: Julie Dahl from the
14 Department of Fisheries and Oceans.
15 I don't know if I really have much more of an
16 answer for you, but this question was raised with
17 us for -- in the Northwest Territories. The
18 fisheries joint management committee actually asked
19 us that question, whether we were aware of any
20 impacts of vibrations due to winter road traffic on
21 fish, and I believe they undertook, if not a study,
22 at least a literature review to see if there was
23 any information on it. I'm not intimate with the
24 details of that, but I do not believe it appeared
25 that the vibrations were of a high enough level to
26 cause harm to fish. There might be some initial

0756

1 startling, but unlikely anything that would cause
2 harm to fish.
3 Q Thank you. This is in regards to the pit water.
4 Upon reclamation, how do you make sure the pit
5 water is safe for birds and animals?
6 MR. MISSAL: Madam Chair, I would ask
7 Kelly Sexsmith to answer that question, please.
8 MS. SEXSMITH: Kelly Sexsmith. The pit
9 water will be monitored following closure on a
10 regular basis to see the progress of degradation of
11 ammonia and to measure what the metal
12 concentrations and the total dissolved salts
13 concentrations of that water will be as the pit
14 approaches the level where it would need to be
15 released, and that's how we will know that the
16 water will be safe for fish at the end of the mine
17 life.
18 Q And if it is not safe, what methods do you have or
19 plan to use to make it safe?
20 A We expect that the water quality will not have an
21 acute or an immediately lethal effect on fish, we
22 don't expect it to be that bad. We expect it to be
23 quite a bit better than that, in fact.
24 But if it isn't acceptable for long-term
25 health of fish, we will discharge it through a
26 thing that we call the diffuser, which I think

0757

1 Peter had explained earlier, and what that does is
2 it makes sure the water is mixed very quickly and
3 within a very narrow zone so that it is meeting
4 levels that are consistent with long-term health of
5 fish.
6 Q And if you pump that water through this diffuser,
7 you put more water into the pit or what do you do,
8 you close it or --
9 A At that point we would be taking the water out of
10 the pit, through this pipe and out into Carat Lake.

11 Q Once it fills again?
12 A Yes.
13 Q You would keep diffusing it until, like, whatever
14 water goes into it, it is safe?
15 A Yes. And as we are discharging water from the pit
16 and the pit is being filled with new water, that
17 water is eventually going to displace the water in
18 the pit, and over time, it should continue to
19 improve.
20 And if it is at a level where there is any
21 residual risk to the aquatic ecosystem, there will
22 probably be long-term monitoring requirements that
23 extend well beyond the closure period.
24 CHAIRPERSON: Thank you. That's all the
25 questions we had from the Board. One more time,
26 any questions from the elders to Tahera? If not,

0758

1 thank you very much, Tahera Corporation.
2 Next we will be receiving presentations from
3 other parties, but I ask that they make it down to
4 15 to 20 minutes on their presentation, because we
5 have got questions from other parties towards them.
6 Before we do, let's take a ten-minute coffee
7 break. Thank you.
8 (RECESSED AT 2:20 P.M.)
9 (RECONVENED AT 2:37 P.M.)
10 CHAIRPERSON: Shall we begin? Before I
11 ask NTI to make their presentation, Tahera, I think
12 there are some school students who have some
13 questions towards Tahera, so, Mr. Greg Missal, if
14 you can come back up front, there is some students
15 who have some questions. And after the students,
16 local residents or Kugluktummuit, if you have
17 questions towards Tahera, feel free to ask.
18 Right now I will ask the school students if
19 they have any questions.
20 MR. TILLEMAN: Madam Chair, as they are
21 coming up to ask any questions that they might
22 have, perhaps Mr. Missal can once again just
23 explain the size of the mine, the overall
24 footprint, you know, once again just summarize how
25 far is it away from Kugluktuk and how far away it
26 is from Gjoa Haven and how big might some of these

0759

1 buildings be in the whole of the mine. And then in
2 the pit again, just give us an idea in terms is it
3 the size of a hockey rink roughly or not or if it
4 is -- if you add it all up, what will it kind of
5 look like in the perspective? Thank you.
6 CHAIRPERSON: Okay. Please.
7 MR. MISSAL: Thank you, Madam Chair.
8 Greg Missal with Tahera Corporation. Just some
9 very general descriptions about the project, the
10 project is located about 220 kilometres southeast
11 of Kugluktuk or 200 kilometres southwest of

12 Bathurst Inlet or 420 kilometres northeast of
13 Yellowknife.
14 If I could just get the lights dimmed for a
15 second, I could show you on the map on the wall.
16 The Jericho project is indicated by that square.
17 There is Kugluktuk 220 kilometres away, and here is
18 Bathurst Inlet approximately 200 kilometres. And
19 here is Yellowknife, and this distance is
20 approximately 420 kilometres.
21 We will be building a mine site at that
22 location, at the location of Jericho. There will
23 be a number of buildings that will be constructed
24 at the mine site, some will be similar in size to
25 this room that we are in today. The processing
26 plant, the diamond processing plant will be larger

0760

1 than this building. We will have accommodations
2 there for our employees, which will be Atco
3 trailers that will be connected together to form a
4 larger complex, and that's where the eating areas
5 and the dining, the dining rooms, the kitchens and
6 the sleeping quarters will be in those
7 accommodations.
8 There will be a number of rock piles that
9 will be at the site. They will all be sloped at a
10 safe angle. And the water near the site, we will
11 be using water from Carat Lake for purposes in the
12 processing plant. We need water as part of the
13 processing -- part of the processing plant, and we
14 will be using Carat Lake for our domestic use as
15 well.
16 CHAIRPERSON: Thank you. Any questions
17 from students?
18 MR. KILLOUAK: Good afternoon. I just wanted
19 to ask a question on the subject on page 2 for your
20 Environmental Impact Statement. At present the
21 company plans to develop and market out the
22 diamonds recovered from Jericho as a rough product
23 --
24 CHAIRPERSON: Excuse me? Can you please
25 give us your name and talk a little slower so the
26 translators can keep up. Thank you. Not too close

0761

1 to the mic.
2 Q Gary Killouak. At present, the company plans to
3 develop and market out diamonds recovered from
4 Jericho as a rough product. The company remains
5 open to discussing the possibility of participating
6 in a secondary diamond industry in Nunavut;
7 however, to date, there have been limited amount of
8 discussions related to this matter. What were the
9 discussions and will there be more discussions?
10 MR. MISSAL: Thank you very much for
11 that question.
12 Tahera and the Kitikmeot Inuit Association

13 have negotiated an Inuit Impact Benefit Agreement
14 or IIBA, and part of the IIBA is a provision which
15 means it is an agreement between Tahera and KIA
16 that Tahera would provide rough diamonds. That
17 portion of the IIBA is a confidential section of
18 the IIBA between Tahera and KIA, so I cannot say
19 too much about -- any more about that, but we have
20 had those discussions with KIA. I hope that
21 answers the question.
22 CHAIRPERSON: Any other questions from
23 the students? Maybe if someone can help adjust the
24 mic.
25 MS. KODLUN: Hi, my name is Leah Kodlun,
26 and I am here with my classmates, the Nunavut

0762

1 Arctic College Pretrades Program. I have three
2 questions, and one is you guys say you guys plan to
3 hire 60 percent Inuit, which positions would go out
4 to Inuit, like the lower level paying jobs or would
5 you guys be giving out management positions?
6 MR. MISSAL: Thanks for that question,
7 Leah. The positions that will be open to Inuit are
8 all positions; however, they require the
9 appropriate skills and training to fill those
10 positions. Many of the jobs at the Jericho site
11 are very technical in nature, that means that it
12 requires a very high level of education and
13 training and experience.
14 In some of the jobs that we need to fill,
15 people will probably need between 10 and 20 years
16 of experience, such as the mine manager or the
17 processing plant manager. They need to be very,
18 very experienced people that can operate a mine of
19 this type.
20 There will be training opportunities for
21 Inuit people in the region, and that is something
22 that has been worked out as part of the Inuit
23 Impact Benefit Agreement, and we have -- I believe
24 that Tahera has shown its commitment to doing that
25 by setting this goal of achieving 60 percent Inuit
26 employment by year five. Thank you.

0763

1 Q My second question is -- my second question is
2 would you guys provide funding if someone wanted to
3 train for a management position or would the
4 funding just be for the construction or the
5 training for the construction and upkeep of the
6 mine?
7 A I think in terms of -- I think if I understand the
8 question correctly, we would hire people for
9 certain positions that have the appropriate
10 training or experience for that position. If
11 someone excels at doing their job, then they
12 would -- they could potentially work themselves up
13 to a higher position, and that could, in fact, be a

14 management or a supervisory type position. We are
15 open to that type of process.
16 Q What about the funding, the funding for training,
17 would you guys, like, give out contracts, or do you
18 guys give scholarships or do they just go to local
19 learning facilities?
20 A I'll try and answer that, but if I miss anything,
21 please point that out. In terms of scholarships, I
22 will start there, Tahera will be providing
23 scholarships for post-secondary education. We
24 haven't put together all the details of how we will
25 administer that, but we have made that commitment
26 to do that.

0764

1 Training is a key component of the IIBA, and
2 that's something that we worked on with the
3 Kitikmeot Inuit Association, and perhaps the KIA
4 will be discussing that in their presentation. But
5 training will be done in a combination of courses
6 offered within the community and at the mine site.
7 And was there any other -- did I miss any
8 other part of that question?
9 MS. KODLUN: No, that's okay. Thanks.
10 MR. MISSAL: Thank you.
11 CHAIRPERSON: Thank you. Any other
12 questions from students?
13 MR. KAKOLAK: Hello, I'm Craig Kakolak
14 from Nunavut Arctic College, NAC, and my question
15 is for the training, would there be on-the-job
16 training? And if, for example, a person has --
17 don't have requirements skills and high level
18 education, would they be also -- take the
19 on-the-job trainings?
20 MR. MISSAL: Thanks for that question.
21 CHAIRPERSON: Bill?
22 MR. TILLEMAN: Yes, just maybe to help us
23 understand, Mr. Missal has mentioned an IIBA, and
24 that's an impact and benefits agreement. And maybe
25 if he could help us understand just in a one-minute
26 answer what is that agreement and how did that come

0765

1 together and so on.
2 MR. MISSAL: I'll respond to perhaps to
3 Mr. Tilleman's question and then tie that in with
4 the question from Craig.
5 The IIBA or Inuit Impact Benefit Agreement is
6 a requirement that's set out in the Nunavut Land
7 Claim Agreement.
8 Tahera and the KIA, the Kitikmeot Inuit
9 Association, negotiated an IIBA which was completed
10 in December of 2003. The IIBA is intended to
11 provide for any compensation in terms of jobs or
12 training or business opportunities for the region
13 as a result of the project being developed. So we
14 are very pleased to have completed that agreement

15 with the KIA.
16 In terms of Craig's question, training is
17 certainly a part of the IIBA, and we intend to
18 utilize training through existing opportunities in
19 the communities, Tahera working with those
20 organizations that offer that type of training as
21 well as onsite training will also be offered.
22 However, I do want to point out that Tahera
23 has to run its business and its work very
24 carefully, and therefore, we need to have good
25 employees that come and work for us and do a very
26 good job for us. They need to be employees that

0766

1 work hard and that we can trust and that are
2 willing to learn. But we are open to providing
3 those opportunities. Thank you.
4 CHAIRPERSON: Any other questions from
5 students? Any questions from local -- okay.
6 Student.
7 MR. HINANIK: My name is Robert Hinanik,
8 and I'm with the pretrades. My question is
9 accidents do happen, and if one of your dams break,
10 what actions will be taken now and then when that
11 accident occurs?
12 Q Madam Chair, it is a little bit of a technical
13 question, but I will attempt to answer that. We
14 believe that we have taken the precautions to
15 design a safe mine site and safe structures such as
16 dams, and we will take every care possible to build
17 those facilities, and we will monitor how they are
18 working out during the life of the mine. And we
19 believe that the mine site will be a safe mine
20 site.
21 CHAIRPERSON: Any other questions from
22 students or local residents of Kugluktuk?
23 RESIDENTS QUESTION TAHERA CORPORATION:
24 MS. KULIKTANA: Hi, Millie Kuliktana. I'm
25 the executive director for Kitikmeot school
26 operations, and I am very pleased that there are

0767

1 students here voicing their opinions.
2 Unfortunately, these are students as well who
3 are working towards upgrading their skills further.
4 What -- and I do hear you saying there are trades
5 opportunities, there are training opportunities,
6 but very too often these training opportunities
7 come because we have a large population or a
8 population who needs to further their education
9 because they did not finish grade 12.
10 My concern, and I have shared it before with
11 other groups, that I am very afraid that training
12 opportunities are too easy to access. Sometimes
13 when a grade 12 student who is barely making it
14 through but has the potential to still graduate
15 under the academic stream sees their same age peer

16 counterparts graduating six to eight-week training
17 programs or pretrades that maybe are six months and
18 then they go into a well-paying job. And, yes,
19 maybe these well-paying jobs are not the best,
20 because within your organizations, you do offer
21 lower paid salaries for the people who do the
22 dirty, the digging, the cleaning, et cetera. These
23 are very attractive to young people who often
24 become parents while they are still in grade 12,
25 and so it becomes very difficult for them to stay
26 focused and graduate with an academic focus.

0768

1 I hear you talking about training
2 opportunities, but I, again, recognize this
3 training for adults.
4 Do you have in your provisions for this mine,
5 opportunities for you to invite your staff to come
6 to our board, our education system and state this
7 is what we have to offer to your students in your
8 high schools, so that, yes, we can get our
9 geologists and biologists and archeologists
10 graduating from our educational system under the
11 academic stream and not everyone goes through a
12 training plan that's basically for trades?
13 Yes, we understand in Nunavut that many of
14 our students are not graduating, and we are working
15 towards raising the levels. This year, for
16 example, we have a potential of 10 students who can
17 complete grade 12, that's 10, that's a lot.
18 But, again, to keep them in their studies
19 for -- in the academic stream can be very
20 challenging. But if they knew that you were out
21 there looking for people to become geologists,
22 biologists, archeologists or marine specialists,
23 then we need to hear from you so that you can say
24 this is what we are looking for. We just don't
25 want to hear about trades training all the time.
26 We need people to promote academic education so

0769

1 that people can go on beyond Arctic College here in
2 Nunavut to the universities down south to become
3 the people that we need to run the mines in the
4 future.
5 When your mine is done, closed off in 20, 30
6 years from now, maybe some day if we have the
7 smarts of our young people in your communities
8 sitting where you guys are sitting, look at how
9 separated we are, company over there, staff over
10 here. Some day we could -- our people could be a
11 company over there, them too over here. But today
12 we just keep talking about trades, trades learning,
13 and, yes, we need education, have understood and
14 recognize that, yes, not everyone will graduate
15 academically through to grade 12, and we have to
16 shift our thinking to recognize trade as well.

17 I have now been in my job for a year, January
18 6th as the executive director. Not once have I
19 been invited to come to a table with any mining
20 industry to say can we work together to encourage
21 people to stay in school and become what we want
22 them to be?

23 We are trying to make a shift now to say
24 let's graduate more kids not through the academic
25 stream, but through the trades stream because we
26 know they are not going to graduate grade 12 with a

0770

1 biology and all those grade 12 academics. So,
2 again, we are having to shift to meet the level of
3 where people want us to be. But, please, for your
4 information, if you are going to come up and say
5 that we are going to have 65 percent employment.

6 And I think if I can answer for you to the
7 elders' question earlier that are all of these jobs
8 for Nunavut and the response is Kugluktuk,
9 Cambridge and Gjoa Haven will be points of hire. I
10 think you should have answered the elder to say,
11 yes, we will hire from Nunavut if there are
12 certified biologist, archeologist, those
13 opportunities are there for you from anyone in
14 Nunavut.

15 So thank you for hearing me out. Again, we
16 need to continue to encourage others to graduate
17 grade 12 and also to support those in our Arctic
18 College programs as well. Koana.

19 CHAIRPERSON: Thank you very much. And
20 take note the other parties in the audience.
21 Mr. Missal.

22 MR. MISSAL: Thank you, Madam Chair.

23 First of all, I would like to thank Millie
24 very much for making those comments.

25 It is -- I think that's a very important
26 point that she made, and I have had experience

0771

1 going into the high schools here, in fact, in May
2 when I was last in Kugluktuk, I went over to the
3 high school and talked to the grade 11 and 12
4 students, and Millie is absolutely right, there is
5 much interest with those students for
6 post-secondary education to go on and do anything
7 that they wanted to do.

8 I was talking to Mayor Anablak earlier today,
9 and he was telling me that his daughter was at the
10 University of Ottawa this year, and I think that's
11 a very good sign that the students from Kugluktuk
12 are going off and pursuing these different types of
13 careers that will give them hopefully very
14 fulfilling jobs and very fulfilling careers.

15 Another part of the IIBA is a commitment from
16 Tahera to keep in touch and visit schools in the
17 Kitikmeot region, so that is something that Tahera

18 will do, has endeavored to do, will do, and I thank
19 Millie, again, for making her comments. Thank you.
20 CHAIRPERSON: Any other questions from
21 local residents to Tahera?
22 MR. KUDLOO: A couple of questions. I
23 guess a comment first. We have seen earlier in the
24 presentation on that Long Lake or the tailings or
25 whatever it was that was -- that like that's
26 situated close to the stockpile, I guess, my

0772

1 question is -- my first question is directed to
2 Tahera, I guess, you know when we -- when we take
3 rock out from underground, there has got to be some
4 sort of an action, oxidation, I guess --
5 CHAIRPERSON: One second. The
6 translators, number 4, they can't hear Innuinaqtun.
7 Okay. Go ahead.
8 Q First of all, I forgot to introduce myself. I'm
9 Phillip Kudloo, I'm chairman for the Kitikmeot
10 Hunters and Trappers.
11 My question was, as I was saying, it is in
12 relation to the stockpile on the Long Lake. When
13 we -- when you take rock out from underground,
14 there has got to be some sort of an action,
15 whatever -- how do you call it, oxidation, I guess,
16 and that's got to have some sort of an impact on
17 the water and the surrounding area. Is there any
18 comparison as to exactly how much or what kind of
19 an impact that action have on the water and on the
20 environment?
21 MR. MISSAL: Madam Chair, I would like
22 to call on Kelly Sexsmith to respond to that
23 question.
24 MS. SEXSMITH: This is Kelly Sexsmith.
25 We sampled the rock surrounding the
26 kimberlite ore at Jericho, as well as samples of

0773

1 that ore and the resulting process residues from
2 this project. And the type of minerals that are in
3 the rock at this project does not contain a mineral
4 called sulfides which are affected by oxidation
5 which causes changes over time, including release
6 of acidity or low pH water, like vinegar, into the
7 ecosystem. But we don't have that type of mineral
8 at Jericho, so we expect that that problem and the
9 things that go with it will not happen at Jericho.
10 Q The reason for my asking is that we live
11 downstream, not only us, but the people from
12 Bathurst Inlet as well. As you know, what is
13 upstream, what is uphill must come down. And the
14 reason for our concern is that we do have a very
15 big concern on how much -- what -- exactly what we
16 are drinking in our river, especially here in
17 Copper Mine, in Kugluktuk. We rely on that river,
18 not only for drinking water, but also for the fish

19 and the wildlife that's within this region.
20 My question is who determines what is safe
21 and what is not and when to stop? How do we
22 compare that? Where do we compare that to
23 especially when we, you know -- especially up in
24 the north, there are other mines, but exactly where
25 do we compare that in terms of, you know, when to
26 quit? When to -- when it is time to quit eating

0774

1 the fish, when it is time to stop drinking the
2 water? Who will determine that time?
3 MR. MISSAL: Madam Chair, I would ask
4 Kelly Sexsmith to respond to that, please.
5 MS. SEXSMITH: The water leaving the site
6 and in the receiving environment will be monitored,
7 and what that means is that we will collect samples
8 and send them to a lab to do chemical analyses on,
9 and in some cases, we will put fish in that water
10 and see how they are reacting to the water, and
11 those samples will tell us whether the water and
12 plants and fish affected by the property will be
13 safe for consumption by people and, in fact,
14 whether they will -- they, themselves, will be safe
15 from the effects of the mine.
16 So that sampling will be done by Tahera.
17 But, in addition, the regulatory agencies will have
18 access to all of that data, and I understand I
19 think they collect some of their own samples to
20 verify that the samples we are collecting are also
21 protective of the environment. So there is a fairly
22 significant network of monitoring that will ensure
23 that the water is safe.
24 Q My other question, my last question is that we have
25 talked about -- we have heard talk of IIBA being
26 undertaken. Exactly what are we referring to in

0775

1 this IIBA in terms of wildlife? What's in that
2 wildlife section, and who determines what goes in
3 there?
4 MR. MISSAL: Madam Chair, Greg Missal,
5 Tahera Corporation. I believe the question was is
6 wildlife included in the IIBA? And the IIBA is
7 only a socioeconomic agreement, so it deals with
8 the people and the communities, jobs, training,
9 business opportunities.
10 The wildlife component of the project is
11 covered in the EIS, which is the Environmental
12 Impact Statement, which is a collection of the
13 environmental work that's been done for the project
14 and was submitted to your board. That document is
15 on the table at the front of the room, so all of
16 the wildlife information is in those documents.
17 Thank you.
18 CHAIRPERSON: And these are documents
19 that are available to the residents?

