

MACKENZIE VALLEY LAND

AND WATER BOARD

Gahcho Kue Mine

WATER LICENCE AND LAND USE PERMIT APPLICATIONS

De Beers Canada Incorporated

MV2005L2-0015 and MV2005C0032

PUBLIC HEARING

Panel Members:

Chairperson	Willard Hagen
Member	Joseph Mackenzie
Member	Frank McKay
Member	Floyd Adlem

HELD AT:

Tree of Peace

Yellowknife, NT

May 6, 2014

Day 1 of 3



“When You Talk - We Listen!”



1	APPEARANCES	
2	Zabey Nevitt	)MVLWB Staff
3	Kathy Racher)
4	Rebecca Chouinard)
5	Amanda Gauthier)
6	Shannon Shaw)
7	Jen Potten)
8	Angela Love)
9	Charles Birchall)
10	John Donihee	)Board Counsel
11	Neil Hutchinson	)Consultants
12	Shannon Shaw)
13	Tammy Karst-Riddoch)
14		
15	Veronica Chisholm	)De Beers Canada
16	Glen Koropchuk)
17	Andrew Williams)
18	Craig Blackie)
19	Sarah McLean)
20	Allan Rodel)
21	Leah Russell)
22	Bill Horne	)EBA Engineering
23	Dan Johnson	)JDS Energy & Mining
24	Ken DeVos	)Golder Associates
25	John Faithful)

1	APPEARANCES (Con't)	
2	Peter Chapman	) Golder Associates
3	Kristine Mason)
4	Michael Herrell)
5	Nathan Schmidt)
6	John Faithful)
7		
8	Anne Wilson	) Environment Canada
9	Sarah-Lacey McMillan)
10	David Fox)
11		
12	Robert Jenkins	) GNWT-ENR
13	Paul Green)
14	Lisa Dyer)
15	Sean Whitaker)
16	Andrea Patenaude)
17	Lara Fletcher	) Brodie Consulting
18	John Brodie (by phone))
19	Don MacDonald (by phone)	) MacDonald Consulting
20		
21	Marc D'Entremont	) Deninu K'ue First
22	David Pierrot	) Nation
23		
24	Todd Slack	) Yellowknives Dene
25) First Nation

1

APPEARANCES (Con't)

2

Matt Hoover

) North Slave Metis

3

) Alliance

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1	LIST OF UNDERTAKINGS	
2	NO.	PAGE NO.
3	1	De Beers Canada Inc. to provide to
4		the MVLWB an update to the Standard
5		Operating Procedure for handling of
6		the PAG and Non-PAG rock including
7		placement and volumes in the blocks
8		due May 9, 2014 129
9	2	De Beers Canada Inc. to provide to
10		the MVLWB the sequence of activities
11		and critical paths, including times,
12		for submission of the plans and
13		programs required for the Water
14		Licence and Land Use Permit due
15		May 15, 2014 140
16	3	De Beers Canada Inc. to provide to
17		the MVLWB an example the equations
18		used to determine the EQC for the
19		parameters listed in Table E.3 due
20		May 15, 2014 145
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1	LIST OF UNDERTAKINGS (Con't)	
2	NO.	PAGE NO.
3	4	De Beers Canada Inc. to provide to
4		the MVLWB rational and equations
5		(including any inconsistencies) to
6		explain the calculations for the
7		average monthly limit for ammonia
8		due May 15, 2014 148
9	5	De Beers Canada Inc. to provide to
10		the MVLWB further information related
11		to hardness as outlined in Table D.2
12		due May 15, 2014 150
13	6	GNWT-ENR to provide to the MVLWB any
14		regulatory reference(s) for
15		re-vegetation covers on waste rock
16		piles due May 15, 2014 212
17	7	GNWT-ENR to provide to the MVLWB any
18		comments or documents provided to De
19		Beers Canada Inc. in relation to the
20		Wildlife and Wildlife Habitat
21		Protection Plan and the Wildlife
22		Effects Monitoring Plan due May 15,
23		2014 234
24		
25		

1 --- Upon commencing at 9:01 a.m.

2

3 THE CHAIRPERSON: We've officially
4 opened here. We'll have Ms. Ann Biscaye do an opening
5 prayer for us. Thank you, Ann.

6

7 (OPENING PRAYER)

8

9 THE CHAIRPERSON: Thank you very much
10 for that, Ann. So I'd like to say good morning to
11 everyone. We'd like to begin by welcoming all -- all
12 participants in this proceeding. And my name is
13 Willard Hagen, and I am the Chair of the Mackenzie
14 Valley Land and Water Board. For those requiring
15 translation, there are receivers available with English
16 on channel 1, Chipewyan on channel 4, and Tlicho on
17 channel 2.

18 There are a few housekeeping items to
19 address. First, the washrooms are through that exit
20 door. And there are two (2) emergency exits: one (1)
21 is located there, and one (1) is at the back, or the
22 front of us, I guess, back of you.

23 And many of you are likely familiar with
24 the background of the Mackenzie Valley Land and Water
25 Board, but I will provide a brief overview for those

1 who are not aware of who and what we do.

2 The Mackenzie Valley Land and Water
3 Board was established under Part IV of the Mackenzie
4 Valley Resource Management Act, or the MVRMA, in March
5 of 2000. We exercise authority over land use
6 permitting and water licensing in the Mackenzie Valley
7 under the Mackenzie Valley Resource Management Act and
8 the Waters Act.

9 This panel of the Mackenzie Valley Land
10 and Water Board was established in accordance with
11 Section 104 of the MVRMA. So over the next two (2),
12 possibly three (3) days, the Mackenzie Valley Land and
13 Water Board will conduct a hearing into an application
14 for a -- a Type A water licence as filed by De Beers
15 Canada Inc.

16 This hearing has been constituted under
17 Paragraph 40.1.2 of the Waters Act and under Section 24
18 of the MVRMA. The application for the water licence
19 was deemed complete December 1, 2005. The application
20 and supporting materials were then circulated to
21 reviewers for comment. On December 22nd, 2005,
22 Environment Canada referred the application to the
23 Mackenzie Valley Environmental Impact Review Board for
24 an environmental assessment, which MVEIRB then ordered
25 an environmental impact review on July 19th, 2013.

1 In the reasons for decision and report
2 of EIR, MVEIRB recommended that the Gahcho Kue Project
3 be approved subject to the measures and commitments
4 necessary to mitigate significant adverse impacts on
5 the environment. The federal government adopted
6 MVEIRB's recommendation on October 22nd, 2013.

7 De Beers submitted an updated project
8 description and application for the Gahcho mine to the
9 -- to MVLWB on November 28th, 2013. The Mackenzie
10 Valley Land and Water Board sent out an application for
11 an initial review to a wide distribution list on
12 December 9th, with comments due on January 16th, 2014.
13 The Board staff held a technical session in Yellowknife
14 on February 11th to 13th, 2014, to give parties an
15 opportunity to clarify issues and to request additional
16 information before submitting public hearing
17 interventions.

18 Board staff held a pre-hearing
19 conference March 18th, 2014, which identified the
20 procedure to be followed at this hearing. No legal
21 issues were raised at the pre-hearing conference.
22 Intervenors were instructed to file their hearing
23 submissions on April 7th, 2014. Interventions were
24 received from the Government of the Northwest
25 Territories, Environment and Natural Resources,

1 Environment Canada, Dene Kue First Nation, Yellowknife
2 Dene First Nation, and the North Slave Metis Alliance.

3 De Beers Canada Inc. responded to the
4 interventions in technical submissions on April 14th,
5 2014. Intervenors were required to submit their
6 hearing presentations by April 17th, and De Beers
7 Canada Inc. by April 24th, 2014.

8 This hearing was advertised in
9 accordance with Paragraph 41.2 of the Waters Act. A
10 public notice was listed in News North NWT on March 17,
11 2014. So that brings us to today. And we're going to
12 sit from now until 5:00 p.m. We will have breaks for
13 lunch and coffee. If the proceedings are concluded
14 earlier than anticipated, we will adjourn for the day
15 and reconvene tomorrow at 9:00 a.m.

16 Intervenors and -- and the Company will
17 provide a presentation summarizing their material
18 submitted to the MVLWB and their written interventions.
19 While there may be differences in opinion about the
20 Application and the issues we will be discussing, and
21 we expect all participants to proceed in a respectful
22 manner.

23 The Board, for your cooperation, is --
24 is being prepared to make their presentations in the
25 order set out in the agenda, and to be organized and

1 focussing -- focussed on your questioning of other
2 parties. The order of proceedings will be as follows.

3 The Board will, first of all, hear from
4 De Beers Canada Inc. regarding their Application before
5 the Board. Once they've completed their presentation,
6 the order of questions will then be as follows:

7 Government of Northwest Territories ENR, Environment
8 Canada, Dene Kue First Nation, the Yellowknife -- the
9 Yellowknives Dene First Nation, and the North Slave
10 Metis Alliance, and the registered speakers, the
11 general public, and then Board staff, board technical
12 advisors and/or legal counsel, and the Board members
13 will have the last -- last opportunity to ask
14 questions.

15 So for the purpose of taking questions
16 from the public, there is a microphone across -- is --
17 is that the one, Zabey? Yeah. Straight across from
18 the Board. And there -- or there is a microphone that
19 will be brought to you for questions also if you're in
20 the audience.

21 So if you wish to speak, you -- if you
22 could please stand up and identify yourself, and a
23 microphone will -- will be brought to you. When the
24 questions directed at the Applicant are completed, we
25 will proceed as in the agenda with presentations again

1 from the registered Intervenor, Government Northwest
2 Territories ENR, Environment Canada, the Dene Kue First
3 Nation, the Yellowknife Dene First Nation, and the
4 North Slave Metis Alliance.

5 Again there will be opportunities for
6 questions after each presentation, and the order for
7 those questions will be as previously described. Those
8 members of the public who have registered here today
9 and -- will also be given an opportunity to address the
10 Board after all the reg -- registered Intervenor have
11 done so.

12 The Board would prefer that this hearing
13 be as informal as possible. However, as a
14 quasijudicial body, we are bound by the rules of
15 procedural fairness, and as the Chair I am responsible
16 for the conduct of the hearing. And I would ask that
17 all comments and any requests be addressed to the
18 Chair. And -- and believe me, if that's not done, you
19 will hear, so.

20 So I'd like to -- like to make note that
21 these proceedings are being recorded and will be
22 transcribed and so that we ask when you speak, you
23 please proceed your -- with your presentation or
24 question with your name and who you represent. This
25 must be every time you are speaking for the record.

1 Our court reporter is Mr. Bob Keelaghan.
2 And if you have any questions about the transcripts,
3 please direct them to him at one of the breaks. And
4 the transcripts will be available through our online
5 registry at a later date.

6 I also ask that you -- you please be
7 mindful that we have interpreters and that this
8 proceedings are being interpreted. Please pace
9 yourself accordingly when speaking or presenting.

10 Once all the interventions have been
11 presented, the parties will each have a few minutes to
12 provide brief closing comments, most likely to take
13 place on day 3. Following that, the hearing will come
14 to a close. And if you want to please note that final
15 closing arguments will not be provided today. They
16 will be provided in writing to the Mackenzie Valley
17 Land and Water Board by June 19th, 2014.

18 Parties can be -- can use closing
19 arguments, update your positions based on the
20 discussion at today's hearing, and to summarize their
21 final recommendations to the MVLWB. Other important
22 dates in this proceedings are outlined in the work plan
23 that was distributed to all parties, copies also
24 available from the Board staff.

25 So I'd like -- now I'd like to take a

1 moment to introduce the members of our -- of our Board
2 and our staff. To far left of me here we have Mr.
3 Joseph Mackenzie, a Board member; Mr. Floyd Adlem, a
4 Board member; Mr. Frank McKay. And that will be --
5 we'll be sitting here through the whole proceedings.

6 The staff, we have Board -- or we have
7 Board counsel, John Donihee; executive director, Zabey
8 Nevitt; next to his -- Dr. Kathy Racher; and we have
9 Neil Hutchinson, a technical advisor; and we have
10 Rebecca Chouinard, our regulatory manager; and where --
11 where are we here in this -- is that you, Shannon?
12 Shannon -- Shannon Shaw, she's a Board technical
13 advisor.

14 We have Amanda Gauthier, in the far
15 corner over there. She is the lady that usually
16 everybody has to go to find out what's happening. And
17 we have Jen Potten, and we also have Angela Love, our
18 regulatory officer and one (1) of the key ones on the
19 file. Did I miss anyone?

20 Chuck, I remember your first name. I
21 don't see you down here. Okay. And he's also with
22 John Donihee as legal counsel.

23 And we have Ann Biscay providing
24 interpretation in Chipewyan on channel 4, Mary Rose
25 Sundberg providing interpretation in Tlicho on channel

1 2, and the English is on channel 1.

2 So before we begin with the
3 presentation, I would like to ask that the spokesperson
4 for De Beers Canada, followed by the registered
5 Intervenor identify themselves for the record and
6 provide us with an opening statement, starting with De
7 Beers.

8 MS. VERONICA CHISHOLM: Thank you, Mr.
9 Chair. It's Veronica Chisholm with De Beers. I'd like
10 to introduce my team that's here today. To my left I
11 have Glen Koropchuk and Allan Rodel, who's the senior
12 project manager. Andrew Williams, Sara -- oh, Craig
13 Blackie, Sarey -- Sarah McLean. Behind, we have Leah
14 Russell, Ken DeVos, Nathan Schmidt. You can just kind
15 of raise your hands. Kristine Mason, Peter Chapman,
16 Dan Johnson, Bill Horne. And to my right I have John
17 Faithful from Golder Associates.

18 We'd like to thank you very much for
19 allowing us to present today, and we look forward to
20 the questions that are received. And we believe that
21 the comments that have been provided today only help
22 our Application, so we'd like to thank everyone.

23 THE CHAIRPERSON: Thank you for that,
24 then. So if the spokesperson for the registered
25 Intervenor please identify themselves to the record

1 and provide us with your opening statements. And we're
2 going to be beginning with the Government of the
3 Northwest Territories ENR.

4

5 (BRIEF PAUSE)

6

7 MR. ROBERT JENKINS: Ah, this one (1)
8 works. Good morning, Mr. Chair. My name is Robert
9 Jenkins. I'm the director of Water Resources with the
10 Government of the Northwest Territories, the Department
11 of Environment and Natural Resources. I'll introduce
12 my team. Probably best suited to do that during our
13 presentation so that you can see the people. We've got
14 them scattered throughout the crowd, and some will be
15 joining us on the phone. So I'll do that at that time.

16 We look forward to presenting to the
17 Board today, receiving any questions. Just want to
18 note that this is the first public hearing for a Type A
19 water licence since the Government of the Northwest
20 Territories became the primary land and water manager
21 in the Northwest Territories through implementation of
22 the devolution agreement. So thank you again, Mr.
23 Chair.

24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: Thank you for that,
2 Robert. And so the second Intervenor will be
3 Environment Canada.

4

5 (BRIEF PAUSE)

6

7 MS. ANNE WILSON: Thank you. Anne
8 Wilson here. With me today will be Dave Fox to talk
9 about incineration issues. Sarah-Lacey McMillan is
10 here as well, unfortunately has a throat infection, so
11 I will be holding the mic. But she has pulled our
12 submission together on this file and -- and done all
13 the -- the heavy lifting on that.

14 Environment Canada would like to thank
15 De Beers for all the hard work they've done on their
16 submissions. And we feel that they've given us a good
17 analysis to go forward and work with. Our concerns are
18 going to be focussed on the freshwater environment, as
19 outlined in our intervention, and some on waste
20 management, as well.

21 So we'll look forward, as always, to the
22 Board's constructive processes and some good
23 interaction. Thank you.

24 THE CHAIRPERSON: Okay, thank you,
25 Anne. And we'll go to Deninu K'ue First Nation.

1 (BRIEF PAUSE)

2

3 MR. TODD SLACK: My name's Todd Slack.
4 I'm with the Yellowknives Dene First Nation. And it's
5 a pleasure to appear again in front of the Board. I'm
6 not going to go into our presentation, but it's fair to
7 say that all of these issues have been discussed in
8 previous events, previous processes. And for us, it's
9 really a common sense issue.

10 It's unfortunate that we're here to talk
11 about them again. We wish that they would have been
12 resolved once and for all a long time ago, but we look
13 forward to talking to them and laying them in front of
14 this Board. And hopefully we can get the kind of
15 results that leads to sound environmental stewardship
16 for the Chief Drygeese Territory. Thanks very much.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: And thank you, Todd.
21 We were actually looking for the Deninu K'ue First
22 Nation, but you'd do quite fine if they get to make
23 their presentation.

24 MR. MARC D'ENTREMONT: Good morning.
25 My name is Marc d'Entremont. I'm a technical advisor

1 to the Deninu K'ue First Nation. Thank you, Mr. Chair.

2 And thank you, De Beers, for holding this hearing.

3 We're looking forward to it.

4 With me today is David Pierrot, who is a
5 councilman for the DKFN. And we're -- like I say,
6 we're looking forward to a interesting discussion. And
7 thanks again.

8

9 (BRIEF PAUSE)

10

11 THE CHAIRPERSON: Thank you for that.
12 So then we'll ask the North Slave Metis Alliance to say
13 a few words.

14 MR. MATT HOOVER: Thank you, Mr. Chair.
15 My name is Matt Hoover. I'm here on behalf of the
16 North Slave Metis Alliance. We look forward to this
17 process and voicing some of our members' concerns.
18 Thank you.

19

20 (BRIEF PAUSE)

21

22 THE CHAIRPERSON: So before we turn it
23 over to De Beers for their presentation, then we'll
24 perhaps give the sound people a few minutes before we
25 hire their competition.

1 --- Upon recessing at 9:23 a.m.

2 --- Upon resuming at 9:28 a.m.

3

4 THE CHAIRPERSON: We'll turn it over
5 the De Beers Canada for their presentation. Thank you.

6 MS. VERONICA CHISHOLM: Thank you, Mr.
7 Chair. Veronica Chisholm, from De Beers. I'm going to
8 have Glen Koropchuk do the introduction to my
9 PowerPoint presentation. So it'll just be a few
10 minutes and then we'll switch over to the PowerPoint.
11 Thank you.

12 THE CHAIRPERSON: Great. And just a
13 reminder to identify yourselves each time you speak and
14 everything will be quite fine.

15

16 PRESENTATION BY DE BEERS CANADA INC.:

17 MR. GLEN KOROPCHUK: Thank you, Mr.
18 Chair. Good morning. My name is Glen Koropchuk. I'm
19 the chief operating officer for De Beers in Canada.
20 It's my pleasure to be here today with all the Board
21 members and all the participants in order to progress
22 this very important process that we embarked upon many,
23 many, many years ago.

24 It is my pleasure to represent De Beers
25 as the Gahcho Kue Project takes this next important

1 step. Before I begin, I'd like to thank the Mackenzie
2 Valley Land and Water Board, its staff, and all its
3 participants for working with De Beers to advance our
4 water licence and land use permit applications. It has
5 been a long, hard journey, but we're starting to get
6 there and we're very appreciative.

7

8

(BRIEF PAUSE)

9

10 MR. GLEN KOROPCHUK: I'd also like to
11 thank the whole De Beers team, especially the
12 permitting people, for their hard work over the last
13 few years. We've laid down a strong foundation and we
14 trust that all the information that we've submitted has
15 been able to be digested and understood by all the
16 participants.