20 MR. MISSAL: That's correct. I believe
21 they are available at the NIRB office, and I
22 believe there is also copies here in the community
23 of Kugluktuk as well.
24 MR. KUDLOO: I guess my last comment is
25 that, you know, it strikes me kind of funny when we
26 talk about drug abuse. Every day we see a lot of

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1 people going out, out in the cold in 40 below, 50
2 below, they don't care how cold it is to go have
3 their fix. They have to go out there on their
4 coffee break, but when it comes to wildlife, we do
5 care about that very much, especially, you know,
6 when we eat our fish from this river and what lives
7 within our region, all the wildlife we rely on,
8 those are the important things.
9 I mean, it strikes me kind of funny that when
10 we talk about other things like negative impact and
11 minimal impact, those are the things that we should
12 question ourselves, who determines minimal and what
13 is that?
14 Thank you, Madam Chair.
15 CHAIRPERSON: In regards to water safety,
16 Ms. Sexsmith, you were saying you do analysis and
17 you send out these analysis. How long does it take
18 for results to come in? How long does it take?
19 MS. SEXSMITH: It varies depending on the
20 type of sample that's being tested, and I can speak
21 to water samples because that's what I am most
22 familiar with. The water samples are usually --
23 they have to be sent out to the lab within two or
24 three days of collecting them to make sure that the
25 water analyses are as accurate as possible, so the
26 mine will have regular flights out of the site, and

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1 they will -- every time they can take water samples
2 out, they will, so that they get to the lab in
3 time.
4 There is an qualified lab in Edmonton, and I
5 believe the samples can probably get from the site
6 straight to that location within a 24-hour period.
7 Usually that lab is able to return results to
8 the proponent within one week, that is if they
9 don't pay a premium on the results. If they have
10 an urgent need to get a water result back quickly,
11 they can usually turn those results back within a
12 two-day period. So that's water samples.
13 The fish tissue work and whatnot, maybe Rick
14 Pattenden could comment on that.
15 CHAIRPERSON: Yes, please.
16 MR. PATTENDEN: Madam Chair, Rick
17 Pattenden, Mainstream Aquatics.
18 When the tissue samples are collected from
19 the fish, they are put on ice so they stay in good
20 condition, and when an appropriate number of

21 samples are collected, they are shipped out in a
22 similar fashion to what was described by Kelly
23 Sexsmith.
24 There is a qualified lab in Edmonton that can
25 do the analysis. As far as the time requirements
26 for the analysis, without any urgency to the

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1 analysis, it likely would take between a week and
2 two weeks to obtain the results.
3 CHAIRPERSON: Thank you. Any other
4 questions from local residents of Kugluktuk? If
5 not -- go ahead.
6 MS. ANGOHIATOK: Thank you, Madam Chair.
7 I have a question. When you talk about
8 taking water samples, is this just from the mine
9 site, or are you taking samples from every part
10 where the water flow is connected?
11 MS. SEXSMITH: We would take water samples
12 from all of the different locations on the mine
13 site that Cam had explained to you. We would also
14 take water samples in Lake C3, which is immediately
15 below the point of discharge, in Carat Lake, at the
16 outlet of Carat Lake, and I believe further down in
17 the river.
18 And Bruce Ott might be able to add to what I
19 have just said.
20 MR. OTT: Bruce Ott, AMEC on behalf
21 of Tahera.
22 One of the things that we need to do is
23 collect water on Inuit-owned lands, and there is --
24 I believe the area of interest is several
25 kilometres downstream of the site. Now having said
26 that, if there was a problem, that we wouldn't want

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1 to have to wait until the problem got several
2 kilometres down away from the site before we
3 detected it, so as Kelly has indicated, there will
4 be a number of samples progressively closer to
5 where any water was discharged from the site right
6 back to the exact point of discharge.
7 Q Thank you. When you review these with the people
8 that have -- there is people here who have concerns
9 about the water. Has it ever been questioned or
10 recommended that water in our areas be tested on a
11 regular basis?
12 A I believe I can answer that, if that's all right.
13 The Copper Mine River is not affected at all by our
14 operation, and I can't answer that question for any
15 other operator or community that might affect your
16 water supply.
17 Q Thank you. I do have one other question. When
18 they do their fish studies, do they consider the
19 spawning areas?
20 MR. PATTENDEN: Madam Chair, sorry, I
21 didn't catch the question? Could it be repeated,

22 please?
23 Q Thank you, Rick. When you guys do your fish
24 studies and analysis, is spawning areas reviewed,
25 looked at?
26 A Madam Chair, Rick Pattenden, Mainstream Aquatics.

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1 Yes, that was an important part of our
2 program is to try and identify the spawning areas.
3 CHAIRPERSON: Thank you. Any other
4 questions from the local residents? Mr. Ahvioyak?
5 MR. AHVIOYAK: Thank you, Madam Chair.
6 I would like to ask a question. I was told
7 -- I was just told that the water and the lakes --
8 I'm going to switch into English as well.
9 Early on, I guess, in the water quality
10 presentation, and in a part where the -- where it
11 is mentioned, they say very few problems, I'm not
12 sure what he meant by that when he say very few
13 problems. Maybe if we could get some of these
14 details of what type of problems are we talking
15 about when we say very few problems that were
16 mentioned earlier. Koana.
17 MS. SEXSMITH: This is Kelly Sexsmith.
18 The problems that we anticipate could occur in the
19 water at Jericho could include nutrients from the
20 sewage and residues from the blasting process, this
21 is ammonia and nitrate and phosphorus. We don't
22 expect those concentrations to be at particularly
23 high concentrations. In other words, the
24 discharges from the mine would not be acutely toxic
25 to wildlife drinking the water or to fish swimming
26 past the outfall. However, those concentrations

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1 could be chronically toxic to fish, in other words,
2 to their long-term health, some of those parameters
3 could cause concern. However, by the time the
4 water has mixed, within a very short distance it
5 will reach levels that are safe for the long-term
6 health of aquatic life. So that's what we mean by
7 a low level of impact.
8 The other parameters that we have some minor
9 concerns with are metals, and these are nickel and
10 uranium and cadmium, and, again, the concentrations
11 are not very high compared to other mine
12 discharges, and we don't expect the impacts to
13 extend beyond a very short mixing zone where the
14 discharges will occur.
15 I hope that answers the question.
16 Q Koana. Thanks for answering the question.
17 I guess -- okay, you talked about, again, low
18 uranium detection, I guess I could say, when you
19 are doing work. Is it on the whole lake or is it
20 just in the area where you need to do some study
21 how -- what kind of metal stuff in the area there
22 is, is it a whole lake? How is that? How do you

23 know this is a very low uranium? Is it in a small
24 area or is it a big area that you studied? Koana.
25 A Kelly Sexsmith. I don't have a pointer, and it
26 would be easier if we could turn the lights down

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1 and I could show you where the discharges go again
2 and what the mixing areas are.
3 I wonder too, Bruce, could you zoom the map
4 out a bit? I believe it extends further if we
5 could zoom it out a bit, that would help.
6 MR. OTT: How is that?
7 A Good. The processed kimberlite containment area,
8 shown here, during operations of the mine, the
9 water will leave the site at this point and go down
10 the stream that we are calling Stream C3 and into a
11 lake here that we are calling Lake C3. The extent
12 where there could be nonacutely toxic but still
13 long-term toxic water would be within 100 metres of
14 this discharge point only under conditions where
15 there was very dry -- a very dry year, a ten-year
16 dry year period when the flow from the upper part
17 of this catchment which comes from this direction
18 and this direction over here would be at an
19 unusually low level.
20 Under other years, the mixing zone could be
21 much smaller. The water in the rest of Lake C3
22 would meet the criteria that are applied to
23 indicate safe levels for long-term health of fish.
24 Carat Lake, which is where the intake for the
25 water that will be used for the mine, as well as
26 some more sensitive fish species would be at an

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1 even more dilute condition and would meet all the
2 criteria with one exception, and that metal is
3 cadmium.
4 The criteria for cadmium are very low. In
5 fact, they are lower than the detection limits that
6 labs can measure, and those criteria are very low
7 because they are based on a test that was affecting
8 one species in aquatic ecosystems that is very,
9 very sensitive. So there could be minor effects to
10 those species, and I'm not talking about fish here,
11 I am talking about benthic organisms. Benthic
12 organisms are small, I hope I get this right, and
13 Rick can correct me, small insects that live on the
14 bottom of the water.
15 The levels of cadmium that have been shown
16 through other types of tests that can affect fish
17 would be easily met in Carat Lake. So Carat Lake
18 would be -- fish in Carat Lake would be unaffected
19 by the metal concentrations that we are talking
20 about.
21 CHAIRPERSON: Any other questions?
22 MR. AHVIOYAK: I have got a couple more
23 questions. I just want to go a little bit further

24 on that. The reason I ask about the uranium tests
25 in the area, but First Nation, those of the -- in
26 their lakes and their fish has been contaminated

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1 because of the different type of metals that were
2 in that lake after some kind of project or mining
3 project or whatever that took place in that area,
4 did some damage to that lake. And I just want to
5 make sure that doesn't happen up north, that is why
6 I am asking that question.

7 Even though when we say very low uranium
8 detected in that lake or in the area itself, so I
9 just want to comment on that.

10 On the wildlife side, we talked about
11 Bathurst herd migration and so on. There is also
12 other animals there in the area, wolverine and so
13 on, fox. I'm sure they are in those documents that
14 were pointed out earlier. Just a short answer to
15 the question is what type of animals have you seen
16 in the area and their migration, if there is?

17 Koana.

18 MR. HUBERT: Thank you. It is Ben
19 Hubert for Tahera.

20 If I could get a pointer, I could try to --
21 we will have to zoom out a bit, Bruce.

22 MR. OTT: You want to see more, not
23 much more. That's it for this one.

24 MR. HUBERT: Okay. We monitored and
25 followed all of the den sites that we knew of in
26 the project area, and there is a den site there,

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1 there is another den site there, these are north
2 and east of the airstrip, and then there is another
3 den site in the highlands halfway between the
4 project and Contwoyto Lake. These dens were active
5 in several years while the project was underway,
6 and there was coming and going at the airstrip.

7 We also saw wolverines in the area and bear
8 in the area. We also saw bear tracks along the
9 shores of Carat Lake.

10 The camp was diligent in the way it managed
11 its garbage, and the camp also has an electric
12 fence there. And so we have learned a lot in how
13 to live in the same country as carnivores and
14 scavengers. And the wildlife management plan that
15 will be prepared to outline procedures for
16 mitigation will be available and remind everyone at
17 the camp and at the site of what to do and how to
18 manage garbage so that we do not attract these
19 animals and cause problems for us and bigger
20 problems for them.

21 So, yes, there are wolves and foxes,
22 wolverines and bear in the area as well as muskox
23 in the high ground. In wintertime we saw more
24 muskox north towards Cathawichaga Lake. We

25 summertime we saw muskox in the highlands around
26 the project. Not very often did we see them in the

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1 neighbourhood of the airstrip, but I am sure that
2 over time the project will interact with muskox the
3 way it will interact with caribou.
4 I hope, Mr. Ahvioryak, that handles your
5 question.
6 CHAIRPERSON: Any other questions? If
7 not, thank you Tahera Corporation.
8 We will now be hearing a presentation from
9 NTI. Please keep it down to 15 minutes as we have
10 quite a few to cover today and tonight. Thank you.
11 Somebody wants to ask a question.
12 MS. AYALIKIQUAQ: Hello, everyone.
13 What Donald just stated, I want to add to it
14 because I have concerns as well regarding mining
15 industry when they are so close to watersheds.
16 What could be our food, even myself, I know that
17 some of the animals are changing. I have seen them
18 up there, their area now is being mined, that's
19 where my parents used to live and roam, some of the
20 caribou.
21 Even though I am not a man, I have done a lot
22 of hunting. And, you know, men used to hunt all
23 the time before there was employment, but however
24 today in the winter and in the summer, I set fish
25 nets, the water has changed and the fish have.
26 Some fish seem -- some fish appear to have

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1 extra large heads and they seem so skinny, so when
2 they are extra skinny with large heads, I throw
3 them away and for fear that they many be
4 contaminated from industries upstream.
5 I just came in, so I am sorry, I'm just
6 commenting on what I just heard. Right now a lot
7 of fish -- you know, some fish are changing, and
8 caribou. Since I was a child when my parents lived
9 up in inland, the caribou were very in good health
10 and perfect animals and some were fishing, there
11 was no industry in our lands. However, the water
12 is now -- now our water, it is awful to make a cup
13 of tea with our water, it upsets the stomach. And
14 years ago we drank this water without concern,
15 without getting bellyaches and upset stomachs and
16 diarrhea. Long ago we didn't have things to have
17 to settle the water and everything.
18 The mining industry, especially when you are
19 within close proximity of lakes and you are using
20 blasting mechanisms, it has to, you know, it is
21 adjacent to a lake or a stream or river.
22 I have seen for myself where I have seen
23 where they were -- I mean, where they do diamond
24 mining, it is the bottom of the lake. I mean, if
25 there is anything flowing from this line to Copper

26 Mine.

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1 I often wonder, please, you know, watch where
2 waters flow and everything and some days there
3 might be, you know, an emergency or a disaster, and
4 we have to watch with the caribou, the migration
5 routes and the runoff from the lake, try and keep
6 it clean. Always be cautious.

7 You know, it has been my concern for years
8 since I was a child because that's my homeland,
9 that's where I grew up. My parents were inland
10 Inuit, and that's where I grew up around Contwoyto
11 Lake and Ipatulik (phonetic). Those were all the
12 areas where we hunted and traveled and lived, we
13 were nomadic. Caribou are beautiful and looked
14 perfect.

15 I often think and wonder what I am eating,
16 you know, is this clean fish, or, you know, are
17 they getting skinny because of contamination or
18 what?

19 Thank you very much, you know, for listening
20 to me, and that's all for now. Her name is Alice
21 Ayalikiquaq.

22 CHAIRPERSON: Thank you very much.

23 PRESENTATION BY NTI:

24 MR. LOPATKA: Good afternoon, Madam
25 Chairperson, member of the Board.

26 On behalf of Mr. James Intuluk, first

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1 vice-president of Nunavut Tunngavik Incorporated, I
2 would like to take this opportunity to thank the
3 Board for allowing us to present at this meeting.

4 My name is Stefan Lopatka, I am the senior
5 advisor environment water and marine management
6 with NTI in Cambridge Bay. With me is George
7 Hakongak, environmental coordinator.

8 NTI is the main Inuit organization that
9 represents all Inuit in Nunavut on land claim
10 issues in Nunavut. More specifically, the mandate
11 of the first vice-president is the department of
12 lands and resources within NTI.

13 In doing this review, our mandate was to
14 ensure that the EIS was complete and fully
15 addressed the issues and concerns that were
16 identified in previous submissions to the Board.

17 NTI is in support of this project moving
18 forward as we see it as a benefit to Inuit of the
19 Kitikmeot and the rest of Nunavut. I encourage the
20 proponent and other intervenors to pay attention to
21 the issues and concerns raised by NTI and the
22 importance of the environmental, economic and
23 social impacts of this project on the Inuit of
24 Nunavut.

25 Now, I would like to introduce George
26 Hakongak, the environmental coordinator for NTI's

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1 land and resource department who will be doing our
2 presentation.

3 MR. HAKONGAK: Thank you, Stefan. Thank
4 you, Madam Chair and audience, ladies and
5 gentlemen, elders.

6 My name is George Hakongak. I am with the
7 Nunavut Tunngavik Incorporated in Cambridge Bay as
8 the environmental coordinator of the lands and
9 resources department.

10 To begin, NTI would like to thank the Nunavut
11 Impact Review Board for the opportunity to
12 participate in the final hearing addressing the
13 Jericho Diamond Project, Jericho Diamond Project of
14 Tahera Corporation to allow the views of Nunavut
15 Tunngavik to be presented.

16 The comments stem from the review of the
17 Jericho final project Environmental Impact
18 Statement issued by Tahera Corporation in January
19 of 2003. The Tahera response to information
20 requested by INAC in May 2003 and the Jericho
21 project final EIS supplemental report of October
22 2003. Rescan Environmental also had access to the
23 original guidelines issued by NIRB for the Jericho
24 EIS April 2000, and the decision of postponement
25 and the contained guidelines in August 2003.

26 The review carried out by Rescan is focussed

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1 on evaluating the information submitted by Tahera
2 to determine the completeness and effectiveness of
3 the proposed measures to ensure responsible
4 environmental stewardship.

5 NTI has not focussed further on the
6 socioeconomic issues as we feel that these issues
7 are best addressed through -- are best addressed
8 through an Inuit Impact and Benefit Agreement,
9 IIBA, as negotiated by the Kitikmeot Inuit
10 Association and the Tahera Corporation.

11 NTI submitted a significant number of
12 recommendations concerning the final Environmental
13 Impact Statement. Tahera has responded to some of
14 these in the supplemental documentation. In
15 reviewing the supplemental report, Rescan has
16 identified a series of outstanding issues that we
17 recommend be addressed through terms and conditions
18 by the NIRB in granting the project certificate.
19 All of the comments raised by Rescan should be
20 incorporated. However, in the final submission, we
21 will focus on these issues we feel are most
22 critical.

23 NTI strongly recommends that the following
24 issues be addressed through terms and conditions of
25 a project certificate. The issues and concerns
26 identified by NTI's review fall in two categories,

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1 (a) those that need to be addressed and resolved
2 prior to the commencement of construction, (b)
3 those that need to be addressed and monitored
4 during the operation of the mine for effective
5 environmental and socioeconomic stewardship. The
6 proponent will need to establish effective
7 mitigative measures in consultation with Inuit in
8 the project area.

9 Mine design issues, in the first category,
10 the main issue identified relates to the design and
11 construction of the dams and dikes that are part of
12 the processed kimberlite containment area in the
13 Long Lake drainage system.

14 CHAIRPERSON: Oh, this is a longer
15 document than we were given 15 minutes, so can you
16 just go through your recommendations? Can you
17 shorten your comments please, and rather than
18 reading it, highlight the main points, please.

19 MR. HAKONGAK: They are clearly identified
20 in this document, our concerns and issues in the
21 mine design issues.

22 First of all, in the major concerns are done
23 by Rescan Environmental in the document technical
24 review, supplemental information for the Jericho
25 final Environmental Impact Statement. They are in
26 those documents from public reference.

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1 Concerns, issues raised have been gathered in
2 the mine design system and reclamation. Issues
3 identified in the category of monitoring cover
4 broadly all stages of mine construction, operation,
5 reclamation, postreclamation and include all
6 aspects of the ecosystemic and economic impacts of
7 the project. Details of the monitoring
8 requirements identified by NTI in review are
9 contained in the Rescan report.

10 Some of the major monitoring issues can be
11 grouped into following categories, air quality or
12 monitoring program, water quality monitoring
13 through an effective water management system,
14 fisheries data analysis to follow the guidelines of
15 Canadian metal mining, environmental effects
16 monitoring protocol, wildlife monitoring programs,
17 particular cooperative work with our stakeholders
18 to increase the scope and scientific value, spray
19 irrigation impact and effectiveness monitoring, use
20 of archeologist holding a valid Nunavut
21 archeologist's permit prior to the initiation of
22 any construction activity. Details of these and
23 other monitoring issues are documented in the
24 Rescan report.

25 There are many concerns that the proponent
26 has to address, and in terms of reclamation or

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1 compensation, NTI strongly -- NTI strongly
2 recommends that all regulators implicated in the
3 project define the requirements for effective
4 monitoring, that NIRB includes these.
5 In closing, NTI is in support of the proposed
6 Jericho Diamond Project. NTI is encouraged by the
7 progress made in the development of the final
8 Environmental Impact Statement and requests that
9 NIRB incorporate the NTI issues as well as
10 monitoring variables and directives designed by
11 other regulators into the terms and conditions for
12 a project certificate.
13 In addition, NTI encourages the proponent to
14 operate and undertake its stewardship role within
15 the letter and spirit of the Nunavut Land Claims
16 Agreement.
17 Once again, thank you for inviting NTI --
18 providing NTI an opportunity to participate in the
19 review of the Jericho Diamond Project. We look
20 forward to hearing of NIRB's decision on this
21 matter and proceeding with the issuance of a
22 positive project certificate for the Jericho
23 Diamond Project in a timely matter. Koana. That's
24 it.
25 CHAIRPERSON: Any questions to NTI from
26 Tahera?

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1 TAHERA CORPORATION QUESTIONS NTI:
2 MR. MISSAL: Thank you, Madam Chair.
3 Just one question to ask for NTI, do you
4 agree that the issues that you have described can
5 be addressed at the regulatory or project design
6 phase?
7 MR. LOPATKA: Yes, we believe that they
8 can be addressed.
9 CHAIRPERSON: Any questions from the
10 elders to NTI? Any questions from KIA to NTI? Any
11 questions from GN? Indian and Northern Affairs?
12 Department of Fisheries and Oceans? Natural
13 Resources?
14 MR. DYKE: No questions.
15 CHAIRPERSON: Any questions from the
16 elders or public? Any questions from the Nunavut
17 Impact Review Board staff? Any questions from the
18 Board? One question?
19 RESIDENTS QUESTION NTI:
20 MS. KULIKTANA: I missed that call from the
21 community.
22 Question to NTI from the community, the other
23 day we had a very full house in here when the
24 hunters and trappers organization held their annual
25 general meeting, and at that time I shared a
26 comment to the board of their local HTO what their

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1 process is for reviewing land use permits, et

2 cetera. And their comment back was they do have a
3 big role to play in reviewing land use permits,
4 land use applications, et cetera, for any
5 exploration, but their comment back was that there
6 always is a lack of funds to have the proper staff
7 at the HTO level to help review applications that
8 come to the boards, the local boards for review
9 prior to giving their consent to go ahead with the
10 project or not in whatever capacity the application
11 is.

12 Would NTI or does NTI have accommodations for
13 local hunters and trappers organizations or other
14 Inuit agencies at the local level to assist them in
15 reviewing land use permits, land use applications,
16 water review, anything that has to do with the
17 environment? Will there in the future, if not now,
18 be dollars identified to help the local agencies
19 become a stronger body to help and to do a better
20 job of reviewing all land use of any type of
21 application? Thank you.

22 And, again, I am sorry I forgot. I am Millie
23 Kuliktana from Kugluktuk.

24 MR. LOPATKA: Stefan Lopatka, NTI.

25 Thank you for your question. NTI has been
26 concerned with the ability of other Inuit

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1 organizations to participate in the review process.
2 We have looked at the issue previously. At this
3 time there is no allocated funds to assist. We are
4 looking at programs in terms of from our lands and
5 resource department to provide some form of
6 assistance in terms of identifying or highlighting
7 the projects and keeping contacts with the various
8 organizations to assist them. We are hoping that
9 we can do some of this through the regional Inuit
10 associations as well.

11 At this time, though, there are no funds. We
12 will be looking into potentially funds and other
13 vehicles, particularly to try to assist the HTOs
14 and other Inuit organizations so that the voice of
15 Inuit could be heard to a greater extent in the
16 regulatory process.

17 CHAIRPERSON: Any other questions from
18 local residents?

19 MR. AHVIOYAK: Just want to follow up on
20 Millie's question, and it is good to hear the NTI
21 is looking into that which the HTO is having some
22 short staff or need a staff to review these
23 applications.

24 When you say you are looking into it, how
25 soon can we hear from you as to when this will be
26 in place? When I say "in place," the funding or

0798

1 staff or some type of support. Thank you.

2 A Stefan Lopatka, NTI.

3 Right now we haven't had any initiatives in
4 terms of funding. What we are looking at as part
5 of the development of our GIS system to develop
6 maps and information, information circulars that we
7 would try to get together and basically distribute
8 so that it would assist in identifying the issues.
9 And at this point in time, that's all that we have
10 been looking at. We open to have a chance again
11 with the regional Inuit associations to further
12 identify ways that we can assist.
13 Time lines, right now I can't give you any
14 time lines because these are some of the projects
15 we are working on, but we hope to -- we did a
16 survey back two years ago to identify the issue,
17 and we have been working on it since. Thank you.
18 CHAIRPERSON: Any other questions?
19 Thank you, NTI.
20 Up next is presentation given by KIA, and,
21 again, for your information, we have read your
22 submission and if you can give us a short summary
23 of your submission, thank you.
24 PRESENTATION BY KIA:
25 MR. EVALIK: Thank you, Madam
26 Chairperson and members of the Nunavut Impact

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1 Review Board.
2 It is my pleasure to lead the presentation to
3 NIRB outlining the Kitikmeot Inuit Association's
4 position on Tahera's proposed Jericho project. I
5 know NIRB has received the KIA's presentation
6 during the technical hearings in Cambridge, but for
7 the benefits of the communities that we serve as a
8 Kitikmeot Inuit Association, I think the Inuit, all
9 the communities got to hear what's got to be said
10 in terms of our activities and how we proceed in
11 terms of our review as well as our intervention.
12 I know there is a time line that has been
13 given to us is 15, 20 minutes, and we will try to
14 stay within that, but, again, I will stress that
15 the communities need to hear what the intervenors
16 have got to say in terms of this project and on any
17 other project that's been forthcoming in the near
18 future.
19 CHAIRPERSON: Thank you, and we do
20 appreciate that. But we get to a point where you
21 are reading word for word, but if you can give a
22 summary of what -- of your submission and get your
23 point across, thank you.
24 MR. EVALIK: We have prepared the
25 summary in our community presentations as the
26 technical stuff and everything like that, we recall

0800

1 it was presented in Cambridge. We will prepare a
2 summary that's being done, and that is what we
3 intended to do. But in terms of our presentation,

4 I think the community has got to hear what we have
5 to say, and we try to do it in summary form, yes,
6 we will try to do it.

7 My name is Charlie Evalik, and I'm the
8 president of Kitikmeot Inuit Association. I will
9 start off with the presentation made by KIA. And I
10 have with me Jack Kaniak today and Geoff Clark from
11 our lands people, and our legal counsel was at
12 Cambridge Bay hearings in terms of the technical
13 hearings, and he couldn't be here today.

14 KIA has reviewed the Tahera Corporation's
15 final Jericho Diamond Mine Project, they are from
16 the EIS statement and the supplementary report and
17 the supporting documents. And based on this
18 review, KIA is pleased to outline its position on
19 this proposed project for the Nunavut Impact Review
20 Board.

21 I will present a broad overview of KIA's role
22 and its position in respect to the Jericho project.
23 Geoff Clark will present a more detailed submission
24 outlining those environmental and other matters
25 which KIA believes NIRB should consider in making
26 its decision on this project proposal.

0801

1 We expect to take about 15, 20 minutes, and
2 then we will be available for question and answer.

3 The Jericho Diamond Mines Project represents,
4 we believe, an important economic opportunity for
5 the Kitikmeot region as well as for Nunavut. KIA
6 has actively promoted mining development in
7 Nunavut, and Kitikmeot region in particular, for
8 all interests of all Inuit. KIA supports
9 appropriate mining development because it has
10 important responsibilities to Kitikmeot Inuit to
11 balance economic opportunities as well as
12 environmental protection to protect the land,
13 wildlife and Inuit lifestyles.

14 We believe KIA has played an active role in
15 these NIRB and water hearings proceedings that will
16 be forthcoming. As a result of our review and of
17 the evidence filed by Tahera to date, KIA will be
18 urging NIRB to recommend to the Minister of Indian
19 and Northern Affairs that additional environmental
20 protection measures be included in NIRB's
21 certificate, regulatory permits and licenses
22 granted for this project.

23 KIA also manages and regulates activities on
24 Inuit-owned lands and this designation Inuit
25 organization for Article 20 of the Nunavut Lands
26 Claim Agreement. KIA is a surface land owner of

0802

1 Inuit-owned lands parcel CO2-05, which is within
2 the immediate footprint of the processed Jericho
3 diamond mine.

4 The proposed diamond mine is located about

5 half on Inuit-owned land parcels and half on Crown
6 lands. About one-half of the mine infrastructure
7 and storage areas are located on surface
8 Inuit-owned lands. Consequently, KIA may impose
9 additional environmental protection requirements on
10 Tahera's use of Inuit-owned lands and the water on
11 Inuit-owned lands to surface leases and other land
12 tenure instruments.

13 In May of this year, KIA had reviewed
14 Tahera's final EIS, and we had identified 18
15 significant concerns that we suggested to NIRB that
16 had to be addressed before any approvals could be
17 granted to Tahera. In terms of these concerns that
18 were brought forward by KIA to NIRB, we believe
19 that some of the concerns have already been
20 addressed by Tahera. In some of the cases, I think
21 some of the concerns that were brought forward by
22 KIA, they still need to be addressed.

23 Overall, it is KIA's position that Tahera has
24 responded adequately to 34 of the 51 issues that
25 were reviewed. Tahera's new work satisfactorily
26 addressed most of the high and moderate issues of

0803

1 significance raised by KIA in May. Nevertheless,
2 after KIA's review of the responses to these 51
3 issues, there were outstanding issues, concerns
4 with respect to mine design and environmental
5 mitigation on monitoring proposal made by Tahera.

6 KIA has identified five significant
7 outstanding concerns with the design of the Jericho
8 mine. KIA has presented two recommendations
9 related to environment and mitigation and 11
10 recommendations related to environmental monitoring
11 to present to NIRB on KIA's behalf. These issues
12 will be summarized later on in this presentation by
13 Mr. Clark.

14 The largest proportion of the residents of
15 the Kitikmeot region are Inuit, and almost all of
16 them are beneficiaries of the Nunavut Land Claims
17 Agreement. Because the Jericho diamond mine is a
18 major development project and because it is being
19 built at least partly on Inuit-owned land, KIA and
20 Tahera have negotiated Inuit Impact Benefit
21 Agreements as per Article 26 of the Nunavut Land
22 Claims Agreement. KIA and Tahera achieved this
23 agreement in early December, and final legal and
24 technical review will follow, and KIA will be
25 signing this agreement with Tahera in the near
26 future.

0804

1 IIBA also includes a commitment by Tahera to
2 pay compensation to KIA for effects of the project
3 on Inuit water rights onto Article 20 of the
4 Nunavut Land Claims Agreement.

5 As stated earlier by Tahera, there is a

6 commitment for 60 percent employment by year five
7 of the project into a binding agreement on this
8 IIBA. The IIBA also provides preference for our
9 contracting opportunities for Inuit firms and
10 individuals from the region.
11 Finally, the IIBA provides cash payments to
12 KIA on behalf of the Kitikmeot Inuit in order to
13 fund programs intended to project Inuit heritage
14 and culture.
15 Based on the commitments made by Tahera in
16 the Inuit Impact Benefit Agreement, KIA is advising
17 NIRB that socioeconomic concerns raised by KIA have
18 been mitigated.
19 The IIBA was made public yesterday in
20 Cambridge Bay with the exceptions of Schedules J,
21 K, and L of the agreement, which we believe are --
22 perceived are confidential between KIA and the
23 company Tahera.
24 IIBA in principle, IIBA in principle was
25 agreed to by KIA board in early December, and we
26 are working on the signing ceremony sometime in the

0805

1 near future. Implementation plans are being put
2 together as we speak in terms of examining the
3 agreement, as well as it is our intentions to visit
4 all the communities of all the Kitikmeot -- of all
5 the Kitikmeot communities to explain what is
6 contained in the agreement so the benefits could
7 accrue to the Kitikmeot Inuit. Thanks.
8 Now I will turn it over to Mr. Clark to make
9 a summary of some of the environmental protection
10 concerns.
11 MR. CLARK: Thank you, Charlie.
12 My name is Geoff Clark. I am the
13 environmental screener with KIA.
14 As Charlie indicated, I am going to summarize
15 my comments from Cambridge Bay. We had three days
16 to cover these issues in Cambridge Bay, and we have
17 to condense it down, the Kugluktuk portion into one
18 day, so we have to also condense our presentation
19 down. However, we would like to make sure that
20 everyone in Kugluktuk is aware of the issues that
21 we covered during this hearing, and the issues
22 relate to mine design, environmental mitigation and
23 environmental monitoring.
24 In terms of mine design, KIA reviewed the
25 project documents, and we raised five issues that
26 should be dealt with somewhere in the process

0806

1 either in the final design stage, where it is being
2 reviewed by the Nunavut Water Board, but also,
3 perhaps, in the recommendations that NIRB makes to
4 the Minister.
5 In terms of the west dam design, the KIA
6 would like to see more permafrost and bedrock

7 drilling in the area where the new location is
8 proposed for for the west dam. Also, the location
9 of the liner that is used within the west dam
10 should be reconsidered.

11 For the divider dikes that are used within
12 the area that is dammed by the west dam, the
13 processed kimberlite containment area, there were
14 divider dikes originally proposed to be used in the
15 processed kimberlite containment area; however,
16 they were removed when KIA criticized some of
17 the -- or the design. However, KIA would like to
18 see divider dikes used in the PKCA or the processed
19 kimberlite containment area because it would allow
20 progressive reclamation to occur.

21 Also, in terms of this area where the
22 processed kimberlite will be placed at closure, we
23 would like to be -- we would like to be provided a
24 description of the final shape of this tailings
25 containment area, what it is going to look like
26 with all of this ground-up material and rock, you

0807

1 know, fine rock tailings in the enclosure. And
2 also to manage tailings deposition so that the west
3 dam is buttressed or supported by the tailings.
4 Also to better describe the areas that are affected
5 by very -- it is called tailings slime, which is
6 very fine particles of tailings mixed with water
7 which has a -- which is slightly different from the
8 main tailings area, and also to consider
9 revegetation of the tailings area rather than
10 capping the processed kimberlite containment area
11 with overburden.

12 There were two environmental mitigation
13 issues that after our review still remained
14 outstanding, and the first was the KIA thought that
15 the diversion of Stream C1 should be considered an
16 unmitigated loss of fish habitat, and so when the
17 compensation plans with the Department of Fisheries
18 and Oceans should be compensated for.

19 Also, Tahera should provide more detailed
20 plans for revegetating the mine after closure
21 rather than leaving bare rock surfaces and
22 overburden to try to establish vegetation wherever
23 it is possible.

24 In terms of environmental monitoring, the KIA
25 had 11 issues that either had been resolved by the
26 time the hearing commenced or that in the

0808

1 supplemental information the company had agreed to,
2 however, we would still like NIRB to be aware of
3 these so that they are in the directives to the
4 Minister to ensure that these are adhered to.

5 These topics generally related to air quality
6 specifically to monitor the finest particulate
7 matter in the air. Another area is water quality

8 monitoring, and, specifically, this is monitoring
9 nitrate that is from ammonia from the explosives
10 that could wash into the Lake C3 and Carat Lake.
11 Another is for monitoring phosphorus which enters
12 the processed kimberlite containment area -- which
13 enters the processed kimberlite containment area
14 from sewage and then may go through the processed
15 kimberlite containment area through to the water
16 system.
17 Another aspect of water quality monitoring is
18 to ensure that the buildup of these nutrients and
19 other metals which is called -- well, which is
20 called internal loading because the company is
21 withdrawing water downstream and depositing it
22 upstream, and then it will be taking in water again
23 downstream for their mine to ensure that there
24 isn't a buildup of these nutrients in Lake C3 and
25 Carat Lake over the life of the mine.
26 For vegetation monitoring, the KIA would like

0809

1 to assure that the standards for monitoring metal
2 concentrations in lichens that the Ekati diamond
3 mine uses is followed at the Tahera mine. We feel
4 that monitoring the vegetation can be an early
5 warning to determine if wildlife may be affected by
6 anything that the mine or any dust or anything that
7 is deposited by the mine on the vegetation.
8 For wildlife monitoring, the KIA -- we have
9 stated that we encourage Tahera to work
10 cooperatively with other stakeholders in developing
11 effective monitoring programs for the mine, and I
12 will come back to this point. For spray -- in
13 terms of the contingency for spray irrigation, the
14 KIA feels that there is more monitoring that would
15 be required if spray irrigation was used. And also
16 that additional archeology work should be conducted
17 in the area before the construction of the mine
18 commences.
19 For wildlife monitoring, there have been many
20 comments in Cambridge Bay and here from elders and
21 others that, for example, that there are many
22 caribou in the area and caribou commonly use this
23 area. I can tell from my brief experience at the
24 mine site last year when I was there in I believe
25 it was July 15th, it was correct to say that there
26 was a bear fence around the Tahera main camp, but

0810

1 in fact, the bear fence wasn't working, it wasn't
2 turned on since the previous year. And the day
3 that we had arrived, the previous day, a grizzly
4 bear got into the main buildings and went all the
5 way down a main hall, maybe 200 feet, something
6 like that, through the entire building to where
7 people were staying and had to be -- the person
8 staying there had to fire a rifle or to hit it with

9 a rifle because he couldn't get the gun to work to
10 get it to leave. And also in the camp there is
11 photos of wolves catching caribou right in the
12 project site, and these are examples of how
13 wildlife use the area. And it also highlights the
14 need for an adequate wildlife monitoring program,
15 and that the agencies responsible for wildlife are
16 ensuring that Tahera is doing their best to not
17 affect wildlife.

18 The government of Nunavut is responsible for
19 -- is largely responsible for monitoring wildlife,
20 and we have not had any indication or commitment
21 from them to develop a monitoring program that's
22 necessary for the scale of this mine that would
23 help citizens to know that how or if the mine is
24 affecting wildlife. And if -- and we would submit
25 to NIRB that the GN has to be involved, because
26 Tahera has indicated that it wants to work to

0811

1 monitor wildlife but it is too big of a job for
2 themselves, and the KIA agrees with that, but we
3 need to make sure that the other people response --
4 the other agencies responsible for wildlife are
5 doing their jobs so that Tahera can do their job.
6 And so we will be requesting that in the NIRB
7 recommends that the GN, the government of Nunavut,
8 is directed to focus adequate resources onto this
9 issue so that Tahera can do an adequate job of
10 monitoring wildlife.

11 The KIA also noted that there were several
12 wildlife and fisheries issues that were not
13 responded by Tahera directly to KIA in the
14 documents that they submitted, and we were
15 generally told that these issues would not be
16 addressed until negotiations with regulatory
17 agencies are completed, regulatory agencies such as
18 Environment Canada or DFO, for example.

19 KIA is concerned because we have little
20 influence over the outcomes of these negotiations,
21 and we cannot guarantee that the regulatory
22 agencies would place a strong focus on conservation
23 of fish and wildlife, for example, as the KIA would
24 like, and thus we are quite concerned that these
25 are referred to the regulatory -- that these issues
26 shouldn't be deferred to the regulatory process

0812

1 until NIRB decides if these are significant
2 impacts, and then if so, mitigation recommendations
3 are made.

4 I'll now turn it over to Charlie who can
5 summarize KIA's conclusions.

6 MR. EVALIK: In conclusions then, KIA's
7 position on Jericho project, KIA has identified
8 several environmental concerns and recommendations
9 for addressing them. We have asked that NIRB

10 consider including these recommendations in this
11 report to the Minister of DIAND. Subject to NIRB's
12 consideration of the environmental issues raised by
13 the KIA, we are pleased to advise that KIA supports
14 the Jericho project in principle. KIA will provide
15 unqualified support for the Tahera project once we
16 sign our Inuit Impact Benefit Agreement and once we
17 have the opportunity to review the NIRB report from
18 these hearings.

19 In our view, the Jericho project will provide
20 significant benefits for the Kitikmeot region.
21 Once the environmental issues are resolved, KIA
22 will look forward to working in partnership with
23 Tahera Corporation as it develops Nunavut's first
24 diamond mine. Koana.