17 Gahcho Kue is a joint venture between De
18 Beers and Mountain Province Diamonds. De Beers is the
19 operator. In Canada we currently operate two (2)
20 mines: our Snap Lake mine in the Northwest Territories
21 and our Victor mine in Northern Ontario. At both
22 operations there is a very strong focus on environment
23 and safety protection.

24 As you may know, Snap Lake mine is
25 currently in the process of amending its water licence.

1 Like the work we've done at Gahcho Kue, the Snap Lake
2 application is supported by strong scientific research.
3 We're breaking new ground. We're trying to understand
4 how we can protect the environment and mine safely and
5 responsibly for the benefit of current and future
6 generations.

7 Much has happened for Gahcho Kue since
8 my opening remarks at the public hearings held during
9 the EIR in December of 2012. Most significantly, on
10 October 22nd, 2013, the federal Minister of Aboriginal
11 Affairs and Northern Development approved the Mackenzie
12 Valley Environmental Impact Review Board's
13 recommendation and report. That allowed this project
14 to proceed.

15 It's clear that our plans to build and
16 operate the Northwest Territories's next diamond mine
17 will meet the highest standards, and the Gahcho Kue
18 will benefit the economy and the peoples of the
19 Northwest Territories. It will also assist in the
20 sustainable development of Canada's vast North for
21 future generations and enhance Canada's position as a
22 premiere diamond producer.

23 The permitting team will very soon
24 explain how we have developed this project and how our
25 robust and -- and our proactive plans to operate the

1 mine and to monitor and protect the air, land, water,
2 and wildlife will provide the level of care that
3 communities expect and deserve.

4 We understand and respect the importance
5 of the air, the land, the water, the wildlife, and the
6 culture to the communities. We also know that future
7 generations need the ability to pursue new business and
8 career opportunities without losing their connection to
9 the land and to their heritage and way of life.

10 Since we first proposed this project in
11 November of 20 -- or 2005, our dialogue with
12 communities has profound and ongoing. We intend to
13 continue and maintain that dialogue. We have heard
14 loudly and clearly that the people want to know that De
15 Beers will live up to its commitments and will
16 endeavour to protect the environment and deliver the
17 economic benefits that will come with the Gahcho Kue
18 Project. We believe this will make a difference to
19 their lives and to their communities.

20 When I spoke during the Environmental
21 Impact Review hearing, I talked about the steps we were
22 taking to maximize Gahcho Kue's positive impact on the
23 Northwest Territories's economy and the steps we're
24 taking to ensure environmental protection comes first
25 and foremost.

1 We said we would implement monitoring
2 and mitigation programs throughout construction,
3 operations, and closure, and we have developed and
4 submitted those plans. At the same time, the project
5 execution team has developed a full suite of operating
6 procedures that will guide how we will work safely with
7 regulator -- regulatory bodies and communities to
8 protect the environment.

9 These procedures are a true example of
10 adaptive management in action. We have taken the best
11 from our learnings at Snap Lake and Victor, and
12 combined our experience in operating a mine in the
13 Northwest Territories and an open pit mine in Northern
14 Ontario to create some of the best operating procedures
15 anywhere in the industry. We're proud of that.

16 Everyone may recall the unfortunate
17 incident this past winter in which two (2) caribou were
18 killed when they ran into a parked truck on the Gahcho
19 Kue spur road. This was even before the road was open
20 to traffic. We at De Beers took this very seriously.
21 It was an incident that we knew could have a very big
22 impact, and -- and we were very concerned.

23 We worked with our partnering
24 contractors with the winter road joint venture, and we
25 reviewed our operating procedures. We engaged with

1 communities and with the Government of the Northwest
2 Territories in order to better understand what
3 happened. And then we applied those learnings from
4 this incident to our caribou behavioural monitoring
5 program. We're learning every step of the day, and
6 we're also trying to get as much information through
7 traditional knowledge and through -- through people who
8 have been here before in order to help.

9 I'm proud to say that our winter road
10 concluded with over six hundred (600) truckloads safely
11 travelling on the winter road with over a thousand
12 caribou new -- nearby without any further incident.

13 Already, De Beers has provided
14 considerable financial and management support for
15 regional monitoring programs to grow our scientific
16 understanding of barren ground grizzly and wolverine.
17 By working with communities, we have developed world-
18 class monitoring programs which will help us manage
19 construction and operations to protect the land, water,
20 and wildlife. These plans will form part of the -- of
21 the discussions here this week.

22 We committed to concluding a
23 socioeconomic agreement with the Government of the
24 Northwest Territories. That agreement, which includes
25 hiring, training, procurement priorities, was signed in

1 July of 2013. We committed to working closely with
2 communities and Aboriginal groups and have built upon
3 both formal and informal relationships. We have
4 already concluded three (3) impact benefit agreements
5 with the North Slave Metis Alliance, the Tlicho
6 Government, and the Yellowknives Dene First Nation, and
7 we continue to work on others.

8 The groundbreaking Ni Hadi Yati
9 Environmental Monitoring Group, which was proposed by
10 our First Nations partners, was introduced during the
11 EIR hearings, and we hope to sign that agreement very
12 soon.

13 Throughout our engagement with
14 communities, we heard that jobs and business
15 opportunities are essential. There will be about seven
16 (700) full time...

17

18 (BRIEF PAUSE)

19

20 MR. GLEN KOROPCHUK: Okay. Thank you.
21 There will be about seven hundred (700) full-time
22 equivalent jobs during construction and approximately
23 four hundred and fifty (450) jobs during operations.
24 Last week, we began the first stage of recruitment,
25 targeting heavy equipment operators to drive the haul

1 trucks, run the dozers, drills, and other equipment
2 needed to support the pioneer works on site this
3 summer. Our adverting and our engagement is targeted
4 towards communities near to the operations.

5 We are committed to supporting Northwest
6 Territories's students achieve post-secondary education
7 success. Last year alone we provided fifty thousand
8 dollars (\$50,000) in scholarships to Northwest
9 Territories's students throughout Northwest
10 Territories's post-secondary scholarship program. And
11 our scholarship programs funded by De Beers last year
12 were given to students from the North Slave Metis
13 Alliance and Yellowknives Dene First Nation students,
14 amongst others.

15 I'm extremely proud to say that we
16 awarded our first post-secondary education sponsorship
17 to a Northwest Territories student studying chemical
18 engineering. He will receive three (3) years of
19 financial support, totalling thirty-five thousand
20 dollars (\$35,000), summer employment whilst he attends
21 schools, and a full-time job when he completes his
22 studies. We have committed to these as we believe that
23 the future is with our -- with our students, with our -
24 - with our kids, and we want to build on that.

25 Across Canada, De Beers also introduced

1 a mining professional training program. We have
2 recruited twenty-one (21) engineers, geologists,
3 environmental scientists, and other professionals to
4 work at both Snap Lake and Victor mines, both to grow
5 our capacity for those operations, but also as -- as
6 feedstock for the Gahcho Kue operation.

7 These university graduates are hired on
8 three (3) year contracts and will receive world class,
9 on the job training in their disciplines. They'll gain
10 experience across all of Canada. And as I said, many
11 of them will end up here in the NWT. This is just
12 another De Beers opportunity that we hope will -- will
13 help build the future generations.

14 We're also committed to using our
15 Northwest Territories business development policy to
16 maximize benefits to Northern business and
17 entrepreneurs. Through the Pioneer Works Program,
18 Northwest Territories and Aboriginal companies will
19 provide camp catering and site services. They'll
20 provide air support and logistics. They helped build
21 the winter road. They're providing drilling and
22 blasting services. They've supplied light and heavy
23 vehicles. They've helped build the pioneer fuel farm,
24 and also they're already supporting the -- the basic
25 roughing in of roads and other worth -- earthworks

1 we're doing now.

2 It is important to emphasize the fact
3 that these contracts, worth a combined value of
4 approximately \$35 million, were awarded after a
5 competitive bidding process. We believe this is
6 important in order to build the capacity of our
7 Northern and Aboriginal businesses so that they can
8 compete competitively across Canada and elsewhere.

9 When we met with local businesses during
10 our annual business opportunities breakfast last
11 November, we announced that Ledcor Projects will be the
12 general construction contractor for the Gahcho Kue
13 project. Ledcor has very close ties with the Deton'Cho
14 Corporation, which is the economic development arm of
15 the Yellowknives Dene First Nation.

16 Horizon North, the company selected to
17 provide the modular camp units, has a relationship with
18 the Deninu K'ue First Nation. ESS Compass Group has a
19 joint venture with the Denesoline Corporation, the
20 economic development arm of Lutsel K'e. Together they
21 won the camp catering contract, again on a competitive
22 business basis.

23 As you can see, De Beers is already
24 living up to its commitments for Gahcho Kue. Over the
25 next three (3) days, everyone will get a chance to go

1 through our plans. And we hope that once we're through
2 those plans, we'll reach reasonable consensus on the
3 way forward.

4 De Beers and our partner, Mountain
5 Province Diamonds have already invested over \$200
6 million to bring Gahcho Kue this far, and our plan
7 calls for spending approximately a billion dollars in
8 total to build this mine. During the eleven (11) years
9 of operations we expect to recover about 52 million
10 diamonds -- sorry, 52 million carats. This will be a
11 big impact, and we know it will be positive.

12 Gahcho Kue represents an important
13 investment for De Beers and Mountain Province. It also
14 represents an important opportunity for benefits for
15 people living close to the project to receive jobs,
16 business opportunities, and for other areas of social
17 and cultural investment. There's also an opportunity
18 to bring new life and new growth to the Northwest
19 Territories economy, and potentially add new revenue to
20 the GNWT.

21 As you have heard from the project team
22 -- as you will hear from the project team, they are
23 ready to move this project forward as soon as the land
24 use permit and water licences are issued. This project
25 is highly dependent on investment decisions being made

1 by both shareholders in time for procurement to occur
2 in order to meet the 2015 winter road, as time is of
3 the essence and we are committed to working with the
4 Board and all other stakeholders to ensure that
5 timelines are met and the project is not delayed.

6 Our commitment to this project and our
7 commitment to living up to our promises is clear and
8 unwavering. We are proud of the work we have done so
9 far. And we will build and operate the proposed Gahcho
10 Kue mine to the highest of standards.

11 Finally, I would like to thank you
12 again, Mr. Chairman, members of the Board, and all
13 parties that have participated in this important
14 process, for all your time and attention. Mr.
15 Chairman, I'm now pleased to welcome Ms. Veronica
16 Chisholm and her team to provide an overview of the
17 project and our plans to protect the land, water, and
18 wildlife. Thank you for this opportunity.

19

20 (BRIEF PAUSE)

21

22 MS. VERONICA CHISHOLM: Veronica
23 Chisholm, with De Beers. We'll just set up -- bring up
24 the presentation. It's about forty (40) minutes long.
25 So as soon as we bring that up...

1 THE CHAIRPERSON: Great. Thanks for
2 your remarks there. And we'll be waiting for your
3 presentation.

4

5 (BRIEF PAUSE)

6

7 MS. VERONICA CHISHOLM: Veronica
8 Chisholm, with De Beers. So I have a short
9 presentation here that we'll -- we'll step you through.
10 First, just a project overview to remind everyone what
11 our project design and the general project plan.

12 And then the next set of slides are
13 really about our responses to the interventions and
14 what we put in the record -- on the record in April
15 2014. So I'll just step you through generally our
16 project overview. And I know a number of people have
17 heard this before.

18 So the Gahcho Kue project is about 280
19 kilometres northeast of Yellowknife. The closest
20 community is Lutsel K'e at about 140 kilometres to the
21 south. Our general project design, as -- as shown here
22 behind me, it includes the requirement to dewater the
23 lake.

24 We need to dewater the lake in order to
25 safely access the ore bodies that are contained

1 underneath the lake. So one (1) of the first things
2 that we'll be doing is the installation of Dike A,
3 which is located here. The numbering system that you
4 see here are just partitioning areas of the lake that
5 we used and we developed that explain and that we have
6 within our water management plan.

7 So as we dewater the lake, and it will
8 be approximately 1.9 million cubes per month to Lake
9 N11, which is located north, here, and about 1 million
10 -- 1 million cubes per month into Area 8, which is
11 situated here. That will allow the water to be drawn
12 down within Kennady Lake. And that will allow us to
13 begin to build some of these interior dikes. Those
14 dikes are required so that we don't have any water
15 coming into the pits.

16 The sequencing of the mine pits is --
17 will start -- will have Hearne and we'll finish off
18 Hearne pit first. This was a change that we made in
19 the update to the project description. That will be
20 followed by 5034 and then Tuzo pit.

21 Our construction time is approximately
22 two (2) years and our operation is about eleven (11)
23 years, with closure expected to be twelve (12) plus
24 years. The length of time for closure is about
25 refilling Kennady Lake, where we'll be diverting water

1 from N11 and pumping back into the lake.

2 The closure land forms that will remain
3 at Kennady Lake will include a fine process kimberlite
4 facility, a coarse process kimberlite facility, south
5 mine rock pile, and west mine rock pile.

6 One (1) of the important elements is we
7 will not breach that Dike A, which is the connection to
8 the downstream, until we are sure the water quality
9 within Kennady Lake meets the objectives so that we can
10 connect to the downstream. And I'd like to remind
11 people that we'll be monitoring water quality within
12 Kennady Lake and in the downstream during construction
13 for two (2) years, during operations for eleven (11)
14 years, and during the twelve (12) years of refilling,
15 so that we'd be confident by the time we break Dike A
16 that we can reconnect to the downstream environment.

17 The next set of slides are largely
18 around our responses to the interventions that were
19 submitted in April. And I think, just as an opening,
20 we thought that the comments were very thoughtful and
21 instructive and De Beers actually agreed to about two-
22 thirds (2/3s) of the recommendations provided by
23 parties. Some of the recommendations I'll -- I've
24 categorized into what I call general conditions.

25 So the Deninu K'ue First Nation and

1 GNWT-ENR had a recommendation that we should -- there
2 be a restriction on operational discharge for three (3)
3 years. We have said in our project description that we
4 only require operational discharge for three (3) years,
5 but if we meet EQC requirements that we may discharge
6 beyond that period of time.

7 We also have a provision to maintain
8 that Area 8 downstream. And so some discharge may, if
9 we meet water quality or the EQCs, discharge from our
10 water management pond, or from Lake N11 to maintain
11 that downstream environment. So we don't think there's
12 a need to restrict our operational discharge for just
13 the three (3) years. And we will, of course, meet the
14 EQC requirements.

15 The North Slave Metis brought up the
16 point about the requirement for a water treatment
17 plant. This was contemplated during the Environmental
18 Impact Review process. And in the panel decision it's
19 clearly mentioned that this would be utilized as a
20 contingency option. De Beers carried that forward into
21 the water licence application in the Water Management
22 Plan, and water treatment is listed as a contingency
23 should that be required. We do not believe, with our
24 current Mine Plan, that that's a requirement.

25 Ni Hadi Yati is a forum by which De

1 Beers and the Aboriginal parties can meet throughout
2 the life of mine to discuss any issues or concerns that
3 are raised, as well as any applications that get put
4 onto the record. It's a -- a binding agreement with
5 its own separate dispute resolution clauses and
6 budgets. It's between De Beers and six (6) Aboriginal
7 parties that were a party to the Environmental Impact
8 Review process. We do not believe that it requires a
9 requirement within our water licence.

10 Part of this slide is cut off. But one
11 (1) of the things -- one (1) of the other items that
12 the Deninu K'ue had asked for was just on general
13 submission times. De Beers had suggested a May 1st
14 submission times for annual reports. The Deninu K'ue
15 had requested March 31st.

16 The reason why De Beers is suggesting a
17 later submission time is just simply because we want an
18 opportunity to engage on par -- with parties prior to
19 the submission so that we can include comments in
20 advance. So it's just something we'd like the Board to
21 consider.

22 Adaptive management and response
23 frameworks: So both ENR and Environment Canada had
24 requested that the adaptive management framework that
25 we developed as De Beers as part of the water licence

1 application include all of the updates in -- in terms
2 of actions and response -- response frameworks and
3 management plans into that one (1) document. And I'm
4 sure they'll correct me if I misunderstood their
5 recommendation.

6 What De Beers is -- why De Beers
7 developed the adaptive management framework was we
8 wanted to show the linkages between the management
9 plans, and how we consider how what -- cause and effect
10 relationships.

11 So for example, if we're examining water
12 quality we wanted to look at the parameters that we're
13 measuring in terms of air quality. We wanted to look
14 at the parameters that we're measuring in terms of
15 refined process kimberlite, or geochemistry. And the
16 Adaptive Management Plan is a mechanism by which to
17 explain how these plans can inform on one another.

18 Within each of the individual plans is
19 where we're housing the specific action levels and
20 management responses, and we believe it's appropriate
21 to incl -- to include those in those individual plans
22 rather than the overall adaptive management framework,
23 because those individual action plans and management
24 responses for those individual management plans may be
25 changed -- you know, may change one (1) plan and not

1 other plans. And I'll be required to update two (2)
2 plans at the same time, and we're just wondering about
3 the utility and the efficiency of doing that 'cause
4 they have two (2) separate purposes.

5 The Deninu K'ue had mentioned that they
6 would like the Action and Response Plan to be
7 considered as a condition of our water licence. We're
8 saying that's probably more appropriate as part of a
9 schedule. That's generally what's been done in the
10 past, and so it isn't a specific condition within the
11 water licence but rather a schedule that defines the
12 term of each of the management plans.

13 Dike Construction and Management Plan,
14 and the Water Management Plan, and Erosion Management
15 Plan: So both ENR and the Deninu K'ue had requested
16 that we submit separate dike construction management
17 plans. We're suggesting sixty (60) days in advance of
18 those management plans. We currently have submitted in
19 March of 2014 a memo on our Dike A. We have the
20 construction, the detailed for construction plan for
21 Dike A that we'd like to submit. That's the first dike
22 that needs to be built. The other dikes would follow
23 later on. And so that is the one that we're looking
24 for key approval on.

25 Both ENR and the Deninu K'ue had asked

1 us to break out our Water Management Plan into each of
2 the individual phases that included construction,
3 operation, and closure. De Beers has agreed to do
4 that. We will do that.

5 We will separate out a separate Water
6 Management Plan, and a Sediment Erosion Plan that
7 speaks to just our dewatering activity and our
8 construction activity. And then six (6) months prior
9 to operation, we'll submit a Con -- Operational Water
10 Management Plan. And the same will be for the closure
11 plans. We'll incorporate the input that was provided
12 by the -- through the recommendations on what specific
13 clauses you would like to see in there about the
14 mitigation, monitoring, frequency of monitoring. So
15 we'll update those plans to do that.

16 In addition, ENR and the Deninu K'ue had
17 asked for some calibration information, details about
18 our field methods, correlation with TSS. We'll agree
19 to do that, and include those in our management plan
20 for both -- for construction, operation, and closure.
21 So we'll include those details as recommended by those
22 parties.

23 The Site Specific Water Quality
24 Objectives: ENR had mentioned that -- that we should
25 include the suggestions provided in the report -- the

1 panel report of decisions, and include those in the
2 narrative statements. We feel we've done that. That
3 includes the incorporation of traditional knowledge,
4 those suggestions from the panel, and we've included
5 those into our narrative statement. And they're
6 consistent with the statements developed by De Beers
7 and were used in determining the significance of the
8 project on the receiving environment and the
9 development of the water quality objectives. So we
10 would believe that we've incorporated the panel's
11 decisions and sugg -- and suggestions into those
12 narrative statements.