25 CHAIRPERSON: Thank you. Any questions
26 to KIA from Tahera?

0813

1 TAHERA CORPORATION QUESTIONS KIA:
2 MR. MISSAL: Madam Chair, just one
3 moment, please.
4 Madam Chair, just one question for KIA and
5 that is if they would agree that Tahera can address
6 the issues that they raised or have described in
7 the regulatory or mine design phase?
8 MR. CLARK: This is Geoff Clark from
9 KIA. We agree that these can be addressed in the
10 mine design or regulatory phase, but we would like
11 our monitoring comments to be in the NIRB
12 directives to assure that they are followed.
13 CHAIRPERSON: Any questions to KIA from
14 the elders? Any questions from NTI?
15 MR. LOPATKA: No questions.
16 CHAIRPERSON: Any questions from GN?
17 GOVERNMENT OF NUNAVUT QUESTIONS KIA:
18 MR. MacISAAC: Hi, Bernie MacIsaac with
19 the department of sustainable development, GN.
20 One question for the KIA, are they satisfied
21 that the socioeconomic concerns related to this
22 project are covered by their IIBA with Tahera?
23 MR. EVALIK: I believe in most cases as
24 we represent the Kitikmeot of Inuit as the KIA
25 under the Nunavut Land Claims Agreement, and under
26 Article 26 of the Nunavut Land Claims Agreement, I

0814

1 think we covered off most of the issues that
2 socially -- social economic agreement benefits will
3 accrue to Kitikmeot Inuit.
4 But in terms of the assistance from the
5 governments, the federal government or territorial
6 government, we believe that some coordination and
7 some assistance required by Kitikmeot Inuit, and
8 that being economic development and assisting in
9 terms of the Inuit in terms of their aspirations to
10 develop their own contracts in terms of the

11 employment and training opportunities, I think the
12 government has got to be responsible for that. And
13 we could work with both levels of government, we
14 believe, in terms of addressing the -- for the
15 benefit of Kitikmeot Inuit. And I think we have
16 got to work together, and it is the -- but in most
17 cases I think we believe what we have negotiated
18 under IIBA will address some socioeconomic benefits
19 for the Kitikmeot Inuit. And we are -- like I
20 stated, we are in the process, we are right now in
21 the process of putting together implementation
22 plans of the IIBA, and it is our intention to visit
23 all the communities of that agreement.
24 MR. MacISAAC: Thank you.
25 CHAIRPERSON: Any questions from Indian
26 and Northern Affairs? Department of Fisheries and

0815

1 Oceans? Natural Resources Canada?
2 MR. DYKE: No questions.
3 CHAIRPERSON: Any questions from local
4 residents? Any questions from Nunavut Impact
5 Review Board staff? Any questions from the Board?
6 Thank you, KIA.
7 It is going on 4:30. We are going to break
8 for supper and continue with our hearings here in
9 Kugluktuk tonight at 7 o'clock. We start at 7. We
10 will also be offering or giving out door prizes, so
11 7 o'clock sharp.
12 (RECESSED AT 4:25 P.M.)
13 (RECONVENED AT 6:46 P.M.)
14 CHAIRPERSON: The people that were
15 supposed to come in tonight and give their song,
16 unfortunately they cannot make it, so we will go
17 ahead with the hearing, starting with Tahera giving
18 a brief presentation for the public who were not
19 here this afternoon.
20 Bill, you have got some comments to make?
21 MR. TILLEMAN: Thank you, Madam Chair. As
22 we are just getting ready to go here, we had a
23 couple of exhibits that we might actually enter and
24 have marked, and unless there is any objection from
25 the parties, we can do that whenever you wanted to
26 do it, just some housekeeping-type stuff.

0816

1 CHAIRPERSON: Any objections? Any
2 objections from the parties? No, go ahead, Bill.
3 MR. TILLEMAN: Thank you, Madam Chair.
4 And so we had previously talked about a letter that
5 was sent on December 19th, 2003 from DFO to the
6 Nunavut Impact Review Board, so I propose that DFO
7 letter dated December 19th, 2003 would be filed now
8 as Exhibit number 19. That's DFO's letter to the
9 NIRB regarding Tahera's meeting, okay?
10 EXHIBIT NO. 19:
11 DFO LETTER TO NIRB DATED DECEMBER 19, 2003

12 MR. TILLEMANN: As number 20, I propose
13 that that exhibit be what we had previously talked
14 about before, and so that would be a summary of the
15 CVs of the Tahera team, so that one would be number
16 20.

17 EXHIBIT NO. 20:

18 SUMMARY OF THE CVs OF THE TAHERA
19 CONSULTANTS

20 MR. TILLEMANN: And then we would propose
21 that as Exhibit number 21, that we have the AEMP
22 Re-evaluation and Refinement Report. This is
23 relevant to Ekati's diamond mine, and it was
24 referenced, I believe, by KIA, and so this is
25 simply the first couple of pages, A Program
26 Proposed for 2003 and 2007, and we would propose

0817

1 that one would be marked as number 21.

2 EXHIBIT NO. 21:

3 AEMP RE-EVALUATION AND REFINEMENT REPORT:
4 PROPOSED PROGRAM 2003 - 2007

5 MR. TILLEMANN: As number 22, we would
6 propose to mark the KIA presentation, which we
7 received today, only because it was slightly
8 different than the presentation that was filed in
9 Cambridge Bay, that would be Exhibit 22.

10 EXHIBIT NO. 22:

11 KIA PRESENTATION IN KUGLUKTUK

12 MR. TILLEMANN: We still have a few others,
13 but I propose we deal with those later, DFO, and I
14 notice DIAND has a couple others, but this brings
15 us somewhat up to date. Unless there are any
16 objections to that in the audience, and none seen
17 right now, then we will go ahead and mark them, and
18 I will turn the time back over to you, Madam Chair.

19 CHAIRPERSON: No objections? No. Thank
20 you.

21 Tahera?

22 PRESENTATION BY TAHERA CORPORATION:

23 MR. MISSAL: Thank you very much, Madam
24 Chair.

25 I would like to start off by welcoming
26 everyone here this evening. My name is Greg

0818

1 Missal, I'm the vice-president of Nunavut affairs
2 for Tahera Corporation.

3 For those of you who don't know, we are
4 conducting our final public hearings this week. We
5 were in Cambridge Bay the last three days, and we
6 are very pleased to be in Kugluktuk today.

7 And I would like to tell you a little bit
8 about the diamond project, which we are processing,
9 for -- it's located at the north lake of Contwoyto
10 Lake, about 200 kilometres southeast of the
11 community of Kugluktuk.

12 Just some information about Tahera

13 Corporation. Tahera Corporation is a publicly
14 traded company which means that we have
15 shareholders, many shareholders who have a great
16 deal of interest in the proceedings this week in
17 these Nunavut communities. We have been involved
18 in diamond exploration in Nunavut since 1992, and
19 we have discovered numerous kimberlite deposits on
20 our properties.

21 What Tahera is proposing to do is to build
22 the Jericho Diamond Project, which is a diamond
23 mine, for the purposes of recovering commercial
24 saleable diamonds from the kimberlite rock. This
25 will be the company's first mine, and we are doing
26 it with the help of some very experienced

0819

1 contractors, some of which I have with me today,
2 those being Nuna Logistics, SRK Engineering and
3 DRA.

4 For this project, we will be utilizing local
5 labour and services where possible. We have
6 completed an Inuit Impact Benefit Agreement with
7 the Kitikmeot Inuit Association, and we will be
8 developing the Jericho project with minimal impact
9 to the environment.

10 The Jericho project is located right by this
11 green square on the map. As I mentioned, we are
12 200 kilometres from Kugluktuk, which is at the top
13 of the map, and about 200 kilometres from Bathurst
14 Inlet.

15 The mine will last -- is proposed to last for
16 an eight-year period. We will be processing
17 300,000 tonnes of kimberlite rock each year. Each
18 tonne of the kimberlite that we remove will have on
19 average 1.2 carats per tonne. Over the life, over
20 the eight years, we will recover approximately 3
21 million carats of diamonds. We will be mining by
22 means of open pit mining, which means digging a
23 hole in the ground. That will take four years, and
24 following that, we will be mining underground for
25 another two years.

26 In order for us to reach the stage that we

0820

1 are at today, that of our public hearings, we had
2 to complete a great deal of environmental work
3 which resulted in us completing these documents
4 that you see at the front of the room. Those are
5 called the Environmental Impact Statement, and that
6 is a collection of the environmental studies that
7 we have done for the project. Those documents were
8 completed based on guidelines that are set out by
9 NIRB. We prepared a draft document, we submitted
10 that document to the Nunavut Impact Review Board in
11 January of 2003. We received information requests
12 in April and May, and in October, we filed a
13 supplementary document to address those information

14 requests.
15 Just to tell you a little bit about the
16 Jericho site or the exploration site as it exists
17 today, we have an airstrip on the site. There is
18 three and a half kilometres of all-weather road.
19 We have an exploration camp, and we have what we
20 call a portal area where the bulk sample was taken
21 in 1997. A bulk sample is a small sample of the
22 overall deposit that's there, and it was 10,000
23 tonnes in size.
24 This picture shows what the mine site will
25 look like once it is built. The whole mine site
26 will be about 220 hectares in size. This is the

0821

1 pit right in the middle here, which is where we
2 will be digging to remove the kimberlite ore.
3 These piles of rock that you see here is rock
4 that we will be removing from the pit as we dig
5 down into the ground. Some of the rock that's
6 removed will be waste rock or granite, and some of
7 the rock will be kimberlite. The kimberlite is the
8 rock that the diamonds are found in, and that's the
9 rock which we will be putting through the
10 processing plant to extract the diamonds.
11 This is the processing plant right here, and
12 beside the processing plant are the accommodations
13 where the employees will be staying.
14 I'm now going to start a little animation or
15 a cartoon of the building of this site, what it
16 will look like once it is built and what it will
17 look like -- what we are proposing it will look
18 like after our reclamation work once the mine is
19 finished.
20 This is starting at the airstrip and moving
21 south. This is the exploration camp that exists
22 today. The lake on this side is Carat Lake. As we
23 move further south, we get to the portal site which
24 is where the kimberlite is located. This is where
25 the open pit will be dug. This shows the
26 kimberlite as it exists under the ground today.

0822

1 Now, we are going to back up a little bit
2 here, and we will start to show what it will look
3 like as the site is built. You can see here we
4 have the accommodations, the processing plant, some
5 of the roads that exist. This is the fuel tank
6 farm, and these are some of the areas where those
7 piles of rock will be placed that I showed you on
8 the previous slide.
9 It takes quite a long time for us to dig this
10 pit. In fact, this will take four years to
11 accomplish this, and the pit will start out very
12 small, as you can see here in the first year.
13 I draw your attention to this road that comes
14 around the side and spirals down and into the pit.

15 That's how the trucks and equipment go down into
16 the pit in order to haul the rock out to the
17 surface. As you can see, by the third year, the
18 pit is getting larger, and after the fourth year,
19 we have finished the pit, and we would start two
20 years of underground mining of this green
21 kimberlite ore. Once we get to the bottom of the
22 pit, we will have to build this spiral that goes
23 down the outside, and that's how we will access
24 mining the underground portion of the kimberlite.
25 When the mining is all finished, one of the
26 important parts of this hearing is a reclamation

0823

1 process, which means that we will have to clean up
2 this site, take down the buildings which you will
3 see here. Much of the rock has been processed.
4 Eventually, the open pit will refill with water.
5 Some of the rock piles do stay in place. The
6 exploration camp is removed, and the airstrip would
7 be left in place for any future uses.

8 As a result of this project, there will be
9 benefits to the Kitikmeot, and that will primarily
10 come about as a result of Tahera negotiating an
11 Inuit Impact Benefit Agreement with the Kitikmeot
12 Inuit Association. We are very pleased to have
13 that agreement completed with the KIA. It will
14 offer employment and training opportunities for
15 Inuit of the region. It will offer the possibility
16 for business opportunities, and also it will aid in
17 community wellness.

18 Along with all the geology and exploration
19 work that we have to do, there is also a lot of
20 environmental work that has to be done. And as I
21 mentioned, it is this environmental work that goes
22 into making up our Environmental Impact Statement
23 that you see on the front table here.

24 Here is a picture of some work being done at
25 the site. This is Barb Adjun, a picture of her,
26 she worked for us one summer.

0824

1 But we have done many type of baseline
2 environmental work. This is a very long list of
3 the work that's being done, but it includes many
4 different areas of work, and you can see it started
5 in 1995, and it has carried on to 2003. This is
6 another picture of some baseline work being done at
7 the site.

8 We have also had an opportunity to have two
9 elders' visits to our site, this one was in 1999,
10 and the other one was in 1996. The elders' visits
11 are very useful because it allows the elders to see
12 the project site firsthand, it provides an
13 opportunity for the elders to discuss any concerns
14 they may have, it brings elders together from
15 different communities. And on the visit in 1999,

16 that elders' visit was coordinated with an
17 archeological dig at the site, so it allowed elders
18 to see that happening as well. What we have found
19 is that elders' knowledge has confirmed and
20 complemented scientific data for the area.

21 Tahera has also been very active in community
22 consultations. I have been to the community of
23 Kugluktuk myself on many occasions over the years.
24 We have also had community consultations in
25 Cambridge Bay and in Gjoa Haven. We have been to
26 Bathurst Inlet a number of times as well as

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1 Umingmaktok, and we have been to Pelly Bay and
2 Taloyoak as well.

3 Each time we have a community meeting, I
4 think we learn more as a company about Inuit values
5 and knowledge, and that's very, very useful for us.
6 This information has had an influence on mine site
7 development, on our mine site plans that we have
8 put together. It has allowed us to better locate
9 some of the infrastructure on the site. It has
10 helped us with our management plans, it has helped
11 us to come up with some ideas on providing
12 right-of-way on some of the roads at the site
13 during migration times, any special diversions to
14 minimize impacts during migrations, as well as
15 brings information to the monitoring committees for
16 traditional knowledge.

17 There are other areas where traditional
18 knowledge can be gained. These are such things as
19 the Kitikmeot Traditional Knowledge Study, which is
20 being conducted by the Kitikmeot Inuit Association
21 and has also been also cofounded by other mining --
22 by many mining companies in the past, ongoing
23 community meetings.

24 The Inuit Impact Benefit Agreement that we
25 have with the KIA will ensure that traditional
26 knowledge continues. And, of course, we are also

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1 able to gain information from other mining
2 companies who may also do work on traditional
3 knowledge.

4 I just want to very briefly introduce the
5 people that we have with us as part of our team, I
6 will very quickly run through this list and tell
7 you what they do for us. Just maybe to get you
8 guys to all give a wave, please.

9 Cam Scott with SRK Consulting does our
10 geotechnical work for us; Kelly Sexsmith with SRK
11 Consulting working on water quality; Pete McCreath,
12 Clearwater Consultants on water quality; Bruce Ott
13 of AMEC who works on a number of different areas
14 for us; Andre Sobolewski, Microbial, he works on
15 our land and water treatment; Rick Pattenden works
16 on our aquatics; Bob Humphries, Levelton, our air

17 quality; Ben Hubert works on our wildlife. Oh, Ben
18 is at the back of the room. Court Smith of Nuna
19 helping out with reclamation, he is also at the
20 back of the room, and Robert Hernal working on our
21 socioeconomics for us. Thanks, Robert. Also with
22 us is Letha MacLachlan at the back of the room who
23 is Tahera legal counsel.

24 I just want to very quickly run through what
25 our proposed schedule is for the Jericho project.
26 As you can see here, our final EIS was submitted

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1 January of 2003, here we are right now at the final
2 hearings for the project.

3 We are hopeful that we will be getting a NIRB
4 decision, a Nunavut Impact Review Board decision in
5 the next 30 days. We are looking for an approval
6 from the Minister for Indian and Northern Affairs
7 by March or April. Following that, we would move
8 on to our permitting for land and water.

9 By the summer of 2004, we would have to begin
10 ordering and buying some of the materials for the
11 following -- to meet the following winter road, and
12 we will be using the winter road which starts at
13 Yellowknife and goes north up to the other mines,
14 Diavik and Ekati, so if you continue on from those,
15 you do get up to Jericho. We need to use that
16 winter road to mobilize our construction equipment
17 and machinery. If we are able to do that, we would
18 begin construction early in 2005, it would last
19 about one year, it would be all that's needed to
20 build this mine. And by late 2005 or early 2006,
21 we would be in full scale diamond production.

22 This is a picture of some of the diamonds
23 that have been recovered from the Jericho
24 kimberlite. These are very high quality, very good
25 diamonds, you can see by these pictures. This
26 diamond at the top of the picture is a 2.2 carat

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1 diamond which Tahera donated to the people of
2 Nunavut, and it is currently in place in the
3 territorial mace in the legislative building in
4 Iqaluit.

5 So that wraps up my summary of the project.
6 If anyone has any questions, I think we are going
7 to take questions from the floor, I would certainly
8 invite anyone to come forward, or following the
9 meeting.

10 I would like to thank all of you for your
11 attention, and thank you very much.

12 CHAIRPERSON: Any questions from the
13 general public to Tahera? If not, before we --
14 before GN gives their presentation, we will do one
15 raffle ticket. Gladys?

16 (DISCUSSION OFF THE RECORD)

17 CHAIRPERSON: The next presenter will be

18 government of Nunavut. Since they have not given
19 their presentation yet, we will give them 30
20 minutes.
21 MR. TILLEMANN: Thank you, Madam Chair.
22 Place your right hand on the Bible, raise your left
23 hand. Please state your name for the record, and
24 spell your last name.
25 MR. MacISAAC: Bernie MacIsaac,
26 M-a-c-I-S-A-A-C.

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1 (BERNIE MacISAAC SWORN)
2 MR. TILLEMANN: Please state your name for
3 the record and spell your last name.
4 MS. ANGOHIATOK: Monica Angohiatok,
5 A-N-G-O-H-I-A-T-O-K.
6 (MONICA ANGOHIATOK SWORN)
7 MR. TILLEMANN: Thank you very much.
8 CHAIRPERSON: Bill?
9 MR. TILLEMANN: Thank you, Madam Chair. I
10 just simply wanted to say that the reason we hadn't
11 sworn the other witnesses tonight or Tahera or
12 anyone else is because they had already been sworn
13 in the other communities, so this is the first
14 presentation by GN, and that's the reason why I
15 just did this for the first time today here in
16 Kugluktuk. Thank you.
17 CHAIRPERSON: Government of Nunavut, you
18 may proceed.
19 PRESENTATION BY GOVERNMENT OF NUNAVUT:
20 MR. MacISAAC: Thank you. My name is
21 Bernie MacIsaac, and I am the manager of mineral
22 recourses for the Department of the Sustainable
23 Development within the government of Nunavut. And
24 with me is Monica Angohiatok who is the manager of
25 wildlife for the Kitikmeot region. And good
26 evening to you and to the Board, to the people of

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1 Kugluktuk and to my colleagues that are here
2 tonight.
3 Our presentation will be a verbal
4 presentation, and I have already given the staff a
5 copy of the general notes that we are going to be
6 using in making this presentation. We intend to be
7 short, and we would like to thank you for including
8 us in the review process of this important project.
9 And the Department of Sustainable Development
10 has followed this project from the beginning and
11 has reviewed the various documents filed and has
12 attended numerous meetings and presentations, all
13 part of this process leading up to this hearing.
14 We make this submission in the hope that our
15 comments and recommendations will aid the Nunavut
16 Impact Review Board in constructing a certificate
17 that is clear, comprehensive, fair and contributes
18 to sustainable development in our territory.

19 The government of Nunavut is of the opinion
20 that the Jericho Diamond Project should proceed to
21 the regulatory permitting stage. We congratulate
22 Tahera on their work with NIRB and other regulators
23 and for being the first mining project to have
24 reached this point in the Nunavut Land Claim
25 Agreement regulatory process.
26 We feel this project has potential to meet

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1 our goals of sustainable development and to
2 demonstrate that mineral exploration and mining is
3 a temporary use of the land that is not in conflict
4 with protecting and promoting the ecosystemic
5 integrity of Nunavut. When this project is
6 complete, the land will be returned to its natural
7 state, our knowledge of the land and wildlife will
8 be improved, and the strength and capacity and
9 perception of our communities will be improved.

10 In summary, our comments relate to two broad
11 issues, the physical environment and the
12 socioeconomic environment. I will present
13 basically our conclusions and recommendations, and
14 the detail of these issues have been previously
15 filed with the Nunavut Impact Review Board.

16 As far as environmental concerns, I guess one
17 of the biggest concerns from a GN perspective is
18 wildlife, and Tahera has stated that the measures
19 that it has put in place and the activities that
20 are going to take place on this project will have a
21 minimal effect on wildlife. We basically agree
22 with that statement that there will not be a
23 significant impact on wildlife as we know
24 information today.

25 However, considering the lack of information
26 or data regarding wildlife in the area, we are

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1 requesting that a wildlife monitoring and
2 mitigation protocol be developed. The parameters
3 of this reporting and protocol will be developed in
4 conjunction with the Department of Sustainable
5 Development in consultation with the company. The
6 protocol will deal with impacts on wildlife and the
7 mitigation thereof. We intend to develop this
8 protocol, or we would like to see this protocol
9 developed before the permitting phase takes place.

10 Our next issue in relation to environmental
11 concerns, the physical environment is that Tahera
12 must prepare and distribute an annual report on the
13 progress of its reclamation trials, and
14 specifically we are talking about revegetation.
15 One of our main concerns here is that no new
16 species from outside the region are introduced
17 during revegetation during the reclamation of this
18 property.

19 Our third concern is that Tahera must clearly

20 demonstrate that the project is a temporary use of
21 the land by committing to reclaiming and
22 recontouring all roads, dumps, et cetera, to a
23 state consistent with adjacent undisturbed lands.

24 Our fourth point, Tahera must post a
25 reclamation bond of sufficient value to cover
26 third-party reclamation of the site.

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1 And our last point in relation to the
2 physical environment is that sufficient monitoring
3 and enforcement to oversee the permits issued with
4 regards to this project be in place.

5 Our next area of concern is socioeconomic
6 impacts. And we, as everybody else, including
7 Nunavut Impact Review Board, just received a copy
8 of the IIBA signed between Tahera and the KIA, and
9 we have not had a chance to review that in detail
10 to determine what is covered there and how that
11 mitigates, I guess, socioeconomic concerns from our
12 perspective. However, having said that, we would
13 like Tahera to create a detailed socioeconomic
14 monitoring and mitigation plan for the Jericho
15 Diamond Project. We feel that their data in
16 relation -- am I talking too fast?

17 We feel that their data in relation to the
18 social aspects of this project is not complete, and
19 especially in regard to communities. And in that
20 regard, we would like them to support the
21 establishment of a communities advisory board to
22 deal with the impacts of this project. And I guess
23 the analogy that we like to use in support of
24 creating that board is that if you are talking
25 about employment opportunities, there is a certain
26 amount of preparation that a person would go

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1 through in order to be -- in order to be prepared
2 for those employment opportunities, that
3 preparation that most likely is going to be some
4 form of training or education.

5 We feel that the communities also have to go
6 through some preparation to deal with the impacts
7 of this development. There is going to be positive
8 impacts and there is going to be negative impacts,
9 and in either case, we feel that there is
10 preparation that is needed. And in each one of
11 those cases, we feel that the GN has a role to play
12 or the GN is going to be expected to play a role,
13 so we would like to see an advisory board
14 consisting of the company, affected communities and
15 the GN to deal with these issues, and having not
16 had time to go through the IIBA in detail, it is
17 possible that there are requirements within that
18 IIBA that the GN is going to have to get involved
19 with as well, such as education and various other
20 things.

21 We would also like to mandate that advisory
22 board to assess the impact of a broad range of
23 valued socioeconomic components which would be in
24 addition to the valued socioeconomic components
25 identified by the company, and they would include
26 such things as harvesting, community governance and

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1 social and physical infrastructure development.
2 In addition to the above comments, we have
3 previously submitted detailed comments that support
4 these conclusions and recommendations in two
5 appendices on socioeconomic and environmental
6 concerns.
7 And once again, we thank you for the
8 opportunity to participate in this review, and we
9 wish the proponent good luck as they proceed with
10 this project. That is our submission.
11 CHAIRPERSON: Any questions from Tahera
12 Corporation?
13 TAHERA CORPORATION QUESTIONS GOVERNMENT OF NUNAVUT:
14 MR. MISSAL: Thank you, Madam Chair.
15 Greg Missal with Tahera Corporation.
16 I think probably just a couple quick
17 questions. One, Bernie, would be the wildlife
18 protocol that you are suggesting, would that
19 include other stakeholders?
20 MR. MacISAAC: There is two issues
21 involved here, I think, in relation to wildlife.
22 There is the issue of wildlife and I guess the
23 mitigation of impacts directly related to the
24 project site, and I see that as a discussion
25 between ourselves and the company to develop this
26 protocol, and also a reporting structure for

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1 wildlife which will add to what we call a bigger
2 picture, and that's the second issue here, and that
3 is how does the impact on wildlife fit into this
4 larger picture?
5 And the government of Nunavut and the
6 Department of Sustainable Development in its
7 wildlife research bases the priorities for that
8 research on need, and obviously there is a strong
9 need developing here with this project and with
10 other projects in the region. And from
11 conversations that I have had here and from
12 comments that have been made by various intervenors
13 and others, there appears to be a willingness of
14 other stakeholders to participate and to work with
15 us to better understand the wildlife in general in
16 the region and how this information gathering from
17 your project will contribute to that. Obviously
18 that's of interest to us, and we will fit that into
19 our priority setting exercise.
20 Q I guess I would be curious to know what you foresaw
21 as the time line of putting something like this

22 together. Would it be something -- it seems to me
23 it may take a while to get together, but I would be
24 just curious to get your thoughts.
25 A Bernie MacIsaac with GN.
26 I guess our initial thinking is to have the

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1 bulk of this together by the time the permitting
2 phase starts, say between now and I believe your --
3 I believe the permitting phase is expected in
4 April, April, May?
5 MR. MISSAL: Madam Chair, I would like
6 to -- oh, I am sorry. I would like to ask Ben
7 Hubert to comment on the management that Tahera is
8 planning for its wildlife just so that is read into
9 the record.
10 CHAIRPERSON: Yes, go ahead.
11 MR. HUBERT: Thank you, Greg, and Madam
12 Chair. Thank you, Bernie and the GN, for your
13 thoughtful but challenging recommendations.
14 Challenging not so much in the scope but in the
15 timing.
16 We foresee that the wildlife mitigation
17 management plan will be developed promptly, and
18 that that would be one of the cornerstones of the
19 protocol, that or a proposed protocol. That will
20 include significant recording and reporting
21 features of notable interactions between the
22 project and wildlife.
23 And I think it is important to know at this
24 point what other major elements of a protocol the
25 GN foresees being developed before permitting --
26 the permitting phase is initiated.

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1 MR. MacISAAC: Bernie MacIsaac.
2 I guess the way we see what we would like to
3 have in place prior to the permitting process is an
4 agreement on what types of information you are
5 going to be expected to record, and I don't see a
6 large problem in developing that type of request.
7 And after hearing what you said about developing
8 that very detailed management plan or a detailed
9 management plan which may take longer, but I think
10 maybe the framework for this protocol could
11 certainly be developed and agreed upon between
12 ourselves and the company by that time.
13 MR. MISSAL: Madam Chair, Greg Missal,
14 Tahera Corporation.
15 I think generally speaking, we would be
16 interested in talking further with the GN on their
17 ideas surrounding this, but we would certainly want
18 some more details on how you saw this unfolding and
19 what role we would play in it. I think as well as
20 some greater clarity on what other stakeholders may
21 be involved, whether it is such groups as the KIA
22 or community groups or other industry groups, and I

23 think we would like to get some sense of what level
24 of interest there is amongst those other groups as
25 well.
26 MR. MacISAAC: Bernie MacIsaac. We are of

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1 the same opinion.
2 Q Madam Chair, I would just like to ask a couple of
3 questions regarding the socioeconomic section of
4 the government of Nunavut's presentation.
5 As Mr. MacIsaac pointed out, he is in a
6 little bit of a unfair situation to speak in great
7 detail about the Inuit Impact Benefit Agreement
8 seeing how it just became public yesterday, but
9 there is very clearly set out methods in there for
10 an implementation committee which is established
11 under the IIBA which would allow government of
12 Nunavut personnel and federal government personnel
13 to meet with the implementation committee for the
14 IIBA, therefore I think we would believe, and I
15 can't speak for KIA, of course, but I think Tahera
16 would be concerned there would be a lot of overlap
17 in what would be accomplished in the IIBA versus
18 perhaps this advisory board that you are
19 suggesting. If you would have any comments on
20 that, I would welcome them.
21 A Bernie MacIsaac.
22 It is certainly not our intention to
23 duplicate any of the aspects of the IIBA. I guess
24 our concern is that we would like to see -- and I
25 guess one of the mandates of the government of
26 Nunavut is to see healthy communities, and we would

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1 like to see the communities front and centre in the
2 developing and the mitigating of the various
3 impacts that would be associated with this
4 development.
5 Now, you know, maybe the different committees
6 and/or boards that a number of people have talked
7 about during these hearings are not in conflict,
8 but from our perspective, we would like to make
9 sure that there is a very, very strong voice there
10 for the communities and a very, very clear
11 definition of roles, what is expected of us as the
12 government of Nunavut, what is expected of the
13 communities, what is expected of you, and that's
14 where we would like to -- and that's where we are
15 with this. If there is some way that we can
16 combine these efforts, then certainly we would be
17 very interested in talking about that.
18 MR. MISSAL: Madam Chair, I don't have
19 any more questions.
20 CHAIRPERSON: Any questions to GN from
21 the elders? Any questions to GN from NTI?
22 MR. LOPATKA: No questions.
23 CHAIRPERSON: Any questions from KIA?

24 KIA QUESTIONS GOVERNMENT OF NUNAVUT:
25 MR. EVALIK: Charlie Evalik, president
26 of KIA.

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1 Is the government of Nunavut aware of the
2 Nunavut Land Claims Agreement which is a paramount
3 agreement in terms of dealing with the Inuit in
4 Nunavut and the various Articles 5 and 6 that deals
5 with the wildlife where Inuit will need to be
6 involved?
7 MR. MacISAAC: Bernie MacIsaac. Yes, we
8 are aware of that.
9 Q Okay. In that case, I will like to put on record,
10 and anything to deal with wildlife, it is your -- I
11 think you indicated that Kitikmeot Inuit
12 Association will be involved in those discussions
13 with the company in terms of wildlife mitigation
14 measures that you might be contemplating?
15 A It was not our intention to exclude anybody.
16 Q See, if I hear correctly, or you might correct me
17 in terms of your presentation, it is -- it is GN
18 and Tahera that you were including and not other
19 stakeholders that might have stake in terms of this
20 project.
21 In terms of the socioeconomic, Article 26 is
22 -- again, is in Nunavut Land Claims Agreement, and
23 it is the Inuit will have -- negotiate Inuit Impact
24 Benefit Agreement, and it is the government of
25 Nunavut's intention to assist in terms of possible
26 implementation of that Inuit Impact Benefit

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1 Agreement in terms of providing resources for
2 capacity and economic development measures that
3 could be required to implement that agreement?
4 A It is our intention as the government of Nunavut to
5 support this project any way that we can.
6 Q Okay. Thank you.
7 CHAIRPERSON: Any questions to GN from
8 DIAND?
9 DIAND QUESTIONS GOVERNMENT OF NUNAVUT:
10 MR. TRAYNOR: Good evening, Madam Chair.
11 Stephen Traynor, DIAND.
12 Can you outline for us what the government of
13 Nunavut's position is on a socioeconomic agreement
14 for this project as we heard it was asked about by
15 the hamlet in Cambridge Bay?
16 MR. MacISAAC: Bernie MacIsaac. I don't
17 think we necessarily have a position clearly on a
18 socioeconomic agreement per se; however, we would
19 like to have a clear understanding of the
20 definition of roles related to socioeconomic
21 impacts, and whether that clear definition of roles
22 turns into an agreement or a memorandum of
23 understanding of some sort. But the important
24 thing is to have a clear definition of roles and

25 what is expected of the various parties.
26 Q Thank you. Next question, is any government of

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1 Nunavut department on the IIBA implementation
2 committee?
3 A Not that I'm aware of at this point.
4 Q Thank you. Next question, will the -- and it is a
5 long one, and my apologies to the translators.
6 Will the GN commit to continuing to participate,
7 along with the company and other regulators, on the
8 regional monitoring issues such as the Bathurst
9 caribou management working group, cumulative
10 effects assessment management framework initiative
11 for the Slave geological province and the review of
12 the draft West Kitikmeot Land Use Plan developed
13 the Nunavut Land Use Planning Board?
14 A Bernie MacIsaac. I'm not an expert on what our
15 participation has been to date on those matters. I
16 can say that we will continue to participate to the
17 extent that we have participated, and any new
18 measures that are needed in relation to this
19 project and its relationship with the region and
20 other issues, I guess, related to environmental
21 situations within this region, we will participate
22 as well.
23 Q Thank you. The next question is in regard to, I
24 believe it is the last recommendation in your
25 physical environment section, and I'm just
26 paraphrasing what I have here, and it also relates

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1 to your recommendation in your written submission,
2 it differs slightly, and I just want you to
3 clarify.
4 In it you are asking NIRB for, I believe,
5 sufficient monitoring of the permits for the
6 project to be put in place. And I believe in your
7 written submission, and I apologize for not having
8 it here in front of me, you asked DIAND to take on
9 that role. Can you clarify what your expectations
10 are at this point?
11 A DIAND obviously has a monitoring and an enforcement
12 role in this case because of the Crown land
13 involved. There is also Inuit-owned lands, and I
14 guess we are looking to see a monitoring and
15 enforcement regime set up, which would include
16 DIAND, and I'm not sure if there is going to be a
17 relationship between DIAND and the KIA in relation
18 to monitoring and enforcement, but we see DIAND as
19 the stewards of the land and water for the people
20 of Nunavut, and we expect them to play a major role
21 in the monitoring and enforcement of this project.
22 Q Thank you. As an add on to that one, as DIAND has,
23 as you mentioned, somewhat large role, we do not
24 have the overall monitoring role or capacity as you
25 have described in your submission or here tonight.

26 Would you envision the NIRB board under Section 7

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1 of Article 12 taking on that role?

2 A I think that's up to NIRB to decide.

3 Q Would you recommend it?

4 A Well, I guess our request is that NIRB ensures that
5 a proper monitoring and enforcement regime is
6 established to oversee this project, and if that is
7 what they decide, then so be it.

8 MR. TRAYNOR: Thank you, Madam Chair.

9 CHAIRPERSON: Thank you.

10 Any questions to GN from Department of
11 Fisheries and Oceans? Any questions from Natural
12 Resources Canada?

13 MR. DYKE: No questions.

14 CHAIRPERSON: Any questions to government
15 of Nunavut from local residents? Any questions --
16 okay. One question.

17 RESIDENTS QUESTION GOVERNMENT OF NUNAVUT:

18 MR. KUDLOO: Hello, again. My question
19 is to GN relating to something you mentioned that
20 there will be some sort of a protocol developed
21 between the GN and Tahera. In that process, what
22 will be involved because wildlife, it is a very big
23 article in the claim? And I think there should be
24 local involvement in developing that protocol, be
25 it that local HTO or RWO or elder. Will there be
26 some sort of a consultation prior to developing

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1 that?

2 MR. MacISAAC: Bernie MacIsaac.

3 The GN has a responsibility for the
4 protection of wildlife, and this protocol that
5 would be developed with the company and basically
6 anybody from this, would be to ensure to ourselves,
7 the Department of Sustainable Development wildlife
8 division that wildlife issues have been properly
9 dealt with on that site. One of the reasons that
10 we would like to have this in place, or at least a
11 broad framework of this in place before the
12 permitting phase is to allow for the type, I think,
13 of consultation that you are talking about.

14 Q Now, the reason I should -- I ask that is because,
15 like I said, that Article 5 is the biggest article
16 in the claim itself, and that that is important to
17 all of the people that live in Nunavut, especially
18 affected communities, but that is all, Madam
19 Chairman. Koana.

20 CHAIRPERSON: GN?

21 MR. MacISAAC: Thanks, Madam Chairman. I
22 would like to add to that in that we don't
23 necessarily see this protocol as being the be all
24 and the end all. The proponent has mentioned that
25 they intend to conduct or construct various
26 wildlife management programs and plans dealing with

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1 this, and it is conceivable that these plans will
2 go beyond the scope of the protocol that we have in
3 mind here. And we are not trying to -- we are not
4 trying to exclude anybody, we are just trying to be
5 convinced ourselves that wildlife is going to be
6 protected and there is not going to be significant
7 impacts on wildlife because of this project.
8 CHAIRPERSON: Any questions to GN from
9 local residents? Any questions from the elders?
10 Any questions to GN from the Nunavut Impact Review
11 Board Staff?
12 MR. TILLEMAN: We do have a few, Madam
13 Chair, and we wonder if it might not be an
14 appropriate time to take a short break so we can
15 just talk just for a moment, and so I don't know if
16 it is or not, but we would just like a few minutes.
17 So I don't know how you might want to handle that.
18 You know, we are almost 10 to 8. Maybe you could
19 just give us a few minutes one way or the other.
20 CHAIRPERSON: Okay. We will take a break
21 until 8 o'clock. In the meantime, take out your
22 raffle tickets.
23 (RECESSED AT 7:49 P.M.)
24 (RECONVENED AT 8:04 P.M.)
25 CHAIRPERSON: Any questions to government
26 of Nunavut from the elders or local residents?

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1 MR. KUDLOO: My question is to the GN.
2 When you prepared your social impact
3 statement, I'm not aware of any consultation
4 between the local people, group like women's groups
5 or HTO and hamlet. Where else did you do your
6 consultations prior to making your presentation?
7 Thank you very much.
8 MR. MacISAAC: Thank you, Madam Chair, and
9 thanks for the question. It is Bernie MacIsaac.
10 We have not done consultations on this. It
11 is our intention as part of this process -- as we
12 had said before, our recommendation or our
13 preference is to see an advisory board consisting
14 of the community, the company and the government of
15 Nunavut put together to deal with the impacts
16 mainly from a community perspective, and the idea
17 would be that the -- in our thinking anyway, that
18 the communities would actually lead this advisory
19 board, they would have the majority on the board.
20 And we haven't had those discussions. This is at
21 this point, it is still conceptual. And the idea
22 would be that if this did gain favour, then we
23 would do the consultation with the affected
24 communities and find out the best way to implement
25 this.
26 CHAIRPERSON: Any questions to GN from

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1 the Nunavut Impact Review Board staff?
2 BOARD STAFF QUESTIONS GOVERNMENT OF NUNAVUT:
3 MS. FILIATRAULT: Thank you, Madam Chair.
4 I guess I would like to just first do a
5 little bit of follow-up based on Phillip's -- the
6 point Phillip has just raised and maybe get a
7 little more information as far as DSD had indicated
8 that they support the establishment of these
9 community advisory boards and committee, whichever.
10 Where does the finances come from this? Is GN
11 intending to provide any financial support in that
12 regard to the communities for them to be able to
13 effectively participate?
14 MR. MacISAAC: Bernie MacIsaac.
15 We would have to consider that. I guess a
16 larger picture here is what is going to be expected
17 of the GN in general? And with these types of
18 developments, there is going to be positive
19 impacts, there is going to be negative impacts. We
20 can see impacts on just about every department with
21 the GN that we are going to have to -- that somehow
22 we are going to have to deal with this. We can see
23 impacts on our department of education, our
24 department of justice, our department of health and
25 social services, community government
26 transportation, department of sustainment

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1 development and possible the others as well.
2 I presume you are talking about the budget
3 for the mechanics of establishing this advisory
4 board, or are you talking about the implementation
5 of its recommendations?
6 Q I guess I'm in both, in the sense that we have
7 already heard from community members earlier this
8 afternoon that the communities are highly overtaxed
9 as far as being requested for comments on
10 applications through land use permits and water
11 licenses and whatnot, and all this documentation is
12 coming to the communities, but nothing is being
13 done with it because they don't have the resources
14 to respond. And to set up additional committees, I
15 just want to know if you think that that is an
16 effective way of getting additional information?
17 A Bernie MacIsaac.
18 I think that is exactly our point in that
19 communities are having a hard time dealing with
20 these types of issues in general, and in this
21 instance, it is evolving the process, our whole
22 process is an evolving process. But let's make
23 sure that we are all heading in the right direction
24 leading to this priority of healthy communities.
25 And if we have to step up to the plate and others
26 have to step up to the plate to help communities

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1 deal with these issues, then that's what has to be
2 done. Communities have to have a big voice in
3 what's happening here.

4 MS. FILIATRAULT: Thank you, Madam Chair.
5 Dionne.

6 Just to sort of get a general feel for the
7 government of Nunavut, does GN feel that they have
8 effectively and efficiently represented the
9 territory on issues on mineral development, and in
10 particular Jericho project, in relation to all the
11 areas of your mandate, and to name a few that you
12 have already put forth, public health, wildlife,
13 social services, culture and education?

14 A Can I ask you to repeat that question?

15 Q Does GN feel that they have efficiently and
16 effectively represented the territory on issues of
17 mineral development, and in particular the Jericho
18 project, in relation of all areas of your mandate
19 including public health, wildlife, social services,
20 culture and education?