13 ENR had recommended that we use for our
14 lake specific database, or baseline, just N11 and Area
15 8 when we were building on the EQCs. We used the
16 entire Kirk Lake watershed as our baseline data because
17 we believe it's a robust data set and it provides the
18 variability and accounts for any variability that we
19 would see in just one (1) lake.

20 So we -- we are -- we are of the belief
21 that the Kirk Lake watershed, to document the baseline
22 conditions, is appropriate. The same is true for
23 mercury. We've looked at the local scale, but we're
24 using the larger Kirk Lake watershed.

25 Hardness, as an exposure toxicity

1 modifying factor, this has come up; raised by ENR.
2 It's come up in other water licensing hearings. We
3 believe we're consistent with other rulings on other
4 water licence, specifically Ekati's, regarding the use
5 of hardness, an increased water hardness, that will
6 reduce the possible toxicity effects or toxic effects
7 from inorganic substances such as metals. So we're
8 using not the baseline hardness, but what the projected
9 hardness will be when we achieve closure, and we
10 incorporated that into our EQCs.

11 The effluent quality criteria: I think
12 we're all in agreement that we have developed the
13 effluent quality criteria to minimize changes to the
14 receiving environment. That's the basic tenet of
15 developing those. That is the -- what De Beers has
16 followed when they developed the EQCs.

17 We're fortunate in the fact that our
18 mine footprint is small and so -- and that the plan
19 discharges are limited. So the discharge for the first
20 three (3) years of operations of what we have in our
21 current mine plan, we have the capacity to store water
22 within the water management pond throughout the other
23 years of mining operations.

24 ENR and Environment Canada raised the
25 point that because of inherent uncertainties with water

1 quality modelling that some additional EQC parameters
2 should be included in the -- in the EQCs that we've
3 proposed. And we have done a pretty -- a very
4 comprehensive screening level. We've been asked to do
5 that. We followed a procedure that was required when
6 we developed the EQCs that was -- excuse me -- that was
7 reported in our EQC reports that we submitted both in
8 December and more recently in April.

9 And I'll -- I'll be specific on what the
10 additional parameters were required by ENR. They've
11 requested that the following parameters be regulated
12 with EQC limits discharged to Lake N11 in Area 8. They
13 include total dissolved solids, chloride, sulphate,
14 fluoride, arsenic, cadmium, chromium, copper,
15 molybdenum, nickel, and zinc. We included for Lake N11
16 ammonia, nitrate, total phosphorus, aluminum, pH, and
17 total petroleum hydro -- hydrocarbons.

18 And what we did was we looked at the
19 concentration of each of the parameters, including the
20 ones that ENR had mentioned in their recommendations.
21 And we looked at these parameters in the water
22 management pond and at the edge of the mixing zone as
23 part of the screening process. And that's been
24 detailed in our EQC reports.

25 And then we did a comparison with our

1 water quality objectives which were based on baseline
2 conditions, guidelines, or other specific water quality
3 objectives. As outlined in our response in the
4 intervention, these parameters do not require EQCs
5 according to the transparent process that we present,
6 but they just didn't screen out as a requirement for an
7 EQC.

8 While the majority of the maximum
9 predicted concentrations for these parameters in the
10 water management pond were higher than their baseline
11 conditions during the period of operational discharge,
12 they all screened out as parameters of potential
13 concerns because their concentrations at the edge of
14 the mixing zone were less than their applicable water
15 quality objectives. And that's our position. I'm sure
16 there'll be some more discussion on that.

17 ENR and Environment Canada and
18 Yellowknives Dene have suggested that we include total
19 petroleum hydrocarbons as an EQC. We will do that.
20 We've agreed to do that. And we've listed that into
21 our report. We're aligned there. We've suggested a
22 limit of 5 milligrams per litre, which is typical of
23 our current water -- Type B water licence.

24 ENR had some comments on the dilution
25 factor and are proposing dilution factor of five (5).

1 I think there may be some -- maybe a misunderstanding
2 in terms of the dilution factor that we used with --
3 with the mixing ratio of forty-two (42). We -- we'd be
4 happy to get into this in more detailed discussions or
5 questioning, but we actually believe that our water
6 quality modelling is meeting the objectives or the
7 inherent approach that ENR has suggested, and we look
8 forward to some discussions on that.

9 ENR, Environment Canada, and the
10 Yellowknives Dene have suggested that we include
11 fathead minnows as well as the early life stages of
12 rainbow trout in the toxicity testing. We believe,
13 given the fish that are within Kennady Lake and the
14 downstream, that the rainbow trout is more appropriate
15 and provides better information and appropriate
16 information to our study.

17 The Deninu K'ue had mentioned that there
18 should be a requirement to include pH; pH is a
19 measurement that we include as part of our SNP and our
20 AEMP monitoring.

21 The Yellowknives Dene had suggested that
22 we develop EQCs for that Area 8 that should be similar
23 to baseline conditions. De Beers developed the EQCs
24 for discharge to Area 8. And we believe that we can
25 achieve discharge to Area 8 from our water management

1 pond during the first year of operations. And that's
2 what the EQC report that we submitted in April will say
3 and says.

4 We've had some really good beatings on
5 our Aquatic Effects Monitoring Program. We began this
6 last March of 2013 with a group work meeting on -- on
7 components that should be included in our Aquatic
8 Effects Monitoring Program.

9 ENR had suggested that we follow the
10 guidelines that -- that were developed for the AEMP.
11 We have followed those guidelines, and that we've
12 incorporated those into the overall AEMP design.

13 ENR has suggested that De Beers be part
14 of a working group. We believe that working group is
15 already formed. We've had three (3) meetings since
16 2013, most recently, in February and in March of 2014.
17 And it's really been helpful in shaping our Aquatic
18 Effects Monitoring Program. And those working groups
19 include both regulators and representatives from
20 Aboriginal parties.

21 In terms of the AEMP action levels,
22 there were specific comments by ENR, Environment
23 Canada, on the action levels. We furthered those
24 action levels in a recent AEMP document that we
25 submitted on the record in April. And that was in

1 direct response to the comments we received during the
2 March 19, 2014, working group meeting. And the action
3 levels and response largely focusses on toxicological
4 impairment, nutrient enrichment, physical habitat
5 alteration. Those have been incorporated into the most
6 recent version of the AEMP.

7 ENR had suggested that we follow the
8 BACI framework, which is the before and after control
9 impact design. In the original version of the AEMP
10 that we submitted with our November 28th application,
11 we had a very simplified BACI design. Since our most
12 recent submission following those discussions with
13 those two (2) working group meetings, we've actually
14 enhanced that design and incorporated that into the
15 recent submission.

16 During the working group meetings in
17 February of 2014 and in March 2014, there's been some
18 concern expressed -- and this was carried through into
19 the interventions from ENR -- about the baseline of our
20 plankton data set. De Beers agrees to go out again
21 this summer and collect additional baseline data on
22 plankton in both the reference and core lakes to
23 enhance our existing data set of plankton.

24 De Beers is not proposing, however, the
25 need for weekly or biweekly baseline plankton sampling.

1 We believe that through some of the Snap Lake mine
2 baseline sampling for plankton that we understand the
3 variability in the plankton data that we can apply to
4 the Gahcho Kue site. But we will be collecting monthly
5 data on plankton in those reference and core lakes.

6 The mercury monitoring in lakes will be
7 focussing on the flooded lakes, so adjacent to Kennady
8 Lake and the 'D' lakes, where there will be some
9 flooding because we will be stopping water from
10 entering into or flowing into Kennady Lake. There will
11 be some water that flows back. And in that area we
12 will be monitoring specifically for -- for mercury and
13 tracking it in water and sediment.

14 Waste management. We had a number of
15 recommendations around the waste management, and we
16 more or less have agreed to all of the recommendations.
17 I'll -- I'll highlight a few here. We will update our
18 Waste Management Plans and our incinerator waste --
19 Incinerator Management Plan based on the commitments
20 that we've made to date. And we filed those
21 commitments in April that will reflect those
22 commitments.

23 They include conducting stack testing
24 prior to commissioning, and on regular intervals we've
25 agreed to three (3) years of our incinerator, for

1 dioxins, furans, and mercury. We will also test waste
2 oil and residual ash on a regular basis. And we'll
3 incorporate that into the water -- in our Waste
4 Management Plan.

5 The Geochemical Characterization Plan.
6 So there's some questions by Environment Canada on the
7 use of sulphur, percent sulphur, as the only criteria
8 that we're using to screen for PAG. That is, using a
9 percent sulphur is a standard practice, but it isn't
10 the only thing we will do. If required, we'll do the
11 full acid-base accounting where necessary.

12 In the Incinerator Management Plan, the
13 concern was raised by Environment Canada that we
14 shouldn't burn our sewage or sewage sludge. We've
15 agreed that we will not do that. We will store it in
16 our landfill, which is typical -- typical of what Snap
17 Lake is doing. And that, yes, again I'll make the --
18 say it again, that we will conduct stack testing for
19 Canada-wide standards for dioxins, and furans, and
20 mercury.

21 We'll also update the plans to reflect
22 action levels and management responses in the waste, as
23 well as in the incinerator and other plans. Include
24 those updates in -- in more recent submissions.

25 Wildlife. The Yellowknives Dene, North

1 Slave Metis, and the Deninu K'ue had all asked
2 questions about how we're addressing the measures that
3 were carried through in the panel decision report.

4 For Measure 1, which focussed on
5 reducing our footprint, developing -- we made a
6 commitment to develop a Wildlife and Wildlife Habitat
7 Protection Plan, and a Wildlife Effects Monitoring
8 Plan. We've done that. There was a request to show
9 where the linkages exist between the Wildlife and
10 Wildlife Habitat Protection Plan, and the Wildlife
11 Effects Monitoring Plan. We've done that. We've
12 developed a concordance table that shows that. That
13 will come out in the next iteration.

14 And I'd like to remind people, when we
15 develop our Wildlife Monitoring Plan, we formed a
16 working group during the environmental impact review
17 process that included regulators and representatives
18 from Aboriginal parties. We had two (2) full meetings
19 in the development of that plan, in the early stages of
20 that plan, and that was followed by a community meeting
21 where representatives for the communities also
22 participated and provided input on the development of
23 our wildlife plans. The engagement had continued, and
24 will continue, on the development of wildlife.

25 As Glen Koropchuk mentioned, when we had

1 the incident with caribou on our winter road, we
2 responded quickly. And we also informed the Aboriginal
3 parties, because we knew there was concerns about
4 caribou on our winter access road. And we wanted to
5 let folks know what happened, describe the incident,
6 and also indicate what our follow-up would be. After
7 we concluded our caribou monitoring, we held another
8 call with ENR and Aboriginal parties and invited them
9 to participate just so they knew how we were reporting
10 the data. And we wanted to get their input on how they
11 wanted to see that final report be shaped with the
12 wildlife.

13 Those are just a few examples that
14 demonstrates our commitment and our understanding with
15 respect to caribou and wildlife monitoring in the
16 region and how we're moving forward on our plans. And
17 we would expect that engagement would continue
18 throughout life of mine on wildlife.

19 Measure 3, in terms of the cumulative
20 effects, that was assigned to Aboriginal Affairs and to
21 the GNWT. There's been a number of workshops that's
22 been hosted by the GNWT. They have submitted a draft
23 framework onto the record.

24 And De Beers has participated in those.
25 And oftentimes we've funded some of the workshops. We

1 will continue to do that. And currently we have two
2 (2) regional monitoring programs, applying methods
3 developed by ENR and also used by the other diamond
4 mines on grizzly bear and wolverines, so there can be a
5 cumulative effects assessment done and an understanding
6 of regional effects on those two (2) animals. The
7 methods that we're applying with respect to caribou
8 monitoring are the same methods that have been used in
9 other mines so that we hope that that can contribute to
10 any kind of regional understanding.

11 And we believe the best benefit to
12 contributing to regional monitoring with respect to
13 caribou is to fund ENR and their programs to provide
14 that, and to continue to meet and determine the best
15 way forward that we can do as a company to inform our
16 regional effects on caribou.

17 Glen Koropchuk mentioned Ni Hadi Yati.
18 We're hoping that the conversation with respect to
19 wildlife will continue in the communities, but also
20 through this organization, so we can bring in technical
21 experts when we need to and that it would fall under
22 the umbrella of Ni Hadi Yati.

23 Reclamation commitments. ENR, North
24 Slave Metis Alliance, Yellowknives Dene had suggested
25 that we form a working group. And De Beers agrees to

1 participate in that working group. We made that
2 commitment during the technical sessions. We'll carry
3 that through. We also included in our Application,
4 both in the Closure Plan and the Engagement Plan, that
5 we would host a site workshop this summer with
6 representatives from the Aboriginal parties, where we
7 can look at some of those closure landforms and
8 document some of the baseline conditions that exist
9 there today to help and form the closure planning
10 process. We've made that commitment. We'll carry that
11 commitment through this summer.

12 We also were asked by ENR and
13 Environment Canada to identify and develop methods to
14 reduce the recovery time in Kennady Lake in -- for
15 refilling Kennady Lake. We've agreed to doing
16 investigation, and monitoring, and research on the
17 meromixis within the pits, and to provide periodic
18 updates to the Mackenzie Valley Land and Water Board on
19 any of the outcomes of that research and monitoring.

20 We also -- the Yellowknives Dene had
21 requested that we submit a reclamation research plan
22 six (6) months following, I think it was, the issuance
23 of the water licence. We will do that. We will
24 develop that research plan. We intend to follow -- or
25 develop an Interim Closure Plan along a three (3) year

1 schedule. So in three (3) years we'll develop a -- an
2 additional Interim Closure Plan. That will give us
3 enough time to gather engagement, additional engagement
4 on our Closure Plan, and submit that.

5 Securities. When we were developing our
6 securities, our reclamation security bond, we did that
7 in collaboration with ENR, formally AANDC, and their
8 consultants. And it was a very helpful process,
9 because they also helped us understand and -- the
10 RECLAIM model and the inputs to the RECLAIM model.
11 There was agreement on unit costs and quantities.

12 And where we landed was with respect to
13 prior to construction, the 19 million forty-three (43),
14 we -- De Beers agrees with that. One (1) of the things
15 that we're asking is if there can be a split between
16 2014 and 2015, given that we wouldn't anticipate the
17 water licence until two (2) -- Q4 of 2014.

18 Where we have deviations in our
19 reclamation securities from what De Beers submitted and
20 what ENR submitted through their consultants was around
21 two (2) primary options. One (1) is dealing with re-
22 handling of PAG material. So in the security estimate
23 developed by ENR, they would like the PAG separated and
24 then re-handled and stored into the pit. There's a
25 cost associated with re-handling, and that is one (1)

1 of the reasons.

2 The other deviations in the cost,
3 specifically in operations year 1, 4, and 11, deal with
4 how we're reclaiming and applying overburden. We
5 agreed during the technical sessions; we've captured
6 the commitment to separately stockpile overburden. The
7 question has come up of whether we apply the overburden
8 to the mine rock piles and all the closure land forms,
9 and then re-establish a vegetation cover.

10 Where we have a difference, it's not in
11 our mine plan, is we don't know whether we can
12 establish that vegetation cover on those mine rock
13 piles. There are a hundred and twenty (120). The
14 slopes are one (1) to two point four-six (2.46).
15 Establishing a cover, we may add to some sediment and
16 erosion coming off the sides of those slopes. And so
17 in our mine plan and in our conceptual plan, we didn't
18 think that was a viable alternative, and so we didn't
19 include that in our cost estimate.

20 De Beers did not split between the land
21 use permit and the water licence. ENR had done that.
22 We did not apply a split. We just provided a total
23 amount. Again, this slide just speaks to the
24 differences and the different options, but
25 fundamentally they come down to a re-handling the PAG

1 and the cost associated with re-handling PAG.

2 And I should mention that within the
3 first few years of any PAG that's identified, we have
4 capacity to store that underwater. It's only for about
5 two (2) or three (3) years of operation where we're
6 proposing to store that within the mine rock piles,
7 encapsulated in the mine rock piles, which is a
8 standard practice. And then after year 4 we actually
9 have the Hearne pit and pits to store the PAG. So it's
10 really for about two (2) or three (3) years where we'd
11 be storing PAG within the mine rock piles according to
12 our mine plan.

13 So just as a general summary, as I
14 mentioned earlier, the recommendations, we've agreed
15 with about two-thirds (2/3s) of them that were provided
16 by the Intervenor. De Beers commits to updating the
17 Monitoring and Management Plans to reflect the
18 commitments that we've made throughout the process.
19 And we've captured the summary of the commitments to
20 date in April, including the commitments that we made
21 in response to the interventions.

22 De Beers would commit to adhering to any
23 of the draft Monitoring or Management Plans until those
24 final plans are -- are -- until those plans are
25 finalized. Construction plans will be submitted sixty

1 (60) days in advance of the issuance of the water
2 licence.

3 De Beers would like to thank the
4 Intervenors for their time and consideration in
5 developing the recommendations. We thought they were
6 very thoughtful and very helpful. And De Beers would
7 like to thank the Mackenzie Valley Land and Water Board
8 for the time here to present information on the Gahcho
9 Kue Project. And we certainly look forward to
10 answering any questions the parties would have.

11 Thank you, Mr. Chair.

12 THE CHAIRPERSON: Now, thank you, De
13 Beers for your presentations. And we will take a short
14 break before we come back for questioning -- Intervenor
15 questions starting with the Government of the Northwest
16 Territories. Thank you.

17

18 --- Upon recessing at 10:22 a.m.

19 --- Upon resuming at 10:44 a.m.

20

21 THE CHAIRPERSON: Well, if everyone
22 wants to please take your chairs, then, we'll start
23 with the questions to De Beers Canada's presentation.

24

25 QUESTION PERIOD:

1 THE CHAIRPERSON: And the first order
2 of question then is the Government of the Northwest
3 Territories, ENR, please.

4 MR. ROBERT JENKINS: Thank you, Mr.
5 Chair. It's Robert Jenkins, with Environment and
6 Natural Resources. We've got a couple questions today.
7 Sitting with me to my -- to my left is -- is Lisa Dyer.
8 She's the Director of Environment. To my right, Paul
9 Green. He's with the Water Resources Division. To my
10 far right, Ms. Lara Fletcher. She's the technical
11 advisor working with Brodie Consulting.

12 So I'll pass the -- I've got a couple
13 questions first on -- on -- regards to water and water
14 quality objectives. So I'll pass over the mic to Mr.
15 Paul Green to deliver those.

16 MR. PAUL GREEN: Thanks, Robert.
17 Thanks, Mr. Chair. I guess our first question relates
18 to the baseline data that was used in the assessment,
19 and specifically the use of regional baseline data as
20 opposed to lake-specific.

21 THE CHAIRPERSON: Just for the record,
22 if you could identify yourselves.

23 MR. PAUL GREEN: Sorry. It's Paul
24 Green, with GNWT-ENR Waters. De Beers has proposed
25 water quality objectives that are based on baseline

1 water quality data that have been collected throughout
2 the Kirk Lake watershed.

3 Our question is: What types of
4 statistical analysis have been conducted to determine
5 if Lake N11 water quality is the same as the water
6 quality also in the Kirk Lake watershed?