21 A We have done the best we can.

22 Q Thank you, Madam Chair. Dionne.

23 In the manner that GN deals with issues, does
24 GN deal with issues on a proactive or reactive
25 basis, knowing that impact assessment has to be
26 proactive in assessing potential impacts and

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1 mitigation measures?

2 A We agree that proactivity is a better route, and I
3 guess that's one of the reasons why we are
4 suggesting this type of advisory board so that we
5 can be proactive in dealing with impacts, rather
6 than being reactive.

7 Q Thank you.

8 I would like to talk a little bit about one
9 of the requests or recommendations that you made
10 with respect to -- that INAC -- that the Board
11 should request of INAC that they would build and
12 maintain a sufficient monitoring enforcement
13 capacity. Do you feel it is insufficient at this
14 point on what is needed, because if you are making
15 a recommendation to the Board, they need to know
16 specifically what aspects are -- need to be
17 addressed?

18 CHAIRPERSON: And INAC being Indian and
19 Northern Affairs.

20 A The section you are referring to what is made in
21 our written submission and also referred to in our
22 oral submission. And I guess what we are getting
23 at is that we see INAC, DIAND as the stewards of
24 the water and land resources in Nunavut, for the
25 people of Nunavut. They have the mandate for the
26 protection of those resources, and we would like to

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1 see them take the lead in ensuring that there is a

2 proper enforcement from a practical point of view,
3 proper enforcement and monitoring of this project.
4 We are not saying that we don't think that
5 they have the capacity, I guess, to deal with that
6 or that they have not done that.
7 MS. FILIATRAULT: Thank you, Madam Chair.
8 Dionne.
9 In, I believe, it was your written
10 submission, you made reference to a discussion that
11 was needed on cumulative effects assessment on
12 wildlife in consideration of the new models
13 developed by Diavik and West Kitikmeot Slave Study,
14 I believe, is the acronym.
15 Can you just explain this and what it is
16 about these models that is important for the Board
17 to consider?
18 A I'm not sure what you referred to in our
19 submission, which submission is that?
20 Q It was bullet number five in your written
21 submission that was filed with the Board prior
22 to -- I guess, it would have been in November under
23 your environmental concerns.
24 A I'm sorry, I don't have that. Of the submission
25 that was submitted in November, bullet number five?
26 MR. TILLEMANN: Madam Chair, we will just

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1 give him a copy. It is unfair to ask him that if
2 he doesn't have it in front, so if it is okay, we
3 will just pass a copy over and he can read. This
4 is from their written submission on page 2, I
5 think, point number five.
6 MR. MacISAAC: Okay. I'm sorry, on the
7 letter that was written. I thought you were
8 talking about the appendices, I'm sorry.
9 I guess while we were -- I guess what we were
10 referring to there was that there is quite a bit of
11 work that is being done on these various other
12 projects, Diavik, BHP and West Kitikmeot Slave
13 Study, and I can't be specific about what these new
14 models are; however, an examination, I guess, of
15 the work that is being carried out on those
16 projects should be part of this process, rather
17 than reinventing the wheel, I guess, from this
18 project's perspective.
19 MS. FILIATRAULT: Thank you. Zainab has just
20 got a couple more questions.
21 MS. MOGHAL: Zainab Moghal here. Just
22 in relation to the community advisory board that
23 you suggested, do you have any comments on how that
24 would link to the proposed socioeconomic management
25 strategy suggested by the Department of Indian and
26 Northern Affairs?

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1 MR. MacISAAC: Bernie MacIsaac. I don't
2 -- I see the approaches as being somewhat similar

3 in that, and I don't want to speak for Indian and
4 Northern Affairs, but my understanding from what I
5 have heard is that its goals are more or less the
6 same thing, is to pick up some of the -- maybe some
7 of the things that were not covered under the IIBA.
8 MS. FILIATRAULT: No more questions, Madam
9 Chair. Thank you.
10 BOARD QUESTIONS GOVERNMENT OF NUNAVUT:
11 CHAIRPERSON: Any questions to GN from
12 the Board?
13 I have one question. We have been told by
14 Tahera Corporation that the expected mine life is
15 to be eight years. You have now asked by way of
16 your presentation that a wildlife monitoring
17 program or protocol be developed at least partially
18 in the next three to four months. In your opinion,
19 how many years of monitoring and gathering data
20 should this protocol -- will be required before the
21 information becomes valuable and usable?
22 MR. MacISAAC: We would expect that the
23 information would be collected for the life of the
24 mine. And the information, in our opinion, I
25 guess, would be valuable right from the very
26 beginning.

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1 As most people know, there is a lack of good,
2 hard information in Nunavut, and the more
3 information we can add to that database, the better
4 off we are all going to be for future projects and
5 for a general understanding of wildlife and the
6 environment in general.
7 MS. ANGOHIATOK: Thank you, Madam Chair. I
8 would just like to add that with these carry-on
9 studies when you do wildlife monitoring and you
10 carry on the monitoring year after year, if there
11 is any changes over the years, you can use this
12 baseline data to track these changes. Thank you.
13 CHAIRPERSON: Thank you, GN.
14 MR. MacISAAC: Thank you, Madam Chair.
15 CHAIRPERSON: Okay. Our next 30-minute
16 presentation will be by NRCAN, they too haven't had
17 a chance to give their presentation in Cambridge
18 Bay, so we will be giving them 30 minutes.
19 Bill, you need to swear him in? Okay. He is
20 from Natural Resources Canada.
21 MR. TILLEMANN: Please state your name for
22 the record and spell your last name.
23 MR. DYKE: Larry Dyke. Last name,
24 D-Y-K-E.
25 (LARRY DYKE SWORN)
26 MR. DYKE: Madam Chairman, I will just

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1 need a minute to get the computer going here.
2 CHAIRPERSON: Yes, I did say NRCAN, and
3 it is Natural Resources Canada, sorry about that.

4 PRESENTATION BY NATURAL RESOURCES CANADA:
5 MR. DYKE: Madam Chair, I will forego
6 most of the formalities of introduction because of
7 -- or in the interests of brevity.
8 My name is Larry Dyke. I'm a geologist with
9 the Geological Survey of Canada, and I'm
10 representing a small group of researchers who are
11 interested in permafrost, ground water flow and
12 various aspects of the environment in the north.
13 So on the first screen here, GSC stands for
14 Geological Survey of Canada.
15 So there are a few aspects of the mine that I
16 would like -- or the mine and associated impact
17 that I would like to comment on. The first one
18 concerns the processed kimberlite containment area
19 and what may happen to it in the future.
20 There is permafrost beneath Long Lake;
21 however, there is also a thawed area that very,
22 very likely exists beneath that lake, and once the
23 lake is filled in with the processed kimberlite,
24 that permafrost will probably disappear. There will
25 be freezing from the surface downwards, and there
26 is a possibility that water that's trapped within

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1 those materials may be expelled to the surface.
2 I have a series of diagrams that I would just
3 like to go through that explain this concept. The
4 first diagram here shows the present situation. So
5 we have a cross section, this is a slice, if you
6 like, through the ground, a vertical slice. And we
7 have Long Lake, and we show the talik that probably
8 exists beneath the lake. A talik is simply an
9 unfrozen region within permafrost.
10 As the lake is filled in, that talik probably
11 will grow, and -- along the sides of the lake, and
12 this is a diagram showing probably the maximum
13 level of tailings. Once the tailings areas is --
14 the use of it is finished, then permafrost will
15 begin to form into the talik. This shows
16 permafrost moving downwards from above, and
17 essentially what you have is an enclosed area.
18 Let's see if I can get this pointer going.
19 So this shows the enclosed area of tailings.
20 There is permafrost beginning to aggrade downwards
21 from the surface, and of course there is permafrost
22 already underneath, so it is a trapped enclosed
23 region. And this is just another stage as that
24 permafrost continues to disappear.
25 What may happen is that the surface of the
26 PKCA may not be completely even, and you may have

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1 small ponds forming, and that may be a place where
2 this pressure is able to relieve itself because
3 permafrost may actually be thinner where you have
4 any ponding, and this is a place where expelled

5 pore waters could get to the surface.
6 Indian and Northern Affairs, in their
7 presentation, mentioned the term
8 chryoconcentration. This is simply an increase in
9 this total dissolved solids due to the freezing,
10 and this is a process that we feel may increase the
11 total dissolved solids content in the water. Water
12 may be expelled, at least temporarily, onto the
13 surface of the PKCA.
14 CHAIRPERSON: Excuse me. Before you
15 continue, can you show on this other map for the
16 audience where this PKCA --
17 MR. DYKE: Certainly, Madam Chair.
18 The PKCA is this area right here. There is
19 Long Lake.
20 CHAIRPERSON: And PKCA being?
21 MR. DYKE: PKCA is the processed
22 kimberlite containment area, so that's where the
23 tailings from the mining process will be deposited,
24 so that's the PKCA right there. So the diagrams
25 that I have just shown are cross-sections running
26 like that, across Long Lake.

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1 One reason why we think this might happen is
2 what has happened at an experiment that's been
3 carried out for about the last twenty years in the
4 Mackenzie Delta area. This is the Illisarvik
5 drained lake, and this lake which is about 600
6 metres long and 300 metres wide was drained on
7 purpose in 1978. There is a drainage channel right
8 there, and it was done to see what happens when
9 permafrost is allowed to form into an area where
10 there was a talik beforehand. In the subsequent
11 time, permafrost has formed into that lake bottom
12 and pressures have developed, and pore waters have
13 been expelled to the surface.
14 This is not -- we are bringing this up not as
15 a serious problem, but just as a possible event
16 that may take place once the processed kimberlite
17 containment area is abandoned, and it may introduce
18 a condition that has to be dealt with in the
19 postmining phase.
20 The next item concerns the esker, and esker
21 area where the -- it is in the area where the
22 airstrip will be located, and that's actually off
23 the map of the mine site just to the -- just off
24 the map just to the north. And about five years
25 ago, the Geologic Survey of Canada, as well as
26 other parties, have done some work in that area on

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1 the ground ice that exists within the esker.
2 This shows part of the esker complex, and I
3 would like to draw attention to this sort of
4 spotted or mottled area on the esker and its
5 similarity to another feature in the Mackenzie

6 Delta area. This is called Involute Hill. It is
7 simply a raised plateau area, it is about two
8 kilometres in this horizontal direction here, and
9 it stands about 20 metres above the surrounding
10 tundra, and it is essentially pure ice. So it is a
11 hill of ice with a thin covering.

12 And so the similarity in the texture of this
13 hill in the Mackenzie Delta with this area in the
14 esker suggests that there might be ice there, and
15 definitely drilling that has been done both by
16 Tahera's consultants and the Geological Survey has
17 shown quite a bit of ground ice in that area.

18 These are some interpretations of
19 cross-sections across the esker area based on a
20 method that allows you to bounce radio waves into
21 the ground, and they will reflect off various
22 layers, including ground ice. The ground ice is in
23 white in these cross-sections, and so it shows that
24 it is fairly extensive. The distance scale here is
25 in metres, so 50, 100 and so forth, and the depth,
26 I can't read that scale, but I think the total

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1 depth of the cross-section here is probably about
2 50 or more metres, so it is -- there is no vertical
3 exaggeration here, so these ice layers might be
4 around 10 metres thick.

5 And the only reason I am bringing -- we are
6 bringing this up is that if this area is used as a
7 source of aggregate, great care will have to be
8 taken not to thaw these ice areas, or at least if
9 they are thawed, it will have to be done in such a
10 -- in a controlled manner. So there is a
11 considerable amount of ground ice which may be a
12 factor, may be an important factor in the use of
13 this area as an aggregate source. And what I have
14 written here is simply a summary of that care that
15 needs to be taken.

16 There was one analysis of ice in bedrock
17 carried out, and this is considered as a possible
18 source of contamination. I believe it is in the
19 supplemental report I in Table I-10.

20 This amount of ice was -- this ice is
21 recognized by Tahera, and a calculation was done in
22 terms of the amount of ice that would melt in the
23 pit wall, and we considered -- we carried out a
24 similar calculation just approximating the pit, the
25 open pit as a cone into which thawing would take
26 place a distance of about 5 metres, and assuming a

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1 2 percent volume of the rock containing ice. And
2 we came up with a figure that's about 20 times
3 larger, so there does seem to be a discrepancy
4 there.

5 We were also concerned about whether or not
6 climate warming is -- or climate variability is

7 going to be taken in assessing the long-term fate
8 or stability of any of the earth and rock
9 structures at the Jericho mine, and this shouldn't
10 be difficult seeing there is a considerable amount
11 of ground temperature information that has been --
12 that Tahera has provided for the area.

13 The remainder of my presentation concerns
14 questions that had been raised by CANMET, this is
15 the Canada Centre for Mining and Mineral
16 Technology, it is also part of NRCan, and this --
17 these are made by a small group of researchers who
18 concern themselves mainly with acid mine drainage
19 and geochemistry of mine waste, and they have some
20 minor issues for the geochemical characterization
21 of the mine. They don't consider acid drainage to
22 be an issue.

23 There are some metals that may be of a
24 concern, and they have some recommendations for a
25 few things that need to be done to characterize
26 certain aspects of the mine in terms of

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1 environmental impact.

2 They are wondering about the potential impact
3 of dissolved uranium and discharge. I think they
4 are referring here to some uranium or analyses that
5 were done based on some of the leaching tests that
6 Tahera has carried out. It says here, "there is a
7 distinct unit of biotite gneiss that was identified
8 in the waste rock pad." I think what that means is
9 that there is some biotite gneiss that may end up
10 in the waste rock area, and they are concerned
11 about how that may weather. And there is a
12 question here concerning barium analyses that turn
13 out to be anomalous.

14 CHAIRPERSON: Excuse me. And if you can
15 please explain, just go back to the -- explain to
16 the Board and to the public what is this biotite
17 and all the other geochemical characteristics? Can
18 you please explain in English what that is?

19 MR. DYKE: Certainly, Madam Chair.

20 In any of these metals to which attention is
21 being drawn can at certain concentrations be toxic
22 or hazardous, and so uranium is being identified
23 here as one, as well as barium. These particular
24 metals are present, but they are in general at
25 very, very low levels. Occasionally, there is an
26 analysis where the level is a bit higher, and so

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1 there is some concern over how representative these
2 analyses are of the overall characteristics of what
3 may be removed or leached by water from the
4 materials, that's the waste rock materials and
5 tailings materials that will be left at the mine.

6 Biotite gneiss is a detailed rock term, it
7 essentially refers to a type of rock which is

8 banded. It is a metamorphic rock, which means it
9 has been subjected to great heat and pressure, and
10 it contains a mineral called biotite, and that can
11 weather and yield certain metals into the water.
12 CHAIRPERSON: Thank you.
13 MR. DYKE: CANMET feels that there is
14 further testing needed to confirm the presence or
15 absence of fibrous chrysotile. This is a type of
16 asbestos. And asbestos is a mineral that is
17 used -- that at one time was used to make
18 insulation and it also appears in brake linings on
19 cars and so forth. And because of its fibrous
20 nature, it can be an irritant in the lungs, and so
21 CANMET is essentially concerned, I think, about
22 this possible being a component or part of dust
23 that may get into the atmosphere.
24 CANMET feels that there may be a possibility
25 of chemical weathering that takes place under
26 non-acid conditions, so they would like, perhaps, a

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1 reevaluation to be done to see if there are any
2 processes besides the formation of acid mine
3 drainage that may yield metals.
4 This, I think, last topic concerns total
5 dissolved solids, and I'll explain that term. It
6 refers to the total amount of things that is
7 chemicals, if you like, that are -- that the water
8 contains, and this has been discussed at great
9 length during these hearings. And this concern on
10 the part of CANMET has probably already been
11 addressed by other intervenors at these sessions.
12 Madam Chair, that is the completion of my
13 presentation.
14 CHAIRPERSON: Thank you. Any questions
15 to Natural Resources Canada from Tahera?
16 MR. MISSAL: Madam Chair, Greg Missal,
17 Tahera Corporation. If you would permit, we would
18 just like a few minutes to collect our thoughts for
19 our questions for NRCan, CANMET.
20 CHAIRPERSON: Okay. Why don't we take a
21 ten-minute break. We will be back in ten minutes.
22 (RECESSED AT 8:45 P.M.)
23 (RECONVENED AT 9:402 P.M.)
24 CHAIRPERSON: Shall we begin? Tahera
25 Corporation, you have come questions for Natural
26 Resources Canada?

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1 TAHERA CORPORATION QUESTIONS Natural Resources
2 CANADA:
3 MR. MISSAL: Thank you very much, Madam
4 Chair. Greg Missal, Tahera Corporation. We do
5 have some questions for NRCan, CANMET. I would
6 like to ask Cam Scott to begin with the
7 question/comments.
8 Thank you.

9 MR. SCOTT: Cam Scott, SRK for Tahera.
10 Thanks, Greg.
11 Larry, just I wanted to touch on three
12 issues. The first was one was the borrow areas.
13 Just for clarification, I am wondering if you can
14 bring up that slide which had the section through
15 the borrow areas indicating the depths. We were
16 aware, and we are well aware that there is ice in
17 select zones. Okay. Now, I see. I see what has
18 happened. Just make it clear for everyone what the
19 scale is on the left side.
20 MR. DYKE: Nanoseconds.
21 Q Okay. The scale on the right side is -- is it the
22 depth in metres?
23 A This is the distance scale here, and that number
24 there is 36, so a zero is that, and that's 36.
25 Q Right. So that's clear. So I think we are aware
26 that there is up to 10 metres of ice consistent

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1 with your explanation.
2 The other question I had was in relation to
3 where you had those surface features on the photo
4 and how that corresponds. Was that superimposed
5 right over our borrow area?
6 Because I think from our perspective, knowing
7 that there is ice in the vicinity of the esker, the
8 plan going forward is to just strip a very nominal
9 thickness, a metre or a metre and a half off the
10 top of the borrow areas. So what we are expecting
11 is the potential for some degradation of very
12 shallow permafrost right below that and extending
13 down to the depth of 10 metres of anything of that
14 nature?
15 CHAIRPERSON: Excuse me. Cam, I will ask
16 you to repeat yourself. Children, please be quiet.
17 The interpreters are having a hard time hearing him
18 and translating for the public. Please be quiet.
19 Cam, can you please repeat this question?
20 MR. SCOTT: The first part of the
21 question really is where does that feature lie
22 relative to the planned borrow areas?
23 MR. DYKE: That feature lies to the
24 north, generally to the north of your planned
25 borrow areas, that's my understanding. And I
26 really just pointed that out as a general

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1 indication that there is additional evidence that
2 there could be ground ice in this area.
3 Q Right.
4 A That's all it was, Cam.
5 Q Okay. Thanks, Larry.
6 The second issue was really in relation to
7 the processed kimberlite containment area and the
8 performance of effectively the development of a
9 pingo or the extrusion of water from the pores into

10 the surface of the facility. I think we
11 acknowledge that that could happen in the long
12 term.
13 What is your sense of likelihood of that
14 happening and the potential volume of pore water
15 that you would expect?
16 A My estimate of its likelihood is based partly on
17 that Illisarvik drained like experiment and what
18 has happened there. It is also based on my
19 experience with drilling mud sumps in the Mackenzie
20 Delta area, which do tend to exude brines, I think,
21 by this process. And also, there seems to be a
22 growing awareness on the part of some companies
23 that have to deal with tailings, such as Ekati, and
24 I think even at Nanisivik that this is
25 a possibility -- a possible outcome.
26 So I would say that for the processed

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1 kimberlite containment area, I can't put a
2 probability in terms of a percentage or whatever,
3 but I think it is likely enough that it is
4 something that may be -- that could be expected to
5 happen, and so it -- it should be at least there in
6 the background in any sort of reclamation plan.
7 Some provision should be made at least to check for
8 it.
9 Q Right.
10 A And in terms of volume of water that might be
11 expelled, it would not be changed. I would say it
12 would be something that might ultimately accumulate
13 in one small corner of the PKCA. Again, it is -- I
14 mean, you could take the total pore space in the
15 PKCA and take a tenth of that, just assuming as the
16 10 percent volume increases water changes to ice,
17 and that would give you a maximum amount. That's
18 about as precise as I can get.
19 Q I think the point is -- Cam Scott again.
20 The point has come up previously, we have
21 sort of considered it, and at the moment, the
22 closure plan somewhat addresses it to the extent
23 that the expectation is that there is still a
24 gradient to move water over the surface of the
25 facility at closure and through a closure spillway.
26 A I'm quite happy with that.