7 THE CHAIRPERSON: Thank you for the
8 question. And over to De Beers. If you can identify
9 yourself again, please.

10 MS. VERONICA CHISHOLM: Thank you, Mr.
11 Chair. Veronica Chisholm, with De Beers. We're just
12 going to take two (2) seconds just to confer so we can
13 give an informed answer.

14 THE CHAIRPERSON: Yeah, that's quite
15 acceptable.

16

17 (BRIEF PAUSE)

18

19 DR. PETER CHAPMAN: Peter Chapman.
20 Thanks for the question, Paul. We didn't do
21 statistics. What we did was we wanted to get
22 information about what the water quality is like that
23 the organisms would be exposed to. We used regional
24 data, including close to the site, because that's where
25 all those organisms live. It gave us not only a

1 temporal change but also a bigger idea of what the
2 variation was, what the range was.

3 We're still looking at the local scale.
4 And this is a very reasonable way to get a good idea, a
5 good handle on what the organisms are exposed to
6 initially.

7

8 (BRIEF PAUSE)

9

10 THE CHAIRPERSON: Thank you, Peter.
11 Over to ENR, please.

12 MR. ROBERT JENKINS: Thank you, Mr.
13 Chair. It's Robert Jenkins, with GNWT-ENR. Just a
14 follow-up on that. So just in regards then -- I -- I
15 know we talked a lot about the -- the upper-bound of --
16 of water quality or -- or the specific parameters
17 regionally, and that's the information that as used by
18 -- by De Beers.

19 So can you point out -- are there any
20 examples where the upper-bound regionally for a
21 parameter exceeded the upper-bound which you observed
22 in the Lake N11 data set?

23 THE CHAIRPERSON: Okay. Thank you,
24 Robert. Over to De Beers.

25

1 (BRIEF PAUSE)

2

3 MR. JOHN FAITHFUL: Mr. Chair, John
4 Faithful, Golder Associates. So we can't speak
5 specifically to any of -- any of the parameters within
6 the regional data set that -- within our metrics for --
7 for either mean or upper-bounds that exceeded those
8 four (4), Lake N -- N11 specifically.

9 But I do -- I do suppose that there are
10 some. Conversely, it might -- it also works the other
11 way, that there -- there would be parameters in Lake
12 N11 that would have an upper-bound that would exceed
13 what we have for the -- the large number of samples
14 that represent the local scale.

15 MR. MICHAEL HERRELL: It's Mike
16 Herrell, with Golder. I just want to add to that, too,
17 just to provide a little more context to what was used
18 in the -- the water quality modelling. A statistical
19 analysis was done on the regional data set, as well as
20 at the individual lake level, and it was determined
21 that the water quality was similar within the
22 individual lakes, so the decision was made to come up
23 with the regional data set for use in the -- the water
24 quality model.

25 THE CHAIRPERSON: Okay. Thank you for

1 that. And just for the questions and presentations
2 coming up, just to let you know that the Board is not
3 impatient. We have absolutely no problem with thinking
4 out your answers to the questions beforehand. It's --
5 what we're looking for is, We like good questions and
6 great answers.

7 So we'll pass it over to ENR.

8 MR. ROBERT JENKINS: Thank you, Mr.
9 Chair. It's Robert Jenkins with ENR. Just a -- sorry,
10 another follow-up to that one then. You mentioned that
11 there was some work done between the two (2), and you
12 mentioned that they were similar. And -- and I guess
13 it would be helpful -- useful, I think, for -- for
14 everyone here if you could go into a bit more detail
15 what you mean by similar.

16 THE CHAIRPERSON: Thank you for that.
17 Over to De Beers, and whenever you're ready.

18

19 (BRIEF PAUSE)

20

21 DR. PETER CHAPMAN: Peter Chapman,
22 Golder Associates. First of all, we don't think that's
23 really relevant 'cause I've -- as I've explained, and
24 as has been explained in documentation, what we're
25 looking at is what the animal is exposed to in the

1 local area, the regional area. However, we have over
2 time provided a lot of documentation that's been made
3 available to everyone in terms of the water quality
4 that was measured regionally in the local regional area
5 that was measured in the -- all the lakes. You know,
6 those -- that information is available.

7 If the request is for us to take that
8 information and do further processing or analysis of
9 it, let us know what you need because, in fact, it's
10 been out there for a while.

11 THE CHAIRPERSON: Okay. Thank you for
12 that. Further, Robert? Or did you want to do a
13 sidebar with them at some point?

14 MR. ROBERT JENKINS: Thank you, Mr.
15 Chair. It's -- it's Robert Jenkins with ENR. I guess
16 I was just -- just hoping for a little bit more clarity
17 on it. Again, you -- you talked -- a representative
18 mentioned that the two (2) were similar to each other,
19 and I guess that's what I was looking for, not looking
20 for a big additional effort at this point in time.

21

22 (BRIEF PAUSE)

23

24 MR. ROBERT JENKINS: I guess I wasn't
25 looking for De Beers to -- to provide an undertaking or

1 anything on this. I think I was just looking at an
2 opportunity for the Proponent to provide some more
3 clarity on this to the statements that they made.
4 Thank you.

5 THE CHAIRPERSON: Okay. Thanks. Did
6 ENR have further questions?

7 MR. ROBERT JENKINS: Thank you, Mr.
8 Chair. It's, Robert Jenkins, again. Yes, we can -- we
9 can move along from that and we can discuss this point
10 separately. I'll pass the mic over again to Mr. Paul
11 Green, who will continue on in our questioning.

12 MR. PAUL GREEN: Thank you, Mr. Chair.
13 It's Paul Green, with GNWT-ENR Waters. I'll move on to
14 a point that Veronica mentioned during her presentation
15 regarding the dilution factors in N11.

16 Is -- I guess the question is: Is De
17 Beers expecting sort of perimeter concentrations to --
18 to build up on Lake N11 with time as -- as effluent is
19 discharged -- or as water management pond water is
20 discharged into Lake N11?

21 Thank you, Mr. Chair.

22 THE CHAIRPERSON: Thank you for that.
23 Over to De Beers.

24 MR. JOHN FAITHFUL: Mr. Chair, it's --
25 it's, John Faithful, Golder Associates. So the -- the

1 simple answer to -- to Mr. Green's question, during the
2 -- the period of operational discharge the
3 concentration of various perimeters in Lake N11 is
4 expected to increase as a result of a -- a general mass
5 balance with respect to the chemistry in the water
6 management pond, which is being discharged to Lake N11,
7 and also -- also on the basis of the flows that come
8 into -- to Lake N11.

9 And that -- I think a very good example
10 of how the -- the water quality does change in Lake N11
11 as a result of that operational discharge is actually
12 presented in the EIS, also in the 2012 -- more
13 specifically, the 2012 EIS update. And for each of the
14 perimeters there is a -- there is a plot that shows the
15 incremental change in chemistry in the receiving
16 environment. So there -- there was a steady state mass
17 balance model that accounted for the change in
18 chemistry as a result of the water -- water management
19 pond discharge.

20 That information is as -- is also used
21 in terms of how the EQCs were developed for -- that
22 they took into account not only the CORMIX modelling,
23 but also the steady state mass balance modelling that
24 was undertaken to determine the effects to the
25 receiving environment. Thank you.

1 THE CHAIRPERSON: Okay. Thank you.

2 And back over to ENR.

3 MR. PAUL GREEN: Thank you, Mr. Chair.

4 And so just to followup -- just to make sure I

5 understood -- it's, Paul Green, with GNWT-ENR Waters.

6 So the -- so the concentrations are expected to build

7 up in the lake and these -- these elevated

8 concentrations -- or the expected elevated

9 concentrations were used when -- when sort of

10 generating here forty-two (42) times dilution factor

11 for sediment EQCs.

12 I think I heard you say that. I just

13 want to confirm that that's what my understanding was.

14 Thank you, Mr. Chair.

15 THE CHAIRPERSON: Thank you. Back over

16 to De Beers.

17 MR. JOHN FAITHFUL: Mr. Chair, John

18 Faithful, for Golder Associates. So yeah, to answer

19 Mr. Green's question, the -- the answer is yes. The --

20 the CORMIX modelling -- just to add a little bit to

21 that, the CORMIX modelling in terms of determining a --

22 providing us with an estimation of what that mixing

23 zone is for that effluent discharge, does take into

24 account the chemistry of the receiving environment in

25 order to allow us to -- to propose EQCs, or to develop

1 our proposed EQCs.

2 THE CHAIRPERSON: Thank you. Back to
3 ENR.

4 MR. PAUL GREEN: Thank you, Mr. Chair.
5 It's, Paul Green, with GNWT-ENR. And just one (1)
6 final question on this topic.

7 And so was that for three (3) years of
8 discharge or -- or more than three (3) years of
9 discharge that this modelling was carried out to?
10 Thank you, Mr. Chair.

11 THE CHAIRPERSON: Thank you. Over to
12 De Beers.

13 MR. JOHN FAITHFUL: Thank you, Mr.
14 Chair. John Faithful, Golder Associates. The answer
15 to -- to Mr. Green's question is that the EQCs were
16 proposed on the basis of three (3) years of operational
17 discharge. And so sort of fairly simplistically...

18

19 (BRIEF PAUSE)

20

21 MR. JOHN FAITHFUL: All right. That's
22 a bit loud. Where was I?

23 Okay. So we -- we factor in the
24 operational discharge for three (3) years. In setting
25 the EQCs the -- the approach that is provided in -- in

1 the literature in order to do so is to take the maximum
2 concentration in your source environment, that being
3 the water management pond, so at the -- when you expect
4 the maximum concentration at that time you carry that
5 forward in your EQC proposal. You look at the period
6 of lowest mixing ratio, which is really a -- a measure
7 of the efficiency of the diffuser to disperse that
8 discharged effluent, as well as looking at the maximum
9 -- at the maximum period of -- of discharge.

10 And so, I think, ultimately the answer
11 to your question is, yes, we considered the three (3)
12 years, but we took the -- the sort of worst-case
13 conditions in terms of the chemistry of the source and
14 the -- the mixing in the receiving environment. Thank
15 you.

16 THE CHAIRPERSON: Thank you. Further
17 from ENR?

18

19 (BRIEF PAUSE)

20

21 MR. ROBERT JENKINS: Thank you, Mr.
22 Chair. It's Robert Jenkins, with GNWT-ENR. I know Mr.
23 Green said he didn't have any more questions on the --
24 the dilution and in this area, but I -- I do have one
25 (1) -- one (1) additional.

1 So what recourse is available to De
2 Beers, should effluent discharge commence but it's
3 determined that the calculated dilution factors were
4 overestimated and, therefore, also the -- the
5 associated effluent quality criteria may also have been
6 overestimated?

7 THE CHAIRPERSON: Thank you. Over to
8 De Beers.

9

10 (BRIEF PAUSE)

11

12 MS. VERONICA CHISHOLM: Thank you, Mr.
13 Chair. Veronica Chisholm, from De Beers. So first,
14 it's important to say that we won't be pumping water
15 into N11 unless we meet EQCs. So -- so first -- first,
16 let's be clear on that.

17 Secondly, when we developed the EQCs,
18 which is a requirement on the EQCs, we incorporated a
19 lot of conservatism into those EQCs so that we know
20 that we can achieve them.

21 But in the event that we cannot meet the
22 EQC requirements, we have the capacity to hold water in
23 the water management pond. And that is inherent in the
24 -- in the -- in the mine plan. So that would be our
25 contingency, is that ability to withhold water within

1 our water management pond. Thank you.

2 THE CHAIRPERSON: Thank you for that.

3 And further from ENR?

4 MR. ROBERT JENKINS: Thank you, Mr.

5 Chair. It's Robert Jenkins, GNWT-ENR. Just a -- a

6 follow-up to that then.

7 Do you have any information you can

8 provide then on the possible retention time that you --

9 or the capacity you'd have, should you not be able to

10 meet EQCs?

11 THE CHAIRPERSON: Thank you. Over to

12 De Beers.

13

14 (BRIEF PAUSE)

15

16 MS. VERONICA CHISHOLM: Thank you, Mr.

17 Chair. Veronica Chisholm, from De Beers. We actually,

18 in the Water Management Plan that we submitted with the

19 Application in November 28th, we include the water

20 retention contingency curves in that plan.

21 And we can provide you with the specific

22 references, but it's included in the documentation that

23 we submitted with the Application. We'll look those up

24 -- those specific page numbers and table references for

25 you.

1 THE CHAIRPERSON: Mr. Donihee, do you
2 want that as an undertaking, or what do you call it?

3 MR. JOHN DONIHEE: Yes. Thank you, Mr.
4 Chairman. It's John Donihee. I suspect that that's
5 something that can be taken care of before the end of
6 the day. And if that's acceptable, sir, I don't think
7 we need to take an undertaking for it.

8 THE CHAIRPERSON: Okay. Then, fine.
9 Thank you. ENR, please.

10 MR. ROBERT JENKINS: Thank you, Mr.
11 Chair. It's Robert Jenkins, with ENR. Yes, it's
12 something that I'll probably turn back around and one
13 (1) of my staff will tell me they know the answer to
14 that. But I thought I'd take the opportunity to ask.

15 I'm now going to pass the -- the mic
16 over to Ms. Lara Fletcher. She's a technical advisor
17 working with Brodie Consulting. She's got some
18 questions on -- regarding closure and cost estimation.

19 THE CHAIRPERSON: Okay. Thank you. So
20 over to Laura.

21 MS. LARA FLETCHER: Lara Fletcher,
22 Brodie Consulting, technical advisor to ENR. Brodie
23 Consulting had the opportunity to review the Closure
24 Plan with GNWT, De Beers, and their consultants, JDS
25 Mining, in several meetings. And we thank you for

1 that.

2 As Veronica Chisholm stated, there was
3 general agreement of concepts, scope of work, and
4 quantities. There arose a few key recommendations that
5 were discussed during these meetings that relate to PAG
6 waste rock management, the use of overburden for
7 enhanced reclamation, infilling of area -- of the area
8 adjacent to Dike L at the fine process kimberlite
9 facility, and pumping during lake level restoration.

10 So Veronica has outlined some of these -
11 - these components. So rather than the proposed method
12 of encapsulation of waste rock within the waste rock
13 piles, Brodie Consulting recommended an alternative
14 method of disposal by -- whereby that which is in
15 excess of what can dis -- be disposed of in the waste
16 rock piles -- in the submerged areas of the piles is
17 segregated and stockpiled for disposable -- for
18 disposal into the mined-out pits which will remain
19 submerged post-closure.

20 In response to this recommendation, a
21 technical memo was produced by -- was prepared by JDS
22 Mining which outlined the feasibility, the quantities,
23 and schedule for such seg -- segregation and subsequent
24 disposal of PAG material into mined-out pits.

25 So the question, Mr. Chair: Does De

1 Beers not consider this alternative method of PAG
2 disposal as best management -- best management practice
3 and meeting the highest standards that were, quote --
4 that has been presented in a technical memorandum as
5 being achievable possibly during operations as
6 progressive recla -- reclamation?

7 THE CHAIRPERSON: Okay. Thank you for
8 that then. Over to De Beers.

9

10 (BRIEF PAUSE)

11

12 MS. VERONICA CHISHOLM: Veronica
13 Chisholm, from De Beers. Thank you. I'm happy to
14 respond to Ms. Fletcher -- Dr. Fletcher. And I'm happy
15 to see you in person because I'd only heard a voice
16 over the phone, so -- so that's great.

17 So just as I mentioned in my
18 presentation, most of the majority of rock that would
19 be designated as PAG would be stored underwater. So in
20 the first few years, we have capacity to store that
21 rock underwater. And then once the pit becomes
22 available, after year 4, which is the Hearne pit, we
23 can store PAG underwater.

24 So we're talking about two (2) to three
25 (3) years possibly where we might be using -- handling

1 PAG. And so we don't think -- although we've
2 identified that option, we've developed that with you,
3 we don't think it's necessary to rehandle that PAG for
4 that period of time. We think it's a small amount of
5 rock.

6 Overall, we believe that storing it --
7 encapsulating it within the mine rock pile, it'll be
8 non-acid-generating. And we'll be monitoring according
9 to the Geochemical Characterization Plan that we put on
10 the record with the Application to ensure that anything
11 that's coming out of the mine rock pile is monitored.

12 And we pro -- and we following -- we
13 believe we're following best management practices by
14 doing that. And so we don't see the need for the cost
15 and expense to rehandle for that limited period of time
16 and that we don't think that there's any potential for
17 acid generating during that -- in storing in --
18 encapsulating within the mine rock pile.

19 And I'll -- I'll toss it to Dan Johnson
20 to see if he has anything else to add on that.

21 MR. DAN JOHNSON: Dan Johnson, JDS.
22 The only thing I would add is, as -- as Veronica re-
23 emphasized, that most of the mine rock is put in
24 locations for long-term under -- underwater storage and
25 that the practice at other mines in the Northwest

1 Territories is to encapsulate it.

2 So the Mine Development Plan here has an
3 opportunity to use the long-term underwear --
4 underwater storage and -- and is used where that is
5 available. So the other two (2) to three (3) year
6 window is done as per the other typical standards in
7 the Northwest Territories.

8 THE CHAIRPERSON: Great. Thank you.
9 Back to ENR.

10 MS. LARA FLETCHER: Lara Fletcher,
11 Brodie Consulting. I've a question about the
12 encapsulation, a couple questions. Does that
13 management of PAG rely on the piles being frozen, as
14 was predicted on page 15 of the project description?

15 And has any thermal modelling been
16 carried out where the zone -- where you have the piles
17 overlying a submerged zone which is connected to a
18 larger body of water?

19 THE CHAIRPERSON: Okay, thank you for
20 that. Over to De Beers.

21

22 (BRIEF PAUSE)

23

24 MR. KEN DEVOS: It's Ken DeVos, with
25 Golder Associates. Thanks for that. I guess maybe if

1 you could just very quickly, with all the shuffling
2 around, remind me of -- of the specifics of -- of what
3 you're looking for, and I -- I can answer your
4 question.

5 MS. LARA FLETCHER: Lara Fletcher,
6 Brodie Consulting. It -- it's just -- just trying to
7 sort of have -- take out some of the variables, I
8 guess, or the uncertainties, if -- if this method of
9 encapsulation is being proposed. It gives us a better
10 understanding of whether we agree or not.

11 MR. KEN DEVOS: Thank you. Ken DeVos,
12 with Golder Associates. Mr. Chair, I think there's --
13 probably I can expand a little bit on the understanding
14 of the geochemistry. The non-acid-generating
15 conditions of the pile as a whole don't rely on frozen
16 conditions. So we did the entire assessment on
17 unfrozen conditions for the pile, and I believe that
18 was part of the question. And I think it's important
19 to understand how we came to the conclusion that the
20 overall pile will be non-acid-generating.

21 So based on the available data set,
22 there's -- there's over twelve hundred (1,200) samples
23 of waste rock that were collected from the deposit from
24 the -- the various pits in the deposit. Of those
25 samples, about seven point five (7.5), or 7 1/2,

1 percent of those samples had a total sulphur content of
2 above -- above 0.1 weight percent sulphur. So that's
3 kind of the cutoff that we'll be using to determine
4 whether we need to segregate the material within the
5 pile, or whether the material is -- is suitable for
6 construction on site.

7 Now, if we look at little bit further at
8 the potential acid-base accounting data, so we take
9 into account the buffering capacity of the rocks. Then
10 we're looking at about 4.8 percent of the samples have
11 some potential for acid generation.

12 But when you -- you look at, you know,
13 maybe one (1) sample or -- out of ten (10), or one (1)
14 sample out of twenty (20), and you look at the overall
15 neutralization potential of the rock in the surrounding
16 area, when you blast that rock, it gets fairly well
17 mixed, as you can imagine.

18 So when you look at the rock that you're
19 moving to the pile, we don't expect that, that this
20 material would be acid generating at all in terms of
21 the pile as a whole, because the neutralizing minerals
22 are -- you know, there are several neutralizing
23 minerals, but there's enough calcium carbonate in the
24 deposit to neutralize any acidity that might be
25 produced from oxidation of sulphide minerals as a

1 whole. So this material we blasted, it will be
2 trucked.

3 Where -- where holes have been
4 identified as having greater than 0.1 percent sulphide
5 minerals, or total -- sorry, total sulphur. That
6 material will be placed in the interior of the pile in
7 a known location. So we're going to know where we
8 placed the -- those materials.

9 And there'll be an option there to -- at
10 -- at -- we'll be reassessing that periodically during
11 the annual geochemical report for the site. So we'll
12 know whether that layer that's been placed there in
13 that area where we know that we've placed it, we'll
14 know whether that material will be acid generating or
15 not, as -- as a follow-up, because we'll be taking a
16 lot of samples during operations.

17 We'll be taking, as a minimum, eight (8)
18 samples per 100,000 tonnes of material blasted, and we
19 have millions of tonnes to blast. So we're going to
20 have a lot of samples, a lot of additional information,
21 and we can reassess. And mitigations are then -- if we
22 know where this material is in the pile then we have
23 supplemental mitigations that we can put in place
24 depending on the results of the geochemical assessment.

25 So we can either put a low permeability

1 cover over the top of that material, which is -- is
2 part of the proposed planning, or we do know -- you
3 know, De Beers will know where that material is placed
4 in the pile. So if it does happen by some chance that
5 additional measures are required, they can go back and
6 find that material, because they know where it is in
7 the pile.

8 THE CHAIRPERSON: Thank you for that.
9 Over to ENR, if you can identify yourself for the
10 record.

11 MS. LARA FLETCHER: Lara Fletcher,
12 Brodie Consulting. The low permeability cover, do you
13 mean over the pile, or are you referring to the inca --
14 like the proposed 2 metre tilling within -- on the
15 encapsulated material?

16 THE CHAIRPERSON: Thank you. Back over
17 to De Beers.

18 MR. KEN DEVOS: Thanks. Ken DeVos,
19 with Golder Associates. So the idea would be to -- to
20 try and -- you know, the -- the pile will go in as
21 layers as it -- as it's built up and as the mine is --
22 is developed. So that rock we would try and -- and
23 keep it in the same vertical footprint, if you will, or
24 the same -- same plan view footprint to reduce the
25 amount of area that would potentially be covered at the

1 end if necessary. And we'd be looking -- again, we'd
2 be assessing that on an annual basis.

3 But it would be near the mine life and
4 we'd try and keep that material into as small a
5 footprint as possible. Go ahead --

6 THE CHAIRPERSON: Thank you. Over to
7 ENR.

8

9 (BRIEF PAUSE)

10

11 MS. LARA FLETCHER: Okay. Thank you.
12 I'll -- I'll go -- move on to the overburden.

13 THE CHAIRPERSON: We'll require your
14 name for the record.

15 MS. LARA FLETCHER: I'm sorry, Lara
16 Fletcher, Brodie Consulting, Mr. Chair. The -- the con
17 -- Conceptual Closure Plan states that piles will not
18 be covered or re-vegetated. But De Beers have made
19 subsequent commitments to feasibility of recovering and
20 stockpiling overburden fees and reclamation. I believe
21 the Closure Plan does commit to recover as much soil as
22 practical for use in reclamation activities.

23 And they have produced a figure showing
24 the potential location for an overburden stockpile at
25 the southwest end of the south mine rock pile and have

1 gone on to calculate volumes for overburden cover of
2 disturbed areas.

3 Why has De Beers not committed to
4 covering re-vegetating disturbed areas with overburden,
5 and have not included these costs for overburden cover
6 and re-vegetation of disturbed areas in their security
7 estimate?

8 THE CHAIRPERSON: Thank you. Over to
9 De Beers.

10

11 (BRIEF PAUSE)

12

13 MS. VERONICA CHISHOLM: Veronica
14 Chisholm, from De Beers. Thanks for the question. In
15 our conceptual Closure Plan we have not -- we've said
16 we would stockpile overburden. And I -- and I
17 reenforced that commitment during the technical
18 sessions.

19 As I -- as I mentioned during my
20 presentation this morning, we're not sure of the
21 practicality, and I don't want to make a commitment of
22 achieving re-vegetation, particularly on the mine rock
23 piles if we don't know whether we can achieve it or
24 not. It is a two point four-six (2.46) to one (1)
25 slope that slopes down to the lake. The placing of

1 overburden and re-establishing vegetation on those side
2 slopes will be challenging. And we're actually
3 concerned that we might actually have some
4 sedimentation eroding into Kennady Lake as we're
5 refilling, so we want to limit that.

6 But ultimately it's about what can be
7 achieved. And so what we included in our conceptual
8 Closure Plan in terms of re-vegetation is what we
9 didn't believe we can achieve those on the mine rock
10 piles. We know that in other mines they are growing
11 vegetation on the fine processed kimberlite.

12 And we know that we're committed to
13 doing some re-vegetation trials and we're committed to
14 doing the Research Plan as described. And we'll --
15 we'll advance that as part of our Progressive
16 Reclamation Plan. And as we learn more from the re-
17 vegetation trials, the Interim Closure and Reclamation
18 Plans will be updated on a three (3) year basis. And
19 they will reflect the outcomes of that research.

20 THE CHAIRPERSON: Okay. Thank you.
21 Further from ENR.

22

23 (BRIEF PAUSE)

24

25 MS. LARA FLETCHER: Lara Fletcher, of

1 Brodie Consulting. We -- we'll move on from that now.
2 I have another question. We did discuss during our dis
3 -- during our teleconferences that the area -- the --
4 of the fine PK facility adjacent to Dike L would be
5 infilled and covered with waste rock. It doesn't
6 appear that De Beers has included this cost in the
7 security estimate, which perhaps was inadvertent. It
8 may be just simply an error in the worksheet.

9 However, we -- could we have
10 confirmation that the Closure Plan is to fill this area
11 with coarse PK and that this cost is to be included in
12 the security estimate?

13 THE CHAIRPERSON: Thank you. Over to
14 De Beers.

15 MS. VERONICA CHISHOLM: Veronica
16 Chisholm from De Beers. We actually did include that.
17 And so we'll -- we'll find the specific reference on
18 the spreadsheet when we did the reclaimed model. But
19 we actually did include that into our cost estimate, or
20 believe that we have. And maybe we'll just need to --
21 we'll find that particular reference.

22 Again that will be five (5) minutes or
23 ten (10) minutes, before the end of the day. So we
24 don't think it's an undertaking. And then maybe we'll
25 have a quick offline to see whether we have an

1 agreement on that, Laura. Thank you, Mr. Chair.

2 THE CHAIRPERSON: Thank you. Further
3 from ENR.

4

5 (BRIEF PAUSE)

6

7 MS. LARA FLETCHER: Okay. Thank you.
8 Lara Fletcher, of Brodie Consulting. The final comment
9 -- question I have is pumping costs are expected to
10 make up a significant portion of the closure costs,
11 particularly in different scenarios that may be
12 required. Very preliminary pumping costs have been
13 derived by De Beers and their consultants.

14 Will more detailed pumping costs be
15 provided as part of future iterations of the Closure
16 Plan?

17 THE CHAIRPERSON: Thank you. Over to
18 De Beers.

19

20 (BRIEF PAUSE)

21

22 MS. VERONICA CHISHOLM: Veronica
23 Chisholm, from De Beers. Just to be clear, the pumping
24 costs that we included in our reclaimed model came from
25 our feasibility study. So it's the money that we're

1 spending, so we're pretty careful on -- on that in
2 terms of capital costs. But, yes, in future iterations
3 of the Interim Closure Plan we'll reflect on those
4 pumping costs and we'll provide an update as required.

5 THE CHAIRPERSON: Thank you. Further
6 from ENR.

7 MS. LARA FLETCHER: Lara Fletcher, of
8 Brodie Consulting. Sorry. Those costs that you -- are
9 in your feasibility plan, are those third-party
10 contractor costs?

11 THE CHAIRPERSON: Thank you. Over to
12 De Beers.

13

14 (BRIEF PAUSE)

15

16 MS. VERONICA CHISHOLM: Veronica
17 Chisholm, from De Beers. So the pumps that we included
18 in the RECLAIM model, which is the same for the
19 feasibility, it's just the cost -- the actual physical
20 cost of the pumps.

21 And then we included third-party
22 contractors, as required under the RECLAIM model, for
23 undertaking or monitoring or ensuring that the pumps
24 are working. So that's kind of how we've done that in
25 the RECLAIM model.

1 THE CHAIRPERSON: Thank you. Further
2 from ENR?

3 MR. ROBERT JENKINS: Thank you, Mr.
4 Chair. It's Robert Jenkins, with ENR. No, we have no
5 further questions. Thank you for the answers and
6 thanks for the time to -- to ask these questions.

7 THE CHAIRPERSON: Great. Thank you for
8 the -- both parties. And congratulations. This looks
9 like a fairly seamless transition from devolution from
10 AANDC. We wish that maybe you could have stolen Anne
11 Wilson, but I guess we got to wait until next time to
12 devolve.

13

14 (BRIEF PAUSE)

15

16 THE CHAIRPERSON: Okay. And thank you
17 then. So next up for questions of De Beers is
18 Environment Canada.

19 MS. ANNE WILSON: Thank you. It's Anne
20 Wilson with Environment Canada. And I'll try and stay
21 close enough to the microphone here.

22 So I just have a few questions with
23 respect to the presentation and what we've heard and
24 the responses provided from De Beers in the table. I'm
25 going to start with the action levels. And just to

1 wrap my mind around this, we've got the Aquatic Effects
2 Monitoring Plan which provides us with a response
3 framework. The response framework outlines what are
4 considered negligible and low action levels for all the
5 various things that you'd be monitoring. And that's
6 going to be based on comparisons to the benchmarks that
7 were set in the EIS or using guidelines developed
8 through the CCME or site-specific guidelines.

9 We had asked that there be specific
10 triggers tied to the various management plans for
11 action. And following on Veronica's comment in the
12 presentation, those can certainly go in subsections of
13 the plans. It doesn't have to be one (1) end all and
14 be all response management framework. But I would like
15 to see numbers in those plans that are specific for
16 actions.

17 So in some cases, for example, the
18 Seepage Monitoring Plan, if there are any surprises
19 coming out of that, and I -- I do think back to the
20 Ekati example where totally unexpectedly some alkaline
21 contact rock generated very acidic seepage in the
22 tundra coming out with high aluminum, for example. We
23 don't want to just have mitigation plan -- you know,
24 have years pass before action is taken on things like
25 that.

1 So it would be practical to have some
2 comparisons drawn in the context of your annual seepage
3 monitoring based on objectives for the quality of the
4 seepage. Does that make sense?

5 THE CHAIRPERSON: Thank you. Over to
6 De Beers.

7

8 (BRIEF PAUSE)

9

10 MS. VERONICA CHISHOLM: Veronica
11 Chisholm, from De Beers. So the -- so the answer to
12 that, Anne, is where we're developing those triggers
13 there's appropriate -- where it's appropriate. So
14 where there is numeric values. For example, in the
15 AEMP we include numeric values for triggers. As we --
16 and I've made the commitment to go into the other
17 monitoring and management plans and update the action
18 levels and -- and management responses.

19 Where it's appropriate to use a numeric
20 value we will. Where we can't use a numeric value or
21 numeric value isn't appropriate, we won't do that.

22 So there are instances, and the one that
23 you mentioned for example is probably a good one, where
24 we would be using some numeric values as part of the --
25 as part of the action levels and management responses.

1 THE CHAIRPERSON: Thank you. Back over
2 to Anne.

3 MS. ANNE WILSON: Okay. Thank you, Mr.
4 Chairman. Anne Wilson, Environment Canada. My next
5 question is to do with the potential for increases in
6 mercury in the impounded areas. And I appreciate that
7 there will be monitoring of water and sediments, but
8 currently the triggers are set for changes to fish
9 tissue mercury levels because there are health
10 implications of those.

11 Does De Beers have specific management
12 response actions that could be applied to increases
13 which might occur in sediment mercury?

14 THE CHAIRPERSON: Thank you. Over to
15 De Beers.

16

17 (BRIEF PAUSE)

18

19 DR. PETER CHAPMAN: Peter Chapman.
20 First of all, just to explain, the concern with mercury
21 is mercury in the organic or methylated form. So if we
22 see an increase in -- and we're measuring total mercury
23 at which only a small proportion will be that form,
24 that could move up into the animals that are in the
25 sediment, and then into the fish.

1 So if we see an increase in total
2 mercury, the first thing to do would be to see, you
3 know, what are the concentrations that might be
4 occurring in the animals that the fish would be looking
5 at, determine if there's actually an issue there or
6 not, or if in fact most of it is total and not in a
7 form that will go up. If we determine that is an
8 issue, then we would look at what the possibilities
9 were that we needed to do.

10 THE CHAIRPERSON: Thank you. Back over
11 to Environment Canada.

12 MS. ANNE WILSON: Thank you. It's Anne
13 Wilson. I was trying to get at a preemptive strike
14 there. Before things -- before mercury gets into the
15 biota and the fish, we would first see it in the
16 sediments, and it would be following the impoundment in
17 primarily the methylated form that is bio-available.

18 And my question was: If it was detected
19 there, are there actions that could be taken to
20 mitigate that prior to seeing elevations in the biota?

21 THE CHAIRPERSON: Okay. Thank you.
22 Over to De Beers.

23

24 (BRIEF PAUSE)

25

1 MS. VERONICA CHISHOLM: Veronica
2 Chisholm from De Beers. Thanks for providing that
3 further clarification, Anne. So if we were to detect
4 mercury in the sediment that would -- and to look at
5 some management options before it would reach the fish,
6 some options that would be available to De Beers is we
7 -- first of all, we're talking about a very small area,
8 the -- the D Lake.

9 So I just want to make sure that we're -
10 - we're talking about the same area. And we can
11 isolate that area from the downstream environment if we
12 needed to, 'cause we're largely talking about a
13 consumption issue with fish and so we can isolate off
14 that area.

15 We'd certainly allow NWT in terms of
16 advisory. I guess it's also important to mention that
17 we don't have fishing on site with any of our workers.
18 And then, if need be, if -- if we're seeing the
19 escalation in the sediment, we would fish out those
20 portions of those -- of those particular lakes if we
21 needed to, in terms of the management structure.

22 We would expect, and we've documented
23 this, that there probably will be a slight peak in
24 mercury and then it would fall down into background
25 levels. And that's what we'd be monitoring against

1 what we would expect to happen. But there is some
2 management options available to us.

3 And -- and I think it's also important
4 to mention for this area that actually baseline levels
5 of mercury in fish are already quite high already in
6 that area. So, you know, there's been advisories on --
7 on metal mercury across the Arctic, as far as I
8 understand, in terms of metal accumulation in fish.
9 It's just a context for the region that we're dealing
10 with.

11 THE CHAIRPERSON: Thank you. Further,
12 from Anne?

13 MS. ANNE WILSON: Thank you. Anne
14 Wilson, Environment Canada. I'm going to move on to a
15 geochemistry question and with apologies. I don't have
16 our geochemical person here, so I will do my best for
17 that one.

18 The concern has been raised that
19 tracking the potential for acid generation using only
20 sulphur may not be sufficient in case -- as you had
21 previously mentioned, there might not be enough
22 neutralizing capacity, and that other methods could
23 give reassurances to the -- the potential for acid
24 generation.

25 You'd mentioned that you will do other

1 things such as acid-base accounting as necessary. So I
2 just wanted to put it on the record, is that a
3 commitment that you would do the other methods? If so,
4 what would the frequency, or what would the trigger for
5 using other methods be? Thank you.

6 THE CHAIRPERSON: Thank you. Over to
7 De Beers.

8

9 (BRIEF PAUSE)

10

11 MR. KEN DEVOS: Thank you. Ken DeVos,
12 with Golder Associates. With respect to the -- the
13 method -- the use of total sulphur, it's -- it's -- the
14 reason that -- that you would use total sulphur is
15 'cause your acid generation potential is directly
16 proportional and correlated, and actually calculated
17 based on your sulphur value. So we know if there's
18 very little sulphur there that there's -- there's very
19 little potential for that rock and that material to
20 generate acidity.

21 So that's -- that would be our primary
22 method of -- of determining whether a rock sample needs
23 to be segregated or treated differently, or if it can
24 be used for construction. But as Anne mentioned, we
25 would be also looking periodically, probably

1 biannually, or annually. We would be collecting as per
2 the Geochemical Characterization Plan. There would be
3 a site visit by a geochemist who would collect
4 additional samples. And those additional samples,
5 probably around thirty (30) additional samples per
6 visit, would be submitted for additional acid-base
7 accounting.

8 So we would look at the total
9 neutralizing potential as well as the total sulphur
10 content. And we would do the balance. To ensure that,
11 what we've selected as our -- our criteria, our total
12 sulphur criteria is appropriate for the pile. And we'd
13 make -- have to make adjustments if we found that --
14 that those numbers differed over a period of time. So
15 we'd be looking at the trends and we'd be adjusting if
16 necessary.

17 THE CHAIRPERSON: Thank you. Over to
18 Environment Canada.

19 MS. ANNE WILSON: Thank you. Anne
20 Wilson, at Environment Canada. That was very helpful.

21 I'm going to move onto the effluent
22 quality criteria. And this one so far we've not
23 reached a meeting of the minds on the need for
24 additional perimeters to be included. And I guess as a
25 -- a broad brush basis, what objection would there be

1 to including those as EQCs if you're completely
2 confident they aren't going to be exceeded, because my
3 understanding is that all this will be tested and
4 monitored anyways?

5 THE CHAIRPERSON: Thank you. Over to
6 De Beers.

7

8 (BRIEF PAUSE)

9

10 MS. VERONICA CHISHOLM: Veronica
11 Chisholm from De Beers. The question about just
12 inherently adding in additional EQC parameters, we
13 don't quite see the purpose for that. We -- we went
14 through a very comprehensive and transparent process of
15 examining the potential contaminants of concern. We've
16 documented those. We're going to be monitoring for
17 those. We will have regulatory limits on the ones that
18 we're concerned, and we'll add any additional ones.
19 But we don't see that -- and we don't know where
20 there's been other instances where we'll just
21 arbitrarily add additional EQCs. We just don't think
22 that they're -- they're necessary.

23 And I guess the other important point,
24 in terms of our project design that I mentioned
25 earlier, is it's the limited discharge. I mean,

1 discharging for three (3) years during operation, and
2 we're not going to have a continual discharge from our
3 water management pond, so -- so we don't think that
4 there's -- we're -- we're go -- been monitoring. We've
5 been protective. We've screened out the relevant EQCs.
6 We've included those in the report. Any adjustments
7 will be done. But we don't think -- we don't see the
8 requirement to include those arbitrarily, I guess.