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1 Q The third point and final point was really one in
2 relation to stability and the potential for
3 permafrost degradation due to climate change. And
4 essentially, none of these facilities depend on the
5 permanence of permafrost?
6 A Very good.
7 Q Okay.
8 MR. MISSAL: Madam Chair, I would like
9 to ask Kelly Sexsmith to address some other
10 questions, please.

11 MS. SEXSMITH: You mentioned the potential
12 for melting of ice in the waste rock. We have a
13 range of estimates of the quantity of water from
14 our estimate to the GSC's estimate of quantity, and
15 we would like to point out that the quantity is
16 still a very small amount of water and leave it at
17 that.
18 MR. DYKE: Madam Chair, Larry Dyke,
19 Natural Resources Canada.
20 Thank you for that, Kelly. I agree, it is a
21 small -- it is a small amount in the scheme of
22 things. It is just that there would be an
23 additional quantity of total dissolved solids, if I
24 can use that term again, that I just wanted to --
25 that we wanted to point out that would be a part of
26 the total, sort of, total dissolved solids budget.

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1 MS. SEXSMITH: But by small, I mean that
2 it is a relatively small amount of water on the
3 total site, so there is still a tremendous amount
4 of dilution of any total dissolved salts that they
5 or may not be in that ice available to dilute that
6 water.
7 MR. DYKE: Okay. Thank you.
8 MS. SEXSMITH: Kelly Sexsmith.
9 The next issue I would like to address is the
10 mention of high dissolved uranium in discharge from
11 the waste pile. Uranium was not found in any of
12 the original tests that we did on any of the rock
13 samples, it was found in the one seep that we had
14 from that development waste rock pile from the
15 underground bulk sample extraction, and it was only
16 seen in samples that were collected in last summer.
17 Since observing that there was elevated and
18 not high, I say elevated, uranium concentrations in
19 that seep, we have been working to better
20 understand why there could be uranium in the
21 seepage and determine the potential for uranium
22 leeching from our waste rock piles. And we will
23 continue, as the CANMET has recommended, to
24 investigate this issue so that we can mitigate it,
25 if necessary.
26 MR. DYKE: Madam Chair, Larry Dyke,

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1 Natural Resources Canada. Thank you, Kelly, that's
2 quite an acceptable answer. Thank you.
3 MS. SEXSMITH: The other -- one other
4 point that was raised in CANMET's review was that
5 barium concentrations in the tailings were
6 anomalous, and I would like to point out that the
7 barium concentrations in the discharge from the
8 mine meet drinking water standards.
9 MR. DYKE: Madam Chair, Larry Dyke,
10 NRCAN, that's duly-noted. Thank you.
11 MS. SEXSMITH: I think that's it, Madam.

12 Thank you.
13 MR. MISSAL: Thank you very much, Madam
14 Chair, that ends our questions.
15 CHAIRPERSON: Okay. Any questions to
16 Natural Resources Canada from the elders? Any
17 questions to Natural Resources Canada from NTI?
18 MR. LOPATKA: No questions.
19 CHAIRPERSON: KIA?
20 MR. EVALIK: No questions.
21 CHAIRPERSON: Any questions from Indian
22 and Northern Affairs?
23 DIAND QUESTIONS NATURAL RESOURCES CANADA:
24 MR. HARTMAIER: Madam Chair, Holger
25 Hartmaier, BGC here for DIAND. I had a couple of
26 questions.

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1 The first question actually already was asked
2 by Cam Scott regarding the potential for pingo
3 formation in the PKCA during the freeze back of the
4 talik, so that's been answered.
5 The other question I had is I would like to
6 get Larry's comments on the potential for the
7 development of a talik between Carat Lake and the
8 eventual flooded pit, sort of for a long-term
9 closure, if there is any potential for that.
10 MR. DYKE: Madam Chair, Larry Dyke,
11 Natural Resources Canada.
12 That's a question that in detailed answer
13 would required a detailed look at the depth of the
14 pit and how far it is from Carat Lake. All I can
15 do at this point is sort of off the top of my head
16 point out a few things that might affect that
17 outcome.
18 So Holger is referring to the possibility of
19 a connection developing between the pit when it is
20 filled with water and Carat Lake and the fact that
21 then there might be underground flow of water from
22 the pit into Carat Lake, assuming that the water
23 level in the pit is higher than Carat Lake.
24 Whether or not that will happen is difficult
25 to say because I don't know what the ability of the
26 rock is to carry water. There is permafrost there

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1 right now. Now, that would start to thaw once the
2 pit filled with water. I don't know how quickly it
3 would thaw because I don't know the temperature of
4 the water in the lake, but it would thaw at some
5 rate, and eventually it might be -- it might be
6 able to -- an unfrozen zone, a talik, might be able
7 to connect with the talik that already exists under
8 Carat Lake. Even if that happened, though, the
9 water flow might be very, very gradual because in
10 general, the rock tends to be -- tends to resist
11 the movement of water to a high degree. It is
12 difficult for water to move through most rock.

13 If this did happen, all I can say right for
14 -- all I can say right now is there might be a
15 gradual movement of water from the pit into Carat
16 Lake at some future time.
17 One thing one does notice in that area is
18 that the lake levels are standing at different
19 elevations. If it was possible for water to move
20 between lakes through the rock, you might expect
21 the water levels all to be the same, so the fact
22 that the large lake levels are at different levels,
23 they are not all same, means that the permeability
24 of the rock, that is, its ability to allow the flow
25 of water, is quite low. That's a very convoluted
26 answer, but it is a difficult question to say

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1 anything exact about right now.
2 MR. HARTMAIER: I think that's a good
3 answer. Thanks, Larry.
4 CHAIRPERSON: Any questions to Natural
5 Resources Canada from Department of Fisheries and
6 Oceans? Any questions from GN? Any questions from
7 local residents? Any questions from the Nunavut
8 Impact Review Board staff? Dionne?
9 BOARD STAFF QUESTION NATURAL RESOURCES CANADA:
10 MR. TILLEMANN: It is Bill. And maybe as
11 she is getting her notes ready, if you can maybe
12 explain to us in simpler terms how water moves
13 between two water bodies, and also on top of that
14 you have ice at some stage. So we understand
15 underneath the water there is a warmer zone than
16 the ice, and so it would be somewhat thawed. And
17 so would water go between both bodies or does it
18 only flow in one direction? And if so, what would
19 explain it?
20 MR. DYKE: Madam Chair, Larry Dyke,
21 Natural Resources Canada.
22 Thank you, Bill, for that question. One way
23 to think about it is if you had a flexible tube or
24 a pipe like a plastic pipe filled with water and
25 you hold it up in the air in a U shape, and if you
26 just hold it, there will be a water level at each

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1 end of that pipe, and they will be the same. And
2 if you pour water in one end of that tube or pipe,
3 for a short and -- and say you filled that pipe
4 with sand, so the water can still flow through the
5 sand, what would happen is that if you poured water
6 in one end of the pipe, it is going to flow through
7 and come out the other end.
8 So if you had two lakes on the tundra and
9 they were large enough that they thawed right
10 through -- the thawed zone under each of those
11 lakes went right through permafrost, then water
12 could flow from one lake to the other under
13 permafrost if one lake has a level that's different

14 from the other lake.
15 So the water will flow from the lake with the
16 highest level to the lake with the lowest level.
17 However, generally, that water movement probably
18 takes place, but normally it would take place very
19 slowly because normally the ability of the rock to
20 transmit water, the ability of the rock to allow
21 water to flow through itself is very low. And on
22 Canadian Shield, that flow is generally through
23 cracks in the rock, and because of the pressure or
24 the weight of the rock, those crack are maintained,
25 they are very narrow, very thin, probably thinner
26 than a sheet of paper. And so it is difficult for

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1 water to flow through those cracks. Occasionally
2 you find places where the cracks are very wide and
3 the water flow can be rapid, but normally they are
4 narrow and the water flow is difficult.
5 Is that satisfactory?
6 MR. TILLEMAN: Yes, thank you.
7 CHAIRPERSON: Any other questions?
8 Dionne?
9 MS. FILIATRAULT: Yes, Madam Chair. Thank
10 you. This is Dionne.
11 It relates to an answer or a discussion that
12 happened between yourself and Kelly with respect to
13 the barium values. There was a discussion that
14 yes, it met Canadian drinking water quality
15 standards, and you noted it, but it was stated that
16 it was an anomaly, and, you know, how is that
17 relevant, and what does the anomaly mean, and how
18 should we -- do we need to be looking into this
19 further?
20 MR. DYKE: Madam Chair, Larry Dyke,
21 Natural Resources Canada.
22 I cannot recall the exact figure that CANMET
23 is referring to. When they say anomalous, I think
24 they are referring to -- of probably to a value
25 from one particular analysis that perhaps stood out
26 from the normal level, and they -- I think that

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1 CANMET is simply concerned that further analysis be
2 done to make sure that there are no similar values
3 to that anomalous value.
4 Q Thank you. Dionne.
5 We have had over the last few days a large
6 discussion on stockpile runoff quality and quantity
7 and the waste rock and the low-grade stockpiles,
8 and there was a significant discussion in your
9 written submission. I am just wondering, are there
10 any outstanding concerns that need to be dealt with
11 as far as impact review goes? Or can many of those
12 issues be dealt with, say, because they represent
13 water quality or quantity or waste water quality,
14 can they be dealt with at the regulatory phase?

15 A Madam Chair, Larry Dyke, Natural Resources Canada.
16 I think these concerns regarding quantities of
17 thawing ice in the rock, in the waste rock piles
18 can definitely be dealt with at the regulatory
19 stage, and I think as Tahera has pointed out, that
20 doesn't pose a major component of the total
21 dissolved solids or metal content of any seepage
22 water.
23 Q Thank you. This is Dionne.
24 There was a discussion in your submission
25 with respect to the adequacy of acid base
26 accounting testing and the identification of a

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1 distinct unit of biotite gneiss, and what is the
2 concern that's associated with the biotite gneiss
3 material or mineral?
4 A As far -- Madam Chair, Larry Dyke, Natural
5 Resources Canada.
6 As far as I am aware, the concern with regard
7 to the biotite gneiss is as a possible source of
8 additional metals in seepage water.
9 Q Thank you. Dionne.
10 So that was associated with the waste rock
11 piles, waste rock pads. And similar to my previous
12 question that this would be -- is this an impact
13 assessment issue?
14 A Madam Chair, Larry Dyke, Natural Resources Canada.
15 It would constitute an impact issue, yes.
16 Q On the issues of the processed kimberlite
17 containment area supernatant water quality, do you
18 believe the issues related to this have been
19 addressed, dealt with to your satisfaction? And if
20 not, what needs to be done and when?
21 A Madam Chair, Larry Dyke, Natural Resources Canada.
22 Yes, I think Tahera has addressed these
23 satisfactorily, and my understanding of that
24 addressing is that the possibility of expelled
25 water would be considered in any mine reclamation
26 plan.

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1 MS. FILIATRAULT: That's all my questions,
2 Madam Chair.
3 CHAIRPERSON: Any other questions from
4 the NIRB Staff?
5 MR. TILLEMAN: Madam Chair, just in terms
6 of filing exhibits or getting us the information
7 that we heard tonight, we think the slide
8 presentation was a little bit different than the
9 written one, it had some nice slides in it. So if
10 we could -- if it is on a disk of some kind, if we
11 could get that, that would be appreciated, and we
12 would simply need it before the close of day
13 tomorrow if that's possible and if there are no
14 objections from any of the parties. So I suggest,
15 Madam Chair, I just ask if first of all it is

16 possible, and, second, if there are parties with
17 objections?
18 CHAIRPERSON: Possible to get a copy of
19 your CD?
20 MR. DYKE: Madam Chair, it definitely
21 is. Bill, I can give you that actually right now.
22 CHAIRPERSON: Any objections? No. Thank
23 you.
24 MR. TILLEMAN: And, Madam Chair, there is
25 only one other thing, and it was that there was a
26 research paper or at least research done with

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1 respect to the draining of the lake that I can't
2 remember the name of that, and if that's available
3 either through e-mail or fax tomorrow, it would be
4 helpful if we could have him table that tomorrow if
5 he has it by then, and that's, again, subject to
6 availability and any objections, that would be
7 helpful to the staff to be filed as an exhibit.
8 CHAIRPERSON: Will that be possible?
9 MR. DYKE: Madam Chair, I have a copy
10 of that with me.
11 CHAIRPERSON: Greg Missal?
12 MR. MISSAL: Madam Chair, just one item
13 that we wanted to address in Larry's comments, and
14 that was regarding the biotite gneiss. There is
15 another rock pipe at Jericho called pegmatites, and
16 sometimes near the boundaries or the edge, the edge
17 of pegmatites, that rock can look somewhat like
18 biotite gneiss and it is often misidentified as
19 such.
20 I would maybe defer to Kelly to speak to the
21 composition of that, but we are suspecting that
22 could be a possibility.
23 CHAIRPERSON: Kelly?
24 MS. SEXSMITH: The biotite gneiss --
25 rather, sorry, the pegmatite and its variants, in
26 other words, the different faces of it that look a

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1 little different from each other, are expected to
2 be similar to samples that have been characterized
3 on the project. And as with all the other
4 pegmatites, I expect that that variant would have a
5 low sulphide content and low metal leeching
6 potential, so I don't see it as being a significant
7 impact.
8 Also, it doesn't appear that that rock unit
9 is particularly wide spread, because none of the
10 core that I have examined has had any of that
11 material in it.
12 CHAIRPERSON: Any questions from the
13 Staff?
14 BOARD QUESTIONS NATURAL RESOURCES CANADA:
15 CHAIRPERSON: Any questions from the
16 Board? I've got a question. This substance

17 fibrous -- how do you say the last part,
18 chrysotile? This substance that you say could
19 cause or is also made -- or insulation is also made
20 from this, what are the impacts to public from this
21 substance?
22 MR. DYKE: Madam Chair, Larry Dyke,
23 Natural Resources Canada.
24 I just didn't catch -- quite catch the very
25 last part of your question there. You were
26 wondering about the concern for the public?

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1 Q What are the impacts to public health from this
2 substance, workers?
3 A The general concern over asbestos is its irritation
4 that it produces in the lungs because of the fibers
5 are small but brittle, and they can damage the
6 lining of the lungs.
7 I think with respect to the reference made by
8 CANMET in their submission, they simply thought
9 that there is a mineral in the kimberlite that
10 could possibly alter to this chrysotile material,
11 and that there is perhaps a slight chance then that
12 if that -- if that in any way could produce dust,
13 that -- and those fibers might get into the
14 atmosphere.
15 Q So what are testing methods you propose? On your
16 paper it says the XRD.
17 A Madam Chair, Larry Dyke, Natural Resources Canada.
18 X-ray diffraction is a laboratory method for
19 identifying this mineral.
20 Q And what are the benefits, or what are we trying to
21 mitigate?
22 A The purpose of doing this would be to see if there
23 is any chrysotile asbestos in any part of the
24 material that Tahera would be mining.
25 CHAIRPERSON: Thank you. Legal counsel
26 for Tahera?

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1 TAHERA CORPORATION QUESTIONS NATURAL RESOURCES
2 CANADA:
3 MS. SEXSMITH: Kelly Sexsmith. I would
4 just like to follow up on the issue that was raised
5 before the last issue, and ask if you still felt
6 that the issue of biotite gneiss in the rock not
7 being characterized was still a significant issue
8 that needed to be dealt with at this stage in the
9 process?
10 MR. DYKE: Madam Chair, Larry Dyke,
11 Natural Resources Canada.
12 I -- as I recall, your response that earlier
13 was that any material that was introduced from the
14 biotite gneiss would be looked for in any ongoing
15 water quality measurements, and that's
16 satisfactory.
17 MS. SEXSMITH: Okay. Thank you.

18 Could we have an opportunity to also respond
19 some of the questions you raised regarding the
20 chrysotile?
21 We have not identified that mineral in any of
22 the samples. There was a misidentification of a
23 mineral as chrysotile in some of the earlier work
24 that was done on the project, and I had consulted
25 with a senior mineralogist at the University of
26 British Columbia who runs the XRD machine at UBC,

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1 and he informed me that it would not be possible to
2 identify that mineral using the instrument that
3 they have at UBC, which the earlier work was based
4 on.

5 So this mineral has never been identified in
6 the rocks at Jericho. In addition, information on
7 the geological occurrence of this mineral suggests
8 that it is unlikely to occur in crystal and
9 kimberlite rocks such as Jericho.

10 The occurrences of asbestos to that were
11 found in kimberlite were typically in rocks that
12 had been deformed subsequent to deposition. In
13 other words, they had been subjected to extreme
14 heat or pressure that would allow those long fibers
15 to form. So we don't think there is a significant
16 geological basis for this mineral forming at
17 Jericho.

18 MR. DYKE: Madam Chair, Larry Dyke,
19 Natural Resources Canada.

20 Kelly, I'm quite happy with that answer.

21 Would -- Madam Chair, would it be permissible
22 for me to consult with the researcher who presented
23 this question when I return to Ottawa?

24 CHAIRPERSON: Bill?

25 MR. TILLEMAN: Yes, but it may not do us
26 any good because the hearing will likely close

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1 tomorrow. And so what we have heard is that your
2 submission and your researchers state that biotite
3 gneiss is a possibility, and if it is, it is an
4 issue. Tahera opened the question back up by
5 saying, well, but we haven't encountered it, then
6 you quite logically said, well, that's fine,
7 meaning that if you do encounter it through
8 monitoring, which Kelly suggested, they could do
9 further monitoring. And at that point the staff
10 are kind of saying what do we do next?

11 And so we suggest from Ms. Sexsmith that it
12 probably is possible to be there given the natures
13 and the way in which kimberlite is formed with
14 pressure and heat and whatever else has happened.
15 So what do we do now? How much more testing will
16 they do if they find it? I'm not sure that they
17 can never find it given that your submission has
18 said it is possible. They said we haven't found it

19 yet, it is unlikely, and that's kind of where we
20 were left.
21 I'm not sure where this Board -- what do we
22 take away from this hearing? Because we have one
23 day left. Are you concerned that we -- that the
24 proponent have an additional monitoring, and if
25 that monitoring finds it, then at that point if it
26 is not the kind of rock that Greg said that it was,

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1 which is the parallel rock, pegmatite, if that's
2 what it is, and I'm not a geologist. But, anyway,
3 where do we go from here is really my question.
4 What does the Board take from this interchange that
5 has now just happened is my question to you, sir.
6 MR. DYKE: Madam Chair, Larry Dyke,
7 Natural Resources Canada.
8 With regard to the biotite gneiss, all I can
9 think right now is perhaps a procedure that is
10 being carried out at Diavik where the same rock
11 type is encountered, and the provision there is to
12 place it, to see that it is placed in the centre of
13 the waste rock pile in that case, and the purpose
14 of this is to ensure, to create a maximum assurance
15 that it will remain frozen and thus inert. So that
16 is a provision that was made with respect to
17 biotite gneiss in that case.
18 Beyond that, I'm not able to say what should
19 be -- what should be done. Would you like to --
20 should I go on to the chrysotile?
21 MR. TILLEMAN: But it seems to me, Tahera
22 had a question about it or had a follow-up question
23 after the Board's questions, and so that suggests
24 to me that maybe you should ask anyone else in the
25 audience now if they have any comments. And I
26 think DIAND appears that they might have a comment

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1 that they can help further this issue before we
2 actually decide it. So thank you, Mr. Dyke.
3 And it is up to you, Madam Chair, if you want
4 any further questions from the audience. And DIAND
5 would like to make -- I'm not sure if they want to
6 do it, but it appears they want to make a comment,
7 so my advice is that it is now opened up again, and
8 my advice is you will let him do it.
9 CHAIRPERSON: DIAND, you have a comment?
10 MR. TRAYNOR: Thank you, Madam Chair, and
11 I appreciate the opportunity. Perhaps this may
12 help you out a little bit.
13 In an earlier discussion we were asked a
14 question with regard to uranium by a member of the
15 staff and how we can manage through that issue, and
16 in our recommendations in our written submission,
17 we had said our INAC 19 recommendation was that as
18 part of a waste rock monitoring plan, the proponent
19 should sample the blast rock to confirm the

20 geochemical properties, and this may be a
21 reasonable solution that they can take in terms of
22 they had agreed at the time to deal with it for
23 uranium, and I am sure it can be part of the
24 broader package of the waste rock monitoring plan.
25 Thank you.

26 CHAIRPERSON: Bill, would that be a

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1 reasonable solution?