9 And we have the -- and we have the
10 action levels and the response frameworks that we'll
11 docum -- that we've documented that. So it -- it --
12 it's -- I think all of the information has already been
13 included in our submission, and we just -- I guess
14 that's where we -- there might be some division. But
15 we followed the process that the Board asked us to
16 follow and we're confident in what we've developed in
17 term of EQCs. Thank you.

18 THE CHAIRPERSON: Thank you. Back over
19 to Anne.

20 MS. ANNE WILSON: Thank you. Anne
21 Wilson, Environment Canada. As outlined in our
22 intervention, you know, there's always some inherent
23 uncertainty with modelling as it relies on a -- quite a
24 few unknowns. One (1) of those is the kimberlite
25 heterogeneity.

1 Do you feel you have a really solid
2 characterization of what you might encounter as far as
3 inclusions or changes in geology that would affect not
4 only the first three (3) years of discharge, but the
5 water quality that will be discharged at closure?

6 THE CHAIRPERSON: Thank you. Over to
7 De Beers.

8

9 (BRIEF PAUSE)

10

11 MR. KEN DEVOS: Thanks. Ken DeVos with
12 Golder Associates. So I guess with -- with respect to
13 understanding kimberlite, and -- and how kimberlite's
14 going to change, and how it applies to the model, I
15 think it's important to understand the -- the test work
16 that was done and how we applied those values to the
17 modelling.

18 So we have currently over a hundred and
19 twenty-six (126) samples -- sample analysis on
20 processed kimberlite. And we have five hundred and
21 twenty-eight (528) static tests on -- or samples,
22 geochemical analysis, on -- on overall kimberlite. So
23 we feel that we have a good characterization of the
24 geochemistry of the kimberlite samples.

25 And I'll let Mike -- Mike Herrell speak

1 with regards to how we applied that to the modelling.

2 MR. MICHAEL HERRELL: It's Mike
3 Herrell, from Golder. Thank you, Mr. Chair. I -- I
4 just want to add that the -- the EQCs that have been
5 proposed, they're -- they're proposed for the -- the
6 operational discharge period. And during that time the
7 majority of the water that's going to be stored in the
8 water management pond is going to be from groundwater
9 inflows.

10 Now, that groundwater has been measured
11 directly through groundwater monitoring programs, so
12 there is some confidence around the -- the values of
13 the -- the groundwater quality that will be flowing
14 into the mine. And a few samples have been collected
15 from those Westbay wells, and a conservative input
16 models first term was used from the actual monitoring
17 results from the groundwater. Thanks.

18 THE CHAIRPERSON: Thank you. Further
19 from Environment Canada?

20 MS. ANNE WILSON: It's Anne Wilson,
21 with Environment Canada. I think I'll leave that one
22 there. I'm not quite sure where to take it next, so
23 we'll leave it. Thank you very much.

24 THE CHAIRPERSON: Or you could ask for
25 an undertaking. So we arrive then at lunchtime, or

1 pretty close, if Deninu K'ue First Nation...

2

3 (BRIEF PAUSE)

4

5 THE CHAIRPERSON: Sorry, I didn't see
6 that. Go ahead. Go ahead.

7 MS. VERONICA CHISHOLM: Veronica
8 Chisholm, from De Beers. I think that the last part of
9 your question which we didn't quite address there,
10 Anne, was dealing with closure.

11 And so, you know, generally, and I -- I
12 mentioned this in the presentation that we provided,
13 we'll be doing a lot of monitoring and the monitoring
14 will not stop. And so we'll be managing the issues
15 that we know as they come up.

16 We have Adaptive Management Plan. We've
17 developed action levels to try and develop responses to
18 those action plans. And so that's why we have a high
19 degree of confidence in the EQCs that we're proposing
20 at this time. And that we know that -- through the
21 monitoring, that we'll make any adjustments or
22 adaptively manage as we need to certainly well before
23 closure hits.

24 That's our -- that's -- that's -- we've
25 designed our monitoring programs and our adaptive

1 management programs accordingly. So thank you for
2 allowing me to do that last bit, Mr. Chair.

3 THE CHAIRPERSON: No problem. Do you
4 have further to that, Anne?

5 So if Deninu K'ue First Nation has no
6 objections, we could probably do your question right
7 after lunch.

8 MR. MARC D'ENTREMONT: Hey. Marc
9 d'Entremont, from the DKFN. I only have a couple
10 comments and one (1) question, so it should be pretty
11 brief.

12 THE CHAIRPERSON: That would be great.

13 MR. MARC D'ENTREMONT: Okay. Thank
14 you, Mr. Chair. Again, Marc d'Entremont, with DKFN.
15 As I mentioned, I've got a couple comments and just
16 probably one (1) question.

17 So I was pleased to hear in -- in De
18 Beers's opening presentation they mention the amount of
19 experience in mining, and specifically their experience
20 in mining in Northern Canadian environments. And I
21 think that experience will really -- I'll just say I
22 think the conditions of the permit, that -- that
23 experience will help them, obviously, reach these
24 conditions in the permit, so -- and I think I'll
25 elaborate more on that in our presentation.

1 So we also have our presentation coming
2 up. And I think some more of our questions will come
3 clearer at that point, so I won't get into the details
4 on that.

5 So the only question I really have --
6 Veronica mentioned in the presentation, with regards to
7 the Aquatic Effects Monitoring Program, that the --
8 it's been modified to and include an enhanced BACI
9 design.

10 So my question will be: Has that latest
11 revision been issued? And -- and I'd be really
12 interested in seeing it, so -- particularly how that
13 enhanced BACI design relates to the -- the amount of
14 baseline data that's been collected, as well. So thank
15 you.

16 MS. VERONICA CHISHOLM: Veronica
17 Chisholm, from De Beers. Yeah, we did submit that. It
18 is available onto the registry. The exact date that I
19 submitted it was April 16th; it just occurred to me.
20 April 16th, 2014. So it is available on the registry,
21 and -- and that's the one that we have advanced from
22 the simplified BACI to a more -- more detailed. Thank
23 you.

24 THE CHAIRPERSON: Thank you -- from
25 Deninu K'ue?

1 MR. MARC D'ENTREMONT: No, that's all
2 the questions I had for now. Thank you.

3 THE CHAIRPERSON: Thank you then. I
4 suppose if -- if -- we still have ten (10) minutes,
5 does the Yellowknife Dene First Nation have some
6 questions?

7 MR. TODD SLACK: Thank you, Mr. Chair.
8 Todd Slack, on behalf of the Yellowknives. I have what
9 I think are just a few short questions in terms of
10 clarification as to what we heard this morning.

11 During the presentation, Ms. Chisholm
12 stated that we're -- we're all in agreement that the
13 EQCs are going to minimize change. Just for clarity,
14 who is the 'we' in that statement?

15 THE CHAIRPERSON: Okay. Thank you.
16 Over to De Beers.

17

18 (BRIEF PAUSE)

19

20 MS. VERONICA CHISHOLM: Veronica
21 Chisholm, from De Beers. Thanks for picking up that
22 'we' in there. So I'll provide the clarification.

23 So we've met the obligation of the Board
24 when we submitted that, and the fundamental tenets of
25 an EQC, as I understand it, is to be protective of the

1 environment which would -- I would think is what we all
2 share in terms of regulators and Aboriginal parties, as
3 well as the companies, to be protective of our
4 downstream environment.

5 And -- and that's -- that was the
6 central tenet, and that I -- I believe is the -- the
7 rationale and the requirements behind any EQCs that are
8 developed, and that is the direction that the Board and
9 the regulators provided us. Thank you.

10 THE CHAIRPERSON: Thank you. Back over
11 to Todd.

12 MR. TODD SLACK: Thanks, Mr. Chair. I
13 -- I guess I'll -- I'll seek to clarify that. Is the
14 'we' in that sentence De Beers?

15 MS. VERONICA CHISHOLM: Veronica
16 Chisholm from De Beers. I think when -- when we say
17 'we', yeah, we propose the EQCs. We followed the
18 guidelines. We hope they're accepted. We've looked at
19 the recommendations. We had the discussion with
20 Intervenors. We carried it through the process. And
21 we believe that should they be accepted that they would
22 be for the benefit of everyone.

23 THE CHAIRPERSON: Thank you. Over to
24 Yellowknife Dene.

25 MR. TODD SLACK: Thank you, Mr. Chair.

1 Todd Slack on behalf of the Yellowknives. Picking up
2 on another theme that was brought up, Mr. Jenkins's
3 final question, and I'm just wondering if De Beers is
4 willing to commit that should its predictions be wrong,
5 in terms of the effluent quality in the receiving
6 environment and the effects therein, is it willing to
7 commit to treating that effluent and that water, or is
8 it going to seek other measures such as moving the goal
9 post, like what we saw at Snap Lake? I'm just
10 wondering if we can get that on the record now in case
11 it were to happen later.

12 THE CHAIRPERSON: Thank you. Over to
13 De Beers.

14

15 (BRIEF PAUSE)

16

17 MS. VERONICA CHISHOLM: Veronica
18 Chisholm, from De Beers. So first of all I think it's
19 important to -- to mention that we do have confidence
20 in our modelling, and that we've used a lot of
21 extensive data and we spent a lot of time and
22 reiterations on the modelling that we've done for --
23 for this project.

24 But in the event that there's an upset
25 condition -- and we placed a number of contingencies in

1 our Water Management Plan, and we'd be -- and, so those
2 contingencies were spelled out. That's what the panel
3 decision asked us to do. That's what we followed
4 through with our applications, of which treatment is
5 one (1) option, but it's not all of the options. It's
6 not the only option. There's other options that we
7 have. That's what we've built into our Mine Management
8 Plan.

9 And everything that we're doing, and the
10 detailed monitoring that we're doing, would allow us to
11 be able to det -- detect a problem at the Gahcho Kue
12 sit in advance so that we can evaluate those
13 contingency options to select the most appropriate one.

14 And so we've been open and transparent
15 on that. And we've been -- included detailed
16 monitoring and management plans that we submitted with
17 the application, and advanced a number of those. And
18 those are all done on the -- on the basis to get ahead
19 of any potential upset conditions, or any conditions
20 that evaluate, and then we -- loaded our environmental
21 -- our Water Management Plan with those contingency
22 options. And that's our response. Thank you.

23 THE CHAIRPERSON: Thank you. Further
24 from Yellowknives?

25 MR. TODD SLACK: Thank you, Mr. Chair.

1 Todd Slack, on behalf of the Yellowknives. I'm
2 wondering -- I'll ask that question in a different way
3 then.

4 Will the projet commit to not seeking --
5 should their predictions be wrong -- listen, I imagine
6 Snap Lake had confidence in their monitoring as well,
7 or their predictions, but, you know, that didn't turn
8 out to be well founded confidence.

9 So should those turn out to be wrong, is
10 the project willing to commit that they will not seek
11 an easing of the water quality limits that they're
12 currently proposing?

13 THE CHAIRPERSON: Thank you for that,
14 Todd. Over to De Beers.

15

16 (BRIEF PAUSE)

17

18 MS. VERONICA CHISHOLM: Veronica
19 Chisholm, from De Beers. I guess the comment -- I
20 think -- I think I need to tackle the comment on Snap
21 Lake in terms of the confidence that we had in the
22 modelling.

23 We did have a fair amount of confidence
24 in the modelling at Snap Lake and there had been
25 changes. There have been increases to the water --

1 groundwater inflows into Snap Lake and we responded.
2 And we're continuing to respond. And Snap Lake is
3 going through a separate regulatory process in order to
4 determine the next set of parameters.

5 And we -- and we understand. And -- and
6 they've been monitoring and they've been adapting to
7 that process. We'll also be following an adaptive
8 management process. We don't foresee that we'll need
9 to change those EQCs. But if we do, or if something
10 comes up, and that's an upset condition, then we would
11 work through the Board process. And that's why the
12 regulatory process exists. And that's our expectation,
13 and that's our commission -- commitments.

14 And we follow any lessons that are
15 learned. And having that rigorous robust monitoring
16 program that allows us, and having the contingency in
17 place in order to store water within Gahcho Kue is --
18 is part of the primary -- primary design features of
19 our mine plan.

20 So they are very different mines between
21 Snap Lake and -- and Gahcho Kue. And I'm not trying to
22 deflect any of the responsibility or the confidence
23 around the modelling, but we'll work through the
24 regulatory process and that's why the regulatory
25 process is here.

1 So should there be any difference,
2 that's why we're doing the detailed monitoring, that's
3 why we submitted the monitoring and management plans in
4 advance, that's why we proposed the contingency options
5 that we have within the Water Management Plan. We've
6 been open and transparent about those from the start.

7 And that's our commitment, is to
8 continue to work through the regulatory process and to
9 monitor and detect change, and adapt our management
10 approach as required. Thank you.

11 THE CHAIRPERSON: Okay. Thank you for
12 that. Further from Todd?

13 MR. TODD SLACK: Thank you, Mr. Chair.
14 Todd Slack, on behalf of the Yellowknives. I've got --
15 I've got just a quick two (2) part question here.

16 De Beers, is it fair to say that the
17 Yellowknives have been active in trying to push the
18 develop -- the development of the Closure Plan into a
19 more complete and thorough document?

20 THE CHAIRPERSON: Thank you. Over to
21 De Beers.

22 MS. VERONICA CHISHOLM: Veronica
23 Chisholm, from De Beers. I mean, I'm -- I -- I don't
24 want to be presumptuous to speak or understand
25 everything that the Yellowknives Dene -- I've certainly

1 read the submissions that are available on the project
2 and, yes, closure has been a central theme and it's
3 been raised in the documentation that's been submitted
4 and -- submitted through this process and raised as
5 part of the technical sessions, so.

6 THE CHAIRPERSON: Thank you. Further
7 from the Yellowknives?

8 MR. TODD SLACK: Todd Slack on behalf
9 of the Yellowknives. Thank you, Mr. Chair.

10 So given that we've been trying to be
11 involved and trying to get this and advance this to
12 something more than conceptual and get details, it was
13 a little surprising to learn that the project had
14 unilaterally ruled out vege -- vegetation of the rock
15 piles, citing the steepness of the sides as one (1) of
16 the -- one (1) of the requirements of that. So closure
17 options could have considered a shorter and fatter rock
18 pile where vegetation would have been better, or more
19 easily achieved.

20 So don't you think that this is the kind
21 of thing that we should have been considering during
22 our closure engagements and during that active
23 discussion that we were looking to have, rather than
24 the Company simply saying, No, we're not going to do
25 that?

1 THE CHAIRPERSON: Thank you. Over to
2 De Beers.

3 MS. VERONICA CHISHOLM: Veronica
4 Chisholm with De Beers. I think we've been fairly open
5 about what our closure land forms would look like. We
6 have actively engaged in closure, but keep in mind what
7 we've been asked for is to submit a conceptual Closure
8 Plan.

9 And we know that Closure Plan will
10 become further informed with the reclamation research
11 that the Yellowknives Dene have asked us to do and
12 we've agreed to do that. That reclamation research
13 will include re-vegetation trials so that we can see
14 what can be established and what we cannot establish.

15 And also from the panel decision report
16 it was always about maintaining a small footprint on
17 our -- on -- at closure, and that's what we've designed
18 our project around. But, fundamentally, the project
19 plan has not changed since we submitted in the EIS in
20 2012.

21 And -- and so -- so when we're
22 evaluating and at this conceptual stage, this is what
23 we believe and this is the commitments that we've made
24 that we think it's possible with re-vegetation. But we
25 recognize that we need to do some more research, and as

1 we advance the additional interim closure plans will
2 adapt and change that Reclamation Plan. Thank you.

3 THE CHAIRPERSON: Thank you. Further
4 from the Yellowknives?

5 MR. TODD SLACK: Thanks, Mr. Chair. My
6 final question, and during the -- the introduction
7 today Mr. Korpachek (sic) discussed Snap Lake's history
8 and the -- the benefits that the -- the project had
9 brought to the NWT and First Nations. And I certainly
10 don't want to take away with that -- take away from
11 that. You know, Snap Lake does do some -- has provided
12 value and benefits to First Nations and northerners.

13 However, I would like to ask a two (2)
14 part question, if I might. That is: What year did
15 Snap Lake open, and how many of those years has it bee
16 in compliance with its socioeconomic agreement?

17 THE CHAIRPERSON: You know what, I'm
18 starting to have a little -- some problems. We're
19 actually sitting here -- we -- we dealt with Snap Lake
20 years ago. And we're actually here dealing with Gahcho
21 Kue. And I'm not too sure if the Board needs the
22 information to make any decision on -- on this file,
23 you know, using an old file that's actually also active
24 to the Board.

25 So I don't know whether you could --

1 could maybe ask -- ask those as side questions, or if
2 you have a -- a problem with that?

3 MR. TODD SLACK: Thanks, Mr. Chair. Of
4 course, I'm happy to have that guidance. If it's fair
5 enough I can just talk to that in our presentation.

6 THE CHAIRPERSON: I would appreciate
7 that. I think the Board members would. De Beers is
8 happy to -- if you're happy to respond, that's up to
9 you.

10 MS. VERONICA CHISHOLM: Veronica
11 Chisholm, with De Beers. We're always happy to answer
12 Yellowknives Dene questions, but we're uncertain
13 whether it's the -- in everyone's -- the purpose why
14 we're here is to talk about a water licence and a land
15 use permit for Gahcho Kue, and so talking about the
16 socio-economic conditions at Snap Lake, I'm not sure of
17 the relevance in the information at this particular
18 point.

19 But we'd certainly be welcome to
20 continue any engagement or conversations or answer any
21 questions from the Yellowknives Dene, as we always
22 have. Thank you.

23 THE CHAIRPERSON: Okay. Thank you for
24 that, Todd, and thanks for your cooperation in that.
25 Do you have further?

1 MR. TODD SLACK: No, sir.

2 THE CHAIRPERSON: Great. We'll -- then
3 we'll break for lunch and see everybody back here at
4 1:30? 1:30.

5

6 --- Upon recessing at 12:05 p.m.

7 --- Upon resuming at 1:37 p.m.

8

9 THE CHAIRPERSON: Good afternoon,
10 everyone. Thanks for coming back in a timely fashion.
11 Appreciate that. So our next set of questions to De
12 Beers presentation is from the North Slave Metis
13 Alliance.

14 MR. MATT HOOVER: Thank you, Mr. Chair.
15 Matt Hoover, North Slave Metis Alliance. I just want
16 to thank the other parties for their questions this
17 morning, and we look forward to presenting tomorrow.
18 We only have really one (1) question that arose -- a
19 new concern that arose from this morning.

20 So from an NSMA perspective, this has
21 not been addressed yet and it relates to the three (3)
22 concerns from the interventions: the Aquatic Effects
23 Monitoring Program working group, the WWHPP and WEMP
24 planning, and the closure working group and the
25 transfer of these responsibilities and discussions to

1 Ni Hadi Yati.

2 So under the current draft, I think it
3 might be forty-two (42) of Ni Hadi Yati. From my
4 knowledge, the organization is not built to and does
5 not have the capacity for staff from each Aboriginal
6 organization to take on these new and critical reviews
7 of technical material, as well as to allow for
8 community dialogue.