2 MR. TILLEMAN: Yes, ma'am, that answered
3 the Staff's concerns.

4 CHAIRPERSON: Any other concerns? Indian
5 and Northern Affairs?

6 DIAND QUESTIONS NATURAL RESOURCES CANADA:

7 MR. HARTMAIER: Holger Hartmaier, BGC
8 Engineering for DIAND.

9 I had some points of clarification with
10 regard to the rock type issues. Number one,
11 regarding kimberlite, it is my understanding that
12 as a rock type, kimberlite is formed by the magma
13 coming up through the earth, and it is actually
14 removing pieces of rock from the side walls of the
15 vent as it goes to the surface. So although
16 kimberlite itself has an intrusion, or the body, if
17 you wish, that they are mining has not been itself
18 subject to sheering and deformation and forming,
19 the mineral chrysotile, which you are concerned
20 about, that the rocks that it sampled as it came up
21 through the crust may have been subject to that
22 kind of deformation. So fragments of those rocks
23 may be in the kimberlite, and hence the -- I guess
24 that was the concern that Larry was talking about
25 with respect to the potential for chrysotile.

26 Now having said that, if SRK has done, you

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1 know, the type of analytical work that Larry has
2 recommended and they are not finding that kind of
3 mineral present, then perhaps it is not present at
4 Jericho.

5 The other issue with respect to the biotite
6 gneiss, as Larry had mentioned, at Diavik, the
7 concern was with respect to acid rock drainage and
8 metals coming out of the biotite gneiss. And as I
9 recollect, the biotite gneiss was found as a
10 distinct unit within the granite, so that may have
11 been associated with a metasedimentary unit,
12 meaning it was a rock unit that was formerly laid
13 down by water and then metamorphosed into biotite
14 gneiss. So it wasn't -- the rock unit that Tahera
15 was saying which could be confused with the
16 pegmatite in the wall rock, so that unit actually
17 had some potential for acid rock drainage as well.

18 So, I guess, SRK, knowing the geology of the
19 site, could determine whether, in fact, you know,
20 you are dealing with a pegmatite-derived biotite

21 gneiss or a totally separate unit. So, again, that
22 issue could be resolved by doing, perhaps, more
23 detailed geology, you know, at subsequent stages of
24 the work.

25 And the other issue is with respect to the
26 pegmatite, the pegmatite mineralogy may itself have

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1 rare earth minerals in it, so perhaps that -- I'm
2 just thinking that may be a potential source of
3 uranium if there is trace metals in the pegmatite.
4 And, again, more geological work could be done to
5 characterize the pegmatite to see if there is any
6 rare earth minerals. That's my comments.

7 CHAIRPERSON: Legal counsel for Tahera?

8 TAHERA CORPORATION QUESTIONS NATURAL RESOURCES

9 CANADA:

10 MS. MacLACHLAN: Thank you, Madam Chair.

11 It may be the lateness of the hour, but I
12 guess the clarification that I would like to see on
13 the record, it is my understanding that Dr. Dyke
14 said that he thought this was an impact issue.
15 What I would like is whether or not NRCan is saying
16 that this -- the present -- the potential for
17 presence of this type of rock is an impact that
18 they think is significant, because I think what I
19 have heard is that there are a number of options
20 for mitigation, and if there is mitigation, then
21 this would not be a significant impact that would
22 prevent the project from proceeding. And I think
23 there is some confusion over what Dr. Dyke said
24 earlier on this evening on that issue. Thank you.

25 CHAIRPERSON: Natural Resources?

26 MR. DYKE: Madam Chair, Larry Dyke,

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1 Natural Resources Canada.

2 CANMET has pointed out the presence of this
3 biotite gneiss kind of rock, and they are concerned
4 as to its acting as a source of -- a possible
5 source of metals in water that leeches through the
6 materials that are being left, and so I think it --
7 this -- the presence of this material has to be
8 acknowledged, and I think that that can be done at
9 the regulatory stage by a provision whereby this
10 possibility is checked with ongoing sampling.

11 MS. MacLACHLAN: Thank you, Madam Chair.

12 And I believe that Tahera has made a commitment to
13 develop a waste rock management plan, monitoring
14 plan.

15 CHAIRPERSON: Thank you. Bill?

16 MR. TILLEMANN: Those comments are fine,
17 but where we stand with the record is that the
18 record is more complete as a result of all of the
19 statements that the Board has just heard, and so
20 what, obviously, the Board needs to do is look at
21 everything that has come in, including the further

22 elaboration by DIAND and its consultants, and then
23 decide itself how it does sort out what Mr. Dyke's
24 concerned was with, which is it is an impact
25 assessment issue including some uncertainty and
26 when to deal with it.

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1 And so I'm satisfied on the basis of that
2 further -- I should say the Staff is satisfied on
3 the basis of the further explication by DIAND's
4 consultants, and then it will just simply be a
5 matter for the Board to deal with. But having been
6 reraised by Tahera after the questions were done,
7 all of that will go into your basket to deal with.
8 And that's my advice. I have no further comment.
9 The Board will just have to decide what it wants to
10 do about this when you make your decision.
11 CHAIRPERSON: Any other questions for
12 Natural Resources? Thank you.
13 MR. DYKE: Thank you, Madam Chair.
14 CHAIRPERSON: Presentation will be made
15 by Indian and Northern Affairs. We will give you
16 five minutes to give your brief summary of your
17 submission, and then we can gather questions.
18 Thank you.
19 PRESENTATION BY DIAND:
20 MR. TRAYNOR: Thank you, Madam Chair. We
21 certainly do appreciate having the opportunity to
22 speak. Given the lateness and the demands on the
23 Board at this time due to pressing issues such as
24 pilots and things, we would like to appreciate the
25 offer to be here in Kugluktuk and make the
26 presentation.

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1 We would just take the two minutes to tell
2 the community that we have made a lengthy
3 submission, written submission. We did do a
4 submission in -- a technical one in Cambridge Bay,
5 and it is unfortunate we can't do it here.
6 However, if anyone in the community does have any
7 questions, we do have Pat Laroque in the community,
8 he is our resource management officer, he can help
9 guide you to some of our staff in Iqaluit who can
10 answer any questions or concerns you have. But if
11 the Board does so choose, we can take any questions
12 from the Board if they desire.
13 CHAIRPERSON: First any other questions
14 to Indian and Northern Affairs from Tahera
15 Corporation?
16 MR. MISSAL: Madam Chair, Greg Missal,
17 Tahera Corporation. We have no questions for
18 Indian and Northern Affairs at this time.
19 CHAIRPERSON: Any questions from NTI?
20 MR. LOPATKA: No questions.
21 CHAIRPERSON: KIA?
22 KIA QUESTIONS DIAND:

23 MR. EVALIK: Charlie Evalik, president
24 of KIA. In terms of the INAC presentation that was
25 made in Cambridge and in terms of your technical
26 hearings, in terms of the monitoring of the

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1 project, it is the -- is it possible or would
2 INAC agree that there are under Nunavut Land Claims
3 Agreement, there are bodies that is -- that I
4 established along with NTI and KIA that could
5 assist in terms of our monitoring the project
6 rather than setting up of other agencies as might
7 become templated by INAC?

8 MR. TRAYNOR: Thank you, Charlie.
9 Stephen Traynor, DIAND.

10 That's a very good question, and it certainly
11 is contemplated in the claim, and it is expected
12 that in terms of enforcement of land use and land
13 dispositions, that that is strictly the role of the
14 KIA with regard to this project on their land, and
15 we would certainly want to work as best we can in
16 dealing with enforcement issues collectively.
17 Thank you.

18 Q Then I would ask a subsequent question. Would it
19 be possible that NTI KIA and INAC and other
20 regulatory agencies, that we sit down in terms of
21 how we are going to monitor this rather than
22 putting another agency in place for this project,
23 as I believe that there is adequate monitoring
24 requirements that are under Nunavut land claims
25 agreement already that our staff has?

26 A Stephen Traynor, DIAND.

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1 I would encourage cooperation amongst all
2 regulators that ensure that all of the issues are
3 being monitored from each of our perspective
4 regulatory areas are being looked at. I would,
5 however, add that we have to do this as a
6 collective as no one organization has the overall
7 mandate to monitor the project as a whole.

8 There may be some provisions in the claim, as
9 mentioned previously in the GN discussion, that
10 could envision a broader, but we would like to at
11 this point make sure we work together as a
12 cooperative. However, we do leave the option open
13 for NIRB as it is envisioned in the claim in
14 Section 7, Article 12 to take on that role, but we
15 would certainly want to have discussions with other
16 regulators during ongoing operations. Thank you.

17 CHAIRPERSON: Any questions to Indian and
18 Northern Affairs from Department of Fisheries and
19 Oceans? National Resources Canada?

20 MR. DYKE: No questions.

21 CHAIRPERSON: Any questions to Indian and
22 Northern Affairs from local residents? Any
23 questions from elders? Any questions from NIRB

24 Staff? Any questions from the Board? Thank you.
25 And if we can get a short brief summary of
26 your submission, Department of Fisheries and

0898

1 Oceans?
2 PRESENTATION BY DEPARTMENT OF FISHERIES AND OCEANS:
3 MS. CRITCH: Madam Chair, members of the
4 Board. My name is Stephanie Critch, and I'm fish
5 habitat biologist with Fisheries and Oceans in
6 Iqaluit. I just wanted to take this opportunity to
7 thank you for us -- for DFO being able to be part
8 of this, the Jericho public hearings.
9 Fisheries and Oceans did submit a written
10 submission to NIRB earlier and did also give a
11 presentation in Cambridge Bay which has been filed
12 with NIRB. And if time permits, we will be giving
13 a presentation in Gjoa Haven tomorrow. So I will
14 not give an overview of our presentation right now,
15 we will do that in Gjoa Haven tomorrow.
16 There were a couple of issues that I wanted
17 to clarify here as well. I would like to comment
18 on the December 19th letter from DFO to NIRB that
19 was recently entered as an exhibit. I'm not sure
20 what number exhibit that was, maybe Bill can help
21 me out there?
22 MR. TILLEMAN: Madam Chair, it is Exhibit
23 19.
24 MS. CRITCH: Thank you. Exhibit 19.
25 The attached memorandum was written by
26 Mainstream Aquatics on behalf of Tahera

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1 Corporation. In my letter I stated that DFO would
2 elaborate on the issues stated within the
3 memorandum at the public hearings, and I would just
4 like the record to read that DFO's position has
5 been elaborated on and clarified in our
6 presentation that we gave in Cambridge Bay.
7 Also, to clarify the issue raised by KIA in
8 Cambridge Bay, when KIA had raised concerns that
9 some of the fish habitat related -- excuse me,
10 impacts and potential fish habitat, no-net-loss
11 plans were located on Inuit-owned land. Since then
12 Geoff Clark from KIA, Greg Missal and Tahera and
13 myself and Julie Dahl from Fisheries and Oceans
14 have consulted a survey map and have all agreed
15 that none of the works processed are on Inuit-owned
16 land. Nonetheless, DFO will include KIA on
17 consultation of our draft authorization.
18 And that's all I have to say this evening.
19 CHAIRPERSON: Thank you. Any
20 questions, additional questions from Tahera
21 Corporation to DFO?
22 MR. MISSAL: Madam Chair, Greg Missal
23 with Tahera Corporation. We have no additional
24 questions at this time.

25 CHAIRPERSON: Thank you. Any questions
26 from KIA? NTI? GN? Indian and Northern Affairs?

0900

1 Natural Resources Canada?
2 MR. DYKE: No questions.
3 CHAIRPERSON: Any questions to Department
4 of Fisheries and Oceans from local residents? Any
5 questions from the elders? Any questions from NIRB
6 Staff?
7 MR. TILLEMAN: No, Madam Chair. Just kind
8 of a housekeeping thing. One is just exhibits.
9 DFO is still looking for a couple of things which I
10 hope that they will tell us tomorrow if they found
11 a couple of those guides, and a related issue may
12 be they just stated in consultation with Tahera and
13 KIA and DFO has found that none of the works
14 proposed were on IOLs, and I assume that since
15 Tahera and KIA didn't object to that statement,
16 that they are in agreement with it. They didn't
17 raise their hands. And they are both nodding yes,
18 and so that means everyone is agreed.
19 We have no questions for DFO.
20 CHAIRPERSON: Any questions from the
21 Board? Thank you.
22 Okay. Thank you, Tahera Corporation, mayor
23 and citizens of Kugluktuk. We have now concluded
24 the Kugluktuk portion of Tahera's environmental
25 assessment hearings. Tomorrow the Nunavut Impact
26 Review Board will go to Gjoa Haven. We will then

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1 hear primarily from the community with brief
2 presentations from Tahera and other government
3 parties.
4 At the close of the hearings, which the
5 Nunavut Impact Review Board expects will be on
6 Friday after Gjoa Haven, the Board will prepare and
7 send their report and recommendations to the
8 Minister of Indian and Northern Affairs for
9 distribution and other responsible ministers.
10 Nunavut Impact Review Board will be making
11 every effort to complete its decision within 30
12 days. Before I give some thank-yous, I have been
13 told that Bill would like to say something.
14 MR. TILLEMAN: Well, really I don't want
15 to because I have to admit that I made a mistake,
16 and now I have admitted it publicly, is that I knew
17 that the hamlet had asked to say a few words before
18 we left, Madam Chair. I forgot to tell you, so it
19 is my fault, and so I think you should just ask the
20 hamlet if they have anything to say, and I have
21 made a mistake by not telling you, and I'm sorry.
22 CHAIRPERSON: The hamlet of Kugluktuk,
23 you may step up.
24 PRESENTATION BY HAMLET OF KUGLUKTUK:
25 MR. ANABLAK: Thank you, Madam Chair, and

26 good evening. I got it correct this time.

0902

1 We put forward a submission back in June 23,
2 and we are just going to do a quick highlight of
3 some of the issues that we have for the community,
4 and also a couple of questions I guess to the
5 proponent, Tahera. This was submitted or put
6 together by -- on June 23rd, the community
7 overview. One of the largest Inuit population
8 within Kitikmeot.

9 Within five years, we will be the largest
10 community in Kitikmeot overall, closest community
11 to the project, closest IOL selected by a
12 Kugluktummuit, a high degree of local understanding
13 and awareness of projects through years of
14 consultation.

15 The community trends, 90 plus residents, 20
16 percent of workforce working in remote camps
17 setting every year, threefold increase in mine
18 employment since 1999, no unemployment problems in
19 Kugluktuk, dramatic increases in high school
20 attendance and graduations, increased business
21 startups and disposable income, highest adult
22 incarceration rate in Nunavut, highest juvenile
23 incarceration rate in Nunavut, close to \$1 million
24 income support payments per year, historically high
25 suicide rates, significant Innuinaqtun language
26 loss, significant training and education gaps, 100

0903

1 plus housing on the waiting list.

2 Hamlet of Kugluktuk programs and services, we
3 have the water and sewage program, roads,
4 recreation, community lands, bylaw enforcement,
5 government liaison enforcement, services,
6 protection services, environmental services,
7 employment services, economic development, alcohol
8 and drug awareness, youth centre, airports
9 operations, elders and youth, income support and
10 prenatal nutrition.

11 Intimately aware of community issues and
12 concerns, council guided by community wellness
13 plan, change begins with us. Council striving to
14 implement community economic development plan and
15 community employment plan, extensive experience
16 working cooperatively with BHP Billiton Limited,
17 Diavik Diamond Mines Incorporated, Kitnuna, Nuna
18 Logistics, Kinross Gold Corporation (Lupin).

19 20 plus years of exposure to social impacts
20 of -- sorry, mining impacts on Kugluktuk, 20 plus
21 years of exposure to social impacts of mining in
22 Kugluktuk, 10 plus years of exposure to social
23 impacts of diamond mining and exploration, 5 plus
24 years of community programming and program delivery
25 attempting to mitigate mining impacts and promote
26 community wellness.

0904

1 Kugluktuk Tahera review gratefully
2 facilitated both NIRB and the Water Board, Nunavut
3 Water Board. This review involved over 40 local
4 resident, keyed on significant socioeconomic
5 issues, environmental issues less pronounced and
6 significant issues on government role in mining
7 development.
8 That's just a quick highlight of what we put
9 forward to the Board earlier on, and we have a copy
10 here if anybody wants a copy, then we can print
11 them off and get them off.
12 CHAIRPERSON: Bill?
13 MR. TILLEMAN: Yes, Madam Chair, and thank
14 you very much. And the Board would like a copy
15 which we would propose be entered then as Exhibit
16 number 25 which would be -- we will sort the number
17 out, but if it is okay with everyone, we will just
18 enter it as an exhibit, and I have no further
19 comment.
20 EXHIBIT NO. 23:
21 DEPARTMENT OF SUSTAINABLE DEVELOPMENT,
22 GOVERNMENT OF NUNAVUT WRITTEN SUBMISSIONS
23
24 EXHIBIT NO. 24:
25 AIR-QUALITY MONITORING AT THE EKATI
26 DIAMOND MINE REPORT

0905

1 EXHIBIT NO. 25:
2 HAMLET OF KUGLUKTUK PRESENTATION
3 CHAIRPERSON: Is that okay with Tahera,
4 other parties? Any question or comments of Tahera
5 Corporation to hamlet council?
6 MR. MISSAL: Madam Chair, no, we don't.
7 CHAIRPERSON: Any other questions?
8 Comments? Hamlet of Kugluktuk, any other questions
9 or comments?
10 MR. ANABLAK: Yes, to Tahera. I know
11 that being way down in Toronto or wherever it may
12 be, having an office way down there, I think, you
13 know, if Tahera is to go for a place to set up an
14 office and that, we are -- Kugluktuk is certainly
15 interested and very interested in seeing them come
16 to Kugluktuk and setting up an office here in
17 Kugluktuk.
18 Is there any chance, or what is your plans on
19 opening an office in the north?
20 MR. MISSAL: Thank you, Madam Chair.
21 Thanks for that question, Stanley.
22 In our community meeting the other night in
23 Cambridge Bay, we got the exact same question
24 during that meeting, and I told them what I will
25 pass on to you tonight, that I will take that under
26 advisement, and I would like to thank you for

0906

1 inviting us to do that in Kugluktuk. Some of those
2 plans -- some plans, and that being one of them,
3 are still under consideration by Tahera, but I do
4 appreciate you bringing that forward tonight.
5 MR. ANABLAK: Thank you very much, Madam
6 Chair for giving us a chance to speak, and we wish
7 everybody a safe trip back to Cambridge Bay and on
8 to Gjoa Haven and home. Thank you. Good night.
9 CHAIRPERSON: Thank you.
10 And now I would like to thank -- the Board
11 would like to thank the translators, and thank you
12 to Andrew our sound man from PIDO Productions.
13 Thank you to Tahera Corporation, and thank you to
14 all of you for your patience in our hearing
15 schedule.
16 Before we close -- I will let Peter Paneak
17 give the closing prayer before we do some more
18 raffle tickets. And please leave your earpieces
19 before you leave the building, please leave them
20 behind.
21 (CLOSING PRAYER)
22 CHAIRPERSON: And we would like to thank
23 the women's group for preparing coffee, tea and the
24 food. Thank you very much.
25 (ADJOURNED AT 10:13 P.M.)
26

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2
3 I, Tara Lutz, Court Reporter, hereby
4 certify that I attended the above Hearing and took
5 faithful and accurate shorthand notes and the
6 foregoing is a true and accurate transcript of my
7 shorthand notes to the best of my skill and
8 ability.
9 Dated at Calgary, Province of Alberta,
10 this 17th day of January, 2004.
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22 Tara Lutz
23 Court Reporter
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1	EXHIBITS	
2		PAGE NUMBER
3	EXHIBIT NO. 19:	
4	DFO LETTER TO NIRB DATED	
5	DECEMBER 19, 2003.....	816:10
6		
7	EXHIBIT NO. 20:	
8	SUMMARY OF THE CVs OF THE TAHERA	
9	CONSULTANTS.....	816:17
10		
11	EXHIBIT NO. 21:	
12	AEMP RE-EVALUATION AND REFINEMENT REPORT:	
13	PROPOSED PROGRAM 2003 - 2007.....	817:2
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15	EXHIBIT NO. 22:	
16	KIA PRESENTATION IN KUGLUKTUK.....	817:10
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18	EXHIBIT NO. 23:	
19	DEPARTMENT OF SUSTAINABLE DEVELOPMENT,	
20	GOVERNMENT OF NUNAVUT WRITTEN	
21	SUBMISSIONS.....	904:20
22		
23	EXHIBIT NO. 24:	
24	AIR-QUALITY MONITORING AT THE EKATI DIAMOND MINE	
25	REPORT.....	904:24
26		

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1	EXHIBITS CONTINUED	
2		
3	EXHIBIT NO. 25:	
4	HAMLET OF KUGLUKTUK PRESENTATION.....	905:1
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