9 I believe that it, at this time, has
10 fifty-five hundred dollars (\$5,500) per year set aside
11 for organization to deal with all the existing Ni Hadi
12 Yati responsibilities. So I'd like De Beers to expand
13 on if and how they think the organizations can
14 accomplish the Ni Hadi Yati mandate plus these tasks on
15 the existing budget while maintaining a profound and
16 ongoing dialogue with the communities.

17 And from a Board's perspective, I think
18 they might need to consider these issues and how
19 shifting them around could leave them unresolved in the
20 future. Thank you.

21 THE CHAIRPERSON: Thank you for your
22 questions. We'll turn it over to De Beers.

23

24 (BRIEF PAUSE)

25

1 MS. VERONICA CHISHOLM: Veronica
2 Chisholm, from De Beers. Thank you for the question.
3 With respect to the Ni Hadi Yati agreement, I think we
4 both know it's ongoing and it's going through the
5 ratification process.

6 But our agreement to the closure working
7 group, a wildlife working group or wildlife issues, and
8 the AEMP working group, De Beers would provide, as we
9 have in the past, adequate capacity funding to ensure
10 that the communities would have participation and that
11 we would have participation in those beyond what we
12 have within Ni Hadi Yati.

13 It just seemed to us the structure and
14 the format of Ni Hadi Yati, that these would be housed
15 -- could be housed quite well under that umbrella
16 organization. But should additional capacity funding
17 be required, then De Beers would commit to providing
18 that. Thank you.

19 THE CHAIRPERSON: Thank you for that.
20 Further...?

21 MR. MATT HOOVER: Matt Hoover, North
22 Slave Metis Alliance. That's the extent of our
23 questions. And we look forward to presenting tomorrow.
24 Thank you.

25 THE CHAIRPERSON: Okay, thank you. So

1 now we'll go to -- if there are any registered speakers
2 or if there's anyone on our teleconference open line.

3 Anyone from the general public? It
4 looks like we're blank there.

5 So then we will go to the Board staff.

6 MS. SHANNON SHAW: Thank you. It's
7 Shannon Shaw, consultant for the Board. I've got kind
8 of two (2) lines of questions that are in response to
9 the IR-9 and IR-10 from the technical sessions. So
10 maybe starting with IR-10, which related to the request
11 to prepare a standard operating procedure for
12 construction rock or the non-PAG rock.

13 And there was a report submitted in that
14 response that was the PAG placement strategy report
15 which connected, as they maybe left a few things
16 missing that we were looking for. And I've got a
17 handful of questions that I'll maybe do one (1) by one
18 (1) that all relate to that in context.

19 So within that report there was a
20 discussion of a sampling frequency of eight (8) samples
21 per hundred thousand tonnes, which is a pretty standard
22 guideline for sampling on this basis. And to kind of
23 put that into some perspective, that, in my
24 calculations, is roughly one (1) sample on a pit bench
25 about as long as a swimming pool, about 25 metres long;

1 again, a fairly standard sampling frequency.

2 And what we were wondering is whether
3 there's been any thought put forward to ver -- a
4 verification program that would assess whether or not
5 that frequency is sufficient to be identifying PAG in
6 the field. The sulphides, as I understand it, there
7 are usually structurally in place in veins or some
8 fractures. So you can see how a 25 metre distance you
9 could either hit a sulphide pocket that doesn't
10 represent that length, or you miss sulfides within that
11 length.

12 So we'd be looking toward some
13 discussion on verifying that sampling frequency.

14 THE CHAIRPERSON: Thank you, Shannon.
15 Over to De Beers.

16

17 (BRIEF PAUSE)

18

19 MR. ANDREW WILLIAMS: Mr. Chair, Andrew
20 Williams, for De Beers. Shannon, you're quite right in
21 that the sampling that was done in the past has
22 indicated to us that there isn't widespread sulphide
23 minerals, for example, and that those that we have
24 found tend to be restricted to fractures or faults, or
25 maybe contacts within the rock. And given the -- the

1 sampling ratio of eight (8) samples per hundred
2 thousand tonnes, that's a relatively wide spacing.

3 However, what we do during the mining
4 process is that any of the exposed faces are mapped.
5 And so particularly in the early stages of the mine,
6 until we get an understanding of -- of the distribution
7 of the sulfides and how they might be related to
8 certain structures, we'll use that face mapping to --
9 to guide the sampling. And if we feel that we need
10 additional sampling in a particular area we will do so.

11 And that will allow us to build a
12 database of information to understand more of the
13 distribution of where those sulphide minerals which are
14 the prime cause, obviously, of the -- of -- of the PAG
15 material, where they might occur in the rock mass.

16 THE CHAIRPERSON: Thank you for that.
17 Back to Shannon.

18 MS. SHANNON SHAW: Thank you. Shannon
19 Shaw, consultant for the Board. Thank you. I think
20 that certainly takes it a step further beyond what was
21 in that -- the memo. So we'd be looking for that kind
22 of detail in a operating-procedure-type document, as
23 well as some discussion or context around how the
24 samples and the results of those samples would be
25 extrapolated on an operational scale.

1 So if you had, again, a pit bench with,
2 say, ten (10) samples and one (1) was PAG, what volume
3 would be extracted and handled as PAG?

4 And if there's algorithms that are going
5 to be developed to help guide that definition of dig
6 blocks and ultimately what ends up in a truck and where
7 that goes, if you could put some discussion together on
8 that, that would be very helpful.

9 THE CHAIRPERSON: Thank you. Over to
10 De Beers.

11

12 (BRIEF PAUSE)

13

14 MR. ANDREW WILLIAMS: Mr. Chair, Andrew
15 Williams, for De Beers. Shannon, we have begun to
16 develop a standard operating procedure for this. And
17 so perhaps let me read out the steps that we've
18 identified so far. It -- there are still obviously
19 some areas that we might want to refine a little bit
20 further, but I think this should -- should help.

21 So, essentially, we will sample -- as
22 you know, we'll sample the drilled blast holes at a
23 frequency of -- it'll be equivalent to about eight (8)
24 samples per 100,000 tonnes. We would sample daily, so
25 the drilling obviously is an ongoing process. We would

1 sample daily in -- in a -- at a rate consistent with
2 that eight (8) per hundred thousand (100,000).

3 We'd then send those samples off for
4 analysis for the total sulphur content. If we got a
5 sample, or a cluster of samples that returned results
6 higher than .1 percent total sulphur we would demarcate
7 this area as a potential source of PAG material.

8 The area to be identified would be based
9 on the nearest non-PAG identified samples. So that
10 would define for us a polygon around the sample or
11 samples that contained the PAG. That area would be
12 surveyed and then post the blast we would re-identify
13 that area. We would demarcate it with pylons,
14 flagging, whatever's appropriate, so that the shovel
15 operator can see clearly where it is.

16 The mining operations team will then be
17 responsible for monitoring the loading from that area
18 to ensure that the PAG designated material is
19 dispatched to the appropriate area. The PAG in -- from
20 -- in the early years, from years 1 to 2, minus -- what
21 we call minus one (1), which is a construction year,
22 into approximately year 2 of operations will be placed
23 in submerged areas around the -- in the rock piles, or
24 in -- perhaps in -- in dike areas as we've discussed,
25 to keep them submerged.

1 And after year 4 they'll be placed in
2 the -- sorry, from year 2 though to year 4 they would
3 be placed in a designated area within the south mine
4 rock pile, maintaining at least a minimum distance of
5 15 metres from the edge of the mine rock pile, as
6 again, I think was discussed earlier this morning. The
7 -- once -- after year 4 once a mine pit is available,
8 which at this stage would be the Hearne pit, we would
9 then put all the PAG designated material into that pit,
10 or the 5034 pit when that became available.

11 We'll record, obviously, the trucks --
12 the loads that go and where those loads go to, so that
13 we'll keep track of the material. And that -- that
14 record will be used by the geochemist in order to
15 evaluate the overall acid-generating potential of the
16 pile.

17 THE CHAIRPERSON: Thank you for that.
18 Further, from Board staff?

19 MS. SHANNON SHAW: Thank you. Shannon
20 Shaw, consultant for the Board.

21 Thank you. And can I just ask verifying
22 then that the volumes -- you'll be tracking the volumes
23 of PAG rock as placed. I -- I think I recall from past
24 discussions that there was a basis of 6 percent, which
25 is assumed to be the current PAG volume that would be

1 placed that way, and that if volumes tended to be quite
2 a bit higher, that adaptive management type procedures
3 would be kicked into place and decide what to do.

4 And would that then be a criteria on
5 which you would look to this PAG -- optional PAG
6 strategy that's been brought up lately? Or what -- on
7 what criteria would you reconsider that optional PAG
8 strategy of stockpiling and re-handling the PAG?

9 THE CHAIRPERSON: And thanks for that.
10 Over to De Beers.

11

12 (BRIEF PAUSE)

13

14 MR. KEN DEVOS: Thanks. Mr. Chair,
15 there's -- it's Ken DeVos from Golder Associates --
16 there's a series of management options that -- that we
17 would have, and -- and could be pulled forward as
18 needed. And, you know, to keep in mind that we do
19 currently have more than twelve hundred (1,200) samples
20 of this -- this rock material, so we have a pretty good
21 handle on -- on what the geochemistry of the material -
22 - what the expected geochemistry of the material will
23 be.

24 That said, the -- the steps that -- that
25 Andrew has put forward, in terms of -- of defining and

1 moving and characterizing any PAG material, will allow
2 De Beers to understand where exactly in the pile that
3 material is. And they'll be trying to -- to maintain a
4 fairly small zone of that material, so as the pile
5 develops, that zone will be in one (1) spot in the
6 pile. So there's really -- it -- it's not necessary to
7 have a separate stockpile to start with because for --
8 for a couple of reasons, right.

9 First of all, we go back and do a
10 geochemical evaluation at least on an annual basis as
11 the pile is being developed for those few years that
12 we're putting the PAG material in the pile. And
13 depending on the results of that geochemical
14 evaluation, the options that -- that might present
15 themselves would be to first do nothing because the
16 material turns out to be non-acid generating which is
17 what we expected.

18 Secondly, we could look at a potential
19 for putting a cover over that specific area of the pile
20 to reduced loadings from that area of the pile, and
21 maintain good water quality coming from that area.

22 And the third, although it's completely
23 unexpected and -- and Veronica can speak to the
24 willingness to -- to take that extra step, the third
25 and final step would be simply to relocate material

1 from that particular zone of the pile to an underwater
2 envir -- environment. But that would only be
3 undertaken if absolutely necessary. And, frankly, we
4 don't feel it's necessary at this -- this particular
5 time given the amount of -- and the understanding of
6 the geochemistry, and the number of samples that have
7 been collected of the waste rock throughout the -- the
8 different pits.

9 THE CHAIRPERSON: Okay. Thank you.
10 And further from the Board staff?

11

12 (BRIEF PAUSE)

13

14 MS. REBECCA CHOUINARD: Thank you, Mr.
15 Chair. It's Rebecca Chouinard here, for the Board. I
16 just want to be sure -- certain that we're absolutely
17 clear here, because in the manual, or the operating
18 procedure that you've presented, there was this option
19 for stockpiling. And so what we're hearing is that you
20 think you'll need to do that, which might -- hopefully
21 for everybody that's true, and some other options you
22 would try first.

23 So if monitoring results show that there
24 was a potential problem you would look at covering that
25 small area first, and then you talked about relocating

1 that material that was located in the pile. I'm just
2 not sure I'm understanding that last option.

3 And I haven't heard you speak to
4 stockpiling. So is stockpiling ever going to happen?
5 And if so, what would define the criteria of when you
6 would stockpile?

7 THE CHAIRPERSON: Thank you for that,
8 Rebecca. So over to De Beers.

9
10 (BRIEF PAUSE)

11
12 MS. VERONICA CHISHOLM: Veronica
13 Chisholm, from De Beers. I guess -- well, let me try
14 this one. So -- just so we're clear, for the first few
15 years of mining and while we're undertaking
16 construction activities, we have capacity underwater to
17 store that mine rock pile. We will be able to compare
18 back the amount of volumes of PAG that we're
19 identifying and see whether we're on the same
20 trajectory that we're expecting based on the twelve
21 hundred (1,200) samples that we've sampled to date in
22 terms of overall volume and amount of PAG.

23 We're not proposing at this time -- so
24 I'll have a couple of years -- I'll have a few years of
25 data that tells me about where we are with -- with

1 respect to the PAG.

2 And -- and at that time, what we're
3 proposing right now is for those two (2) years where we
4 don't have a pit available or we may be achieving
5 capacity -- we may be under capacity, as well. Like we
6 could still -- we might not ever need to -- to actually
7 put rock in the mine rock piles at all. But if we need
8 to, we're -- we're proposing, for that limited period
9 of time, that we would not do a separate stockpile but
10 actually store that material within a flagged area,
11 within a known area, within a fairly large mine rock
12 pile. And if need be, we would apply an application.

13 But on an annual basis we'll let you
14 know what our volumes of PAG are that we're blasting
15 from the area, so we can provide that certainty around
16 the -- around the estimates that we'll have in advance
17 of the time that we have to go into the mine rock pile.

18 THE CHAIRPERSON: Thank you. Back to
19 the Board staff.

20 MS. SHANNON SHAW: Thank you. It's
21 Shannon Shaw again, consultant for the Board. So I
22 think that wraps up most of the questions related to
23 that IR-9 response. Is it possible then to request as
24 an undertaking that that would be documented in the --
25 in the revised standard operating procedure to that IR

1 request, which would include some of the discussion on
2 the verification of sampling frequency, as well as the
3 steps in operational handling of PAG and non-PAG, and
4 the verification of the -- the volumes as you move
5 forward, or the program in which that would be done?

6 THE CHAIRPERSON: Thank you. So
7 response from De Beers?

8 MS. VERONICA CHISHOLM: Veronica
9 Chisholm, from De Beers. I would suggest that we could
10 do this two (2) ways: 1) we could take it on as an
11 undertaking, or we could include that with our update
12 to our geochemical characterization plan as an Appendix
13 2, including the standard operating procedure into that
14 kind of a living document that we have.

15 So I'll -- I'll wait your advice on
16 that.

17 THE CHAIRPERSON: Okay. Thank you. So
18 maybe a little huddle, or...?

19

20 (BRIEF PAUSE)

21

22 MS. REBECCA CHOUINARD: Thank you, Mr.
23 Chair. It's Rebecca Chouinard, for the Board. Our
24 preference would be to get that information as an
25 undertaking.

1 So, more specifically, an updated
2 standard operating procedure for PAG and non-Pag
3 handling. And then -- the additional information we're
4 looking for are based on the questions that we just
5 asked that have to do with frequency and handling
6 procedures, verification process. And we're also
7 interested in the volume.

8 So just to reiterate some of the process
9 that -- that you talked about in defining your PAG
10 blocks, that additional volume that maybe was not
11 accounted for in that 6 percent PAG classification.

12 So if -- if that's clear, just trying to
13 get a sense of when you think you could have that
14 information together.

15 THE CHAIRPERSON: Okay. Thank you,
16 Rebecca. So over to De Beers and the question of the
17 undertaking.

18

19 (BRIEF PAUSE)

20

21 MS. VERONICA CHISHOLM: Veronica
22 Chisholm from De Beers. We'll have that completed by
23 the end of the week, and -- so that we can submit that
24 and have that in front of you, so no one has to take
25 home any homework over the weekend. So thank you.

1 --- UNDERTAKING NO. 1: De Beers Canada Inc. to
2 provide to the MVLWB an
3 update to the Standard
4 Operating Procedure for
5 handling of the PAG and
6 Non-PAG rock including
7 placement and volumes in
8 the blocks due May 9, 2014
9

10 THE CHAIRPERSON: Thank -- back to
11 Board staff.

12 MS. SHANNON SHAW: Thank you. It's
13 Shannon Shaw again, consultant for the Board. And move
14 on to that -- a set of questions that relates to IR-10
15 which was a request for a sensitivity analysis on the
16 source term predictions, including some discussion on
17 the analog of Ekati as being waste rock that may be
18 similar to what we expect at -- at Gahcho Kue.

19 So the -- the first question is: We've
20 heard that Ekati granite and waste rock, we think, is a
21 fairly similar analog here, and is that also the case
22 for the kimberlite?

23 THE CHAIRPERSON: Thank you for that.
24 And just for the record and to be clear for the
25 members, was that an undertaking that we suggested, or

1 the staff suggested?

2 MR. JOHN DONIHEE: It's John Donihee,
3 Board counsel. Mr. Chairman, I wrote down Undertaking
4 number 1 as being an update of the standard operating
5 plan related to PAG rock, volumes, placement, and
6 handling. That's the best I can manage with all that
7 stuff. And to be filed by May the 9th, which is
8 Friday.

9 THE CHAIRPERSON: Thanks, John.
10 Further from De Beers?

11 MR. KEN DEVOS: Ken DeVos, with Golder
12 Associates. We didn't look specifically at the
13 comparison between Ekati kimberlite and the -- the
14 kimberlite from Gahcho Kue. And -- and the reason is
15 we have a number of samples for this particular
16 kimberlite and we used the results from the samples
17 that we have on this particular kimberlite to determine
18 the geochemical characteristics of the kimberlite.

19 THE CHAIRPERSON: Thank you. Back over
20 to...

21 MS. SHANNON SHAW: Thank you. Shannon
22 Shaw, consultant for the Board. I think we were just
23 looking at whether it was also an appropriate analog
24 for some of the monitored seepage chemistry to give
25 some more certainty or comfort in the source term

1 predictions.

2 We did use a seep from Ekati -- or you
3 submitted a seep from Ekati to compare source terms
4 from the waste rock piles, and we were trying to get a
5 sense of whether those would also be appropriate analog
6 data, the monitored seeps at Ekati, for other
7 facilities on site.

8 THE CHAIRPERSON: Thank you. Back to
9 De Beers.

10

11 (BRIEF PAUSE)

12

13 MR. MICHAEL HERRELL: Thank you, Mr.
14 Chair. It's Mike Herrell from Golder Associates. The
15 -- the purpose of that IR was to only look at the --
16 the mine rock that was going to be placed in the mine
17 rock piles.

18 So it would be the source terms that
19 we're using in the model. They're discussed in our --
20 in the -- the modelling appendix of the EIA. And we --
21 the -- the IR was questioning whether the -- the source
22 terms that were used in the model, if they were similar
23 to an analog site. In that IR, we've -- I think we've
24 demonstrated that they were similar.

25 In the context of the -- the fine PK, we

1 didn't use humidity cell samples for the fine PK. We
2 used the saturated column test 'cause the -- the
3 concept is the fine PK will be placed in Area 2 and
4 it'll be saturated and there'll be saturated flow
5 through -- through the -- the fine PK.

6 So the -- the source term that was used
7 for the fine PK, using the saturated column test, we
8 considered that a -- a reasonable direct analog of the
9 -- the drainage chemistry through those materials that
10 would be placed under water at site.

11 THE CHAIRPERSON: Thank you.
12 Further...?

13 MS. SHANNON SHAW: Thank you. Shannon
14 Shaw, consultant for the Board. Could -- could you
15 comment on why only seep 60B (phonetic) from Ekati was
16 considered in that comparison? We looked a bit at the
17 Ekati data and recognize there's a number of seeps on
18 site, some of which we know aren't necessarily just
19 from granite; they're also in association with some
20 kimberlite, as well.

21 So we try and just tease out which may
22 or may not be appropriate analogs, and recognize
23 there's a lot of variability in some of the chemistry
24 on that site. So just trying and get a better sense of
25 that as a comparison to -- for your -- for your source

1 terms, and understanding the certainty or uncertainty
2 in those.

3 THE CHAIRPERSON: Okay. Thank you,
4 Shannon. Back to De Beers.

5

6 (BRIEF PAUSE)

7

8 MR. KEN DEVOS: Ken DeVos with Golder
9 Associates. So the -- the reason that we chose 60B is
10 for -- there were a few reasons. It's -- it's composed
11 primarily of granite, similar to -- to this site. It
12 contains some acid-generating material similar to what
13 we might -- might have at this site. And it still
14 remains -- well, the other reason is it -- it -- the
15 pile has grown -- been growing over ten (10) years, and
16 what -- one (1) of the things we -- we were looking to
17 demonstrate from the comparison is -- is our -- the
18 approach that we used for the modelling was
19 appropriate.

20 So if -- if we had used the mass-based
21 approach for the model, and if Ekati -- if that pile
22 was growing and a mass-based approach was the
23 appropriate approach to use, we would have expected the
24 concentrations to be increasing over time. And what we
25 see with the Ekati -- that -- that analog -- and -- and

1 it's not just -- we looked at a few other locations.
2 What we see with the Ekati analog is that the
3 concentrations are steady over time, and they're
4 consistent with what we see in our -- our static test
5 results and our humidity cell test results which --
6 which is -- or how we model those -- those -- put those
7 results into our model, which is a steady concentration
8 over time.

9 So what we were trying to demonstrate
10 was that indeed it was appropriate, and in fact it --
11 that was what we had been seeing at other diamond mine
12 locations in the North with similar types of rocks, and
13 similar types of acid generation characteristics as we
14 might expect with this pile.

15 THE CHAIRPERSON: Okay. Thank you.
16 Back to Shannon or Rebecca...?

17 MS. SHANNON SHAW: Thank you. Shannon
18 Shaw, consultant for the Board. Has -- is it possible
19 to get that water quality monitoring data filed for our
20 comparison? From Ekati, sorry. So one (1) of their
21 public record monitoring reports.

22

23 (BRIEF PAUSE)

24

25 MS. VERONICA CHISHOLM: Veronica

1 Chisholm with De Beers. Excuse me.

2 So with the Information Request that we
3 filed we included the reference, which is the SRK
4 consulting report at 2013. The 2012 waste rock and
5 waste rock -- waste rock storage area seepage survey
6 report is final. It was submitted to the Wek'eezhii
7 Land and Water Board in March 2013.

8 We can -- we can try and find it on the
9 registry for you, or -- or whether that's sufficient
10 enough with just that reference?

11 THE CHAIRPERSON: Okay. Thank you. Do
12 you want to reply to that, Zabey, or...?

13 MS. REBECCA CHOUINARD: Sure. Yeah,
14 Rebecca Chouinard, for the Board. Thanks a lot. I
15 think that's the information we were looking for. I
16 didn't realize that you had referenced the report. So
17 the fact that you've referenced the report just enables
18 us to look at that data to see if there's any other
19 comparisons that we may want to consider. So that
20 satisfies our need.

21 THE CHAIRPERSON: Okay. Thanks. Is
22 there further questions? That's what we're here for.

23 MS. SHANNON SHAW: Thanks. Shannon
24 Shaw, consultant for the Board. Just a couple more
25 follow-up, or maybe it's one (1) parcelled together.

1 And that was -- again, in that -- that same IR for
2 sensitivity analyses, we were kind of hoping to get a
3 better feel for the loading from the various facilities
4 and how changes in those source term predictions could,
5 or couldn't, possibly, affect the -- the predictions
6 downstream.

7 So I think I've teased out some of that
8 information from tables and I was just hoping you could
9 confirm for me that I have my understanding straight.
10 And that is that during operations, roughly 10 percent
11 of the flows to the water management pond come from the
12 combined fine PK facility, coarse facility, and the two
13 (2) rock piles? And I got that information from Table
14 9.8-1 in your November report that came with this
15 package.

16 THE CHAIRPERSON: Thank you. And over
17 to De Beers.

18

19 (BRIEF PAUSE)

20

21 MS. VERONICA CHISHOLM: Veronica
22 Chisholm, with De Beers. We're just going to pull that
23 out and confirm the information. But we'll have that
24 by the end of the day. They're just going to go over
25 and -- and confirm that, Mr. Chair. So we -- it --

1 we'll take your number as correct, but we'll just do a
2 confirmation on that and pull that data. But it's not
3 an undertaking per se, because we think we can have
4 that completed by the end of the day. Thank you.

5 THE CHAIRPERSON: Okay. Thank you for
6 that. That works for you, John? And further from
7 Board staff?

8 MS. SHANNON SHAW: Thank you. Shannon
9 Shaw, consultant for the Board. And just with that
10 then, I think also the closure values, or post-closure
11 values were on the order of about 18 percent of the
12 flows come from those facilities to the water
13 management pond?

14 And again, we'd just be looking at
15 trying to get a better handle or conceptualization on -
16 - on how much of those sources could be contributing to
17 the -- the downstream.

18 THE CHAIRPERSON: Thank you. Is there
19 further response? De Beers...?

20 MR. MICHAEL HERRELL: It's Mike
21 Herrell, from Golder. Mr. Chair, yes, we -- we'll
22 provide that information or that confirmation. But I -
23 - I just want to be clear on what we're actually
24 entering, because there's closure and post-closure, so
25 I -- from those facilities. I'll have to look at the

1 balance to see if they're different.

2 But in -- in the post-closure period,
3 you're looking for the facil -- all of the mine rock
4 facilities, including the -- the two (2) mine rock
5 piles and the fine PK facility. Is that correct?

6 MS. SHANNON SHAW: Yeah, Shannon Shaw,
7 consultant for the Board. That -- that's correct.
8 It's really your -- your mine rock facilities, your --
9 you know, where you could be getting some contact water
10 from mine activities.

11 THE CHAIRPERSON: Thank you. And back
12 to De Beers.

13

14 (BRIEF PAUSE)

15

16 MS. VERONICA CHISHOLM: Veronica
17 Chisholm, from De Beers. Absolutely, we'll confirm the
18 numbers that Shannon has provided. But we also want to
19 keep sort of -- have everyone aware that we'll be
20 monitoring all the way along to confirm our
21 assumptions. And we won't be -- you know, we'll have
22 the three (3) years of operational discharge, but, you
23 know, by the time we get to closure we'll have a pretty
24 thorough data set and we'll probably have some
25 remodelling done in advance of closure to ensure that

1 we meet those objectives.

2 So that's -- I'm just saying that
3 there's layers of certainty and confirmation that we
4 have built into our monitoring system that -- I just
5 wanted to mention that as well, so. Thank you.

6 THE CHAIRPERSON: Okay, thanks for
7 that. And further from Board staff?

8 MS. REBECCA CHOUINARD: Thank you, Mr.
9 Chair. It's Rebecca Chouinard here, for Board staff.
10 Just to switch gears completely now. I see smiles over
11 there. My next question, I'm just looking for a bit of
12 information that would assist us in determining when
13 various plans are required as they relate to certain
14 activities. And we've heard some proposed timelines
15 from the Proponent and from others.

16 And I'm just wondering -- and perhaps
17 this is best answered in an undertaking. I don't know
18 if you'd have all the details I'm looking for right now
19 off the top of your head. But essentially, we're
20 wanting -- wondering if De Beers could walk through in
21 detail the sequence of activities incorporating any
22 seasonality considerations to back up your preferences
23 for submission dates and the proposed review process,
24 specifically having the review start prior to
25 ministerial sign off of the licence for the various

1 management plans.

2 So, essentially, we know that there's
3 certain plans that will likely need approval before the
4 linked activities can take place. And we're trying to
5 get a sense of what -- what scheduling constraints
6 you're battling with to help in that decision.

7 THE CHAIRPERSON: Thank you, Rebecca.
8 Over to De Beers.

9 MS. VERONICA CHISHOLM: Veronica
10 Chisholm, from De Beers. Yeah, I'd like a little bit
11 of time just to think about that very carefully because
12 this starts to become part of our critical path, and I
13 want to be really clear and transparent on what we can
14 achieve and what the -- the timelines we would expect
15 to provide those management plans.

16 So this I would request that it's an
17 undertaking. I know you're looking for a date for that
18 undertaking submission. Let me confer with some people
19 who are going to assist me with that undertaking and
20 I'll -- I'll give you a date, but it would be
21 Undertaking number 2, I think.

22

23 --- UNDERTAKING NO. 2: De Beers Canada Inc. to
24 provide to the MVLWB the
25 sequence of activities and

1 critical paths, including
2 times, for submission of
3 the plans and programs
4 required for the Water
5 Licence and Land Use Permit
6 due May 15, 2014
7

8 MR. JOHN DONIHEE: It's John Donihee,
9 Board counsel. The -- actually, the work plan does
10 identify a date for the submission of undertakings of
11 May 15th. So if -- if you need to vary from that, just
12 perhaps you can come back on the record before the end
13 of the afternoon and let us know. But if we don't hear
14 otherwise from you, then we'll assume it's coming on
15 May 15th.

16 MS. VERONICA CHISHOLM: We'll strive
17 for earlier, but we'll take the backstop of May 15th.
18 Thank you.

19 THE CHAIRPERSON: Thank you. Is there
20 further from De Beers on that?

21 MS. VERONICA CHISHOLM: Veronica
22 Chisholm, from De Beers. No. Thank you.

23 THE CHAIRPERSON: Okay, thank you.
24 Back to Board staff.

25 MS. REBECCA CHOUINARD: Thank you, Mr.

1 Chair. It's Rebecca Chouinard, with the Board. I just
2 have one (1) last question before I turn it over to my
3 colleagues here, and it relates to De Beers's position
4 on the water licence term. And I believe you've
5 submitted that you are seeking a twenty (20) year term.

6 We're just interested to hear from all
7 parties today, actually, on -- just to verify that is
8 the term you're seeking and the rationale behind that.

9 THE CHAIRPERSON: Thank you. Back to
10 De Beers.

11

12 (BRIEF PAUSE)

13

14 MS. VERONICA CHISHOLM: Veronica
15 Chisholm, from De Beers. Yeah, when we submitted the
16 water licence, we did -- we noticed that there was the
17 term 'variable' that was in there from one (1) to
18 twenty (20) years. And I suppose we were a bit
19 ambitious with going with the twenty (20) years. But
20 the way we looked at it is any modifications could be
21 captured in the monitoring and management plans and
22 through the adaptive management plans.

23 That they're -- they're certainly at the
24 point of issuance of the -- of the Application. We
25 didn't see that we would need to mend any of the terms

1 in our water licence, but, I mean, certainly we would
2 benefit from the Board's experience and other parties'
3 experience to advise on that.

4 But we were quite confident when we
5 submitted that application and certainly would -- would
6 understand if that needed to be adapted or changed, but
7 that was our positioning. But the monitoring and
8 management plans and -- and the degree of monitoring in
9 the adaptive management plan would preclude the need
10 for us to open up our water licence. Thank you.

11 THE CHAIRPERSON: Thank you. Back to
12 Rebecca.

13 DR. KATHY RACHER: Okay. Kathy Racher,
14 for the Board. So I -- I'm going to switch gears again
15 and ask you a few questions on the -- your EQC report
16 first. So as you know, there have been recommendations
17 put forward by other parties for EQC for parameters in
18 add -- in addition to the ones that De Beers has
19 proposed. And we don't know what the Board's going to
20 decide yet.

21 So my job is to make sure that the Board
22 has all the information it needs to -- to make other --
23 additional EQCs, should they choose to do so. So some
24 of my questions are annoyingly picky. So Table E-4, in
25 Appendix E to your report there -- you have a column in

1 there,

2 "Estimated maximum concentrations at
3 the edge of the mixing zone."

4 The -- I -- I think in the -- in the
5 discussion above the table it says that those are based
6 on the equation that are given on page E-10, which is
7 where the -- the table is. But try as I might, I -- I
8 cannot reproduce those -- those numbers in that last
9 column of Table E-4. And -- although they look about
10 right, but I still can't reproduce them.

11 So I just wondered if you could give me
12 a sample calculation where you show me, you know, what
13 numbers you put -- what equation you use, what numbers
14 you put in, and you could do that as an undertaking.
15 It -- it would only take a -- a minute, I'm sure, just
16 for one (1) parameter -- if you did it for one (1)
17 parameter, then I can figure it out for the rest.

18 MR. JOHN FAITHFUL: Mr. Chair, John
19 Faithful for Golder Associates. We're happy to take
20 that on as an undertaking. What we will do is -- is --
21 I can't promise that by the end of today, but we will --
22 -- we've actually undertaken some of this confirmation
23 work already. It's just a question of finding that,
24 and we can provide that for you tomorrow.

25 THE CHAIRPERSON: Okay. Thank you.

1 So, John, Undertaking Number 3?

2

3 --- UNDERTAKING NO. 3: De Beers Canada Inc. to
4 provide to the MVLWB an
5 example the equations used
6 to determine the EQC for
7 the parameters listed in
8 Table E.3 due May 15, 2014
9

10 THE CHAIRPERSON: And back to you,
11 Kathy.

12 DR. KATHY RACHER: Kathy Racher, for
13 the Board. Okay. With regards to ammonia, in the
14 report on -- in the main body of the report, page 36,
15 you talk about calculating a waste load allocation for
16 ammonia, treating it is a non-conservative parameter.

17 And I just -- I wanted to confirm with
18 the equations and everything there that essentially
19 what you're suggesting is that ammonia just won't
20 accumulate in Lake N11, for example, over time and --
21 and that the equations you've got there for waste load
22 allocation reflect that assumption that ammonia won't
23 be accumulating.

24 THE CHAIRPERSON: Thank you. Over to
25 De Beers.

1 (BRIEF PAUSE)

2

3 MR. JOHN FAITHFUL: Mr. Chair, it's
4 John Faithful, Golder Associates. So on -- on
5 reflection of page 36 and the text that we have
6 provided in page 38, there does seem to be an
7 inconsistency.

8 My initial thoughts at this proce -- at
9 this time, and I think we've been fairly consistent in
10 our -- in our conversation about the way that ammonia's
11 been treated as a conservative parameter through the
12 process, I would need to check the -- confirm the
13 wording on page 36. But it's my understanding that
14 there may be an error there, and I'd like to -- I'd
15 like the opportunity to -- to check for that and
16 correct -- correct on that basis.

17 DR. KATHY RACHER: Kathy Racher, for
18 the Board. That's fine. So we'll -- I'll take that as
19 an undertaking as well, just to -- to be clear. It
20 would be helpful then -- because in the final report,
21 yeah, there -- there is a -- an inconsistency, whether
22 its conservative or non-conservative.

23 And in the report you don't actually
24 show the calculation for an AML, average monthly limit,
25 for example, for ammonia. Because I think in the end

1 you calculate a number that's really high and then you
2 say, Well, that's not necessary. And so you just give
3 us the 10 milligrams per litre, which may be fine.

4 But -- so it would be helpful if you
5 just show what you think is the best way to calculate
6 the AML based on the methods you used -- you've used
7 for everything. And then if you're still recommending
8 the 10 milligrams per litre that's -- that's fine.

9 MR. JOHN FAITHFUL: John Faithful,
10 Golder Associates. Mr. Chair, we can -- we can provide
11 that information because we have -- we have worked
12 through those calculations. And perhaps the clarity
13 wasn't there in terms of -- of why we've explained the
14 -- the rationale for using an acute criteria to develop
15 the AML and the DL -- DML, although I -- I suggest that
16 -- that the argument is there.

17 But we can provide that -- the equations
18 and the rationale to -- to explain where -- why we've
19 ended up where we have. Thank you.

20 DR. KATHY RACHER: Kathy Racher, for
21 the Board. That'd be very helpful. So that's
22 Undertaking 3 -- 4.

23 See, I can't count. Wait, I wasn't
24 supposed to tell you that.

25

1 --- UNDERTAKING NO. 4: De Beers Canada Inc. to
2 provide to the MVLWB
3 rational and equations
4 (including any
5 inconsistencies) to explain
6 the calculations for the
7 average monthly limit for
8 ammonia due May 15, 2014
9

10 DR. KATHY RACHER: Kathy Racher, for
11 the Board. So I also have a question about the nitrate
12 EQC and water quality objective. In the report you've
13 recommended using the hardness dependent water quality
14 objective for nitrate that was originally developed for
15 Ekati in 2012.

16 And for the purposes of calculating the
17 EQC, you've assumed a hardness of 15 milligrams per
18 litre in Lake N11, which you say is the maximum
19 predicted for Lake N11. I note -- I mean, you
20 reference that the Wek'eezhii Land and Water Board
21 adopted that water quality objective for Ekati, but in
22 that case the Board set the EQC equal to the equation
23 for the water quality objective, which includes the
24 hardness, and multiplied by a dilution factor.

25 And the reason the Board did that in

1 their reasons for decision is because the Board was
2 allowing for the fact that hardness is a toxicity
3 modifying factor, but that hardness and nitrate would
4 accumulate over time. And so the -- using the equation
5 helped account for that.

6 So we didn't have to assume some future
7 maximum in the lake. We could -- you know, just as it
8 went as -- as both things, nitrate and hardness,
9 accumulated they would -- they would modify each other,
10 and the EQC just incorporated that.

11 So I -- I -- you know, you've brought up
12 the Wek'eezhii decision, and so I wanted to evaluate
13 the data in this case. One (1) thing I don't have in
14 order to sort of evaluate how hardness is changing, is
15 just -- actually the hardness concentrations that are
16 predicted for either the water management pond or Lake
17 N11 aren't in the report.

18 So for example in Appendix D, Table D2
19 (phonetic) you give the concentrations by a -- you
20 know, estimated by the model by month, by year -- for
21 three (3) years for all parameters but not for
22 hardness. And I wondered if you could -- you could
23 provide those values for hardness? Essentially the
24 same values as in Table D2, but for hardness.

25 THE CHAIRPERSON: Thank you, Dr.

1 Racher. We'll go back over to De Beers.

2

3 (BRIEF PAUSE)

4

5 MR. JOHN FAITHFUL: Mr. Chair, John
6 Faithful, Golder Associates. We have -- we have that
7 information, and we can provide that as an updated
8 table for D2, and we can provide that as another
9 undertaking.

10 DR. KATHY RACHER: Kathy Racher, for
11 the Board. We just laid bets as to who could get the
12 most undertakings out of you. I think I'm winning so
13 far.

14 No, those -- those shouldn't be
15 difficult for you to -- to generate, so.

16

17 --- UNDERTAKING NO. 5: De Beers Canada Inc. to
18 provide to the MVLWB
19 further information related
20 to hardness as outlined in
21 Table D.2 due May 15, 2014

22

23 DR. KATHY RACHER: Okay. One (1) --
24 (1) one of the things, in following up on a question
25 that Rebecca asked about -- you've asked for a number

1 of plans to be -- to be due six (6) -- within sixty
2 (60) days of issuance, including the AEMP, I notice,
3 and I'm just -- you know, in the -- in a -- we want to
4 actually take a look to see if there's some way of
5 staggering some of that, so that it's not -- we don't
6 get fifteen (15) reports on the same day.

7 But one (1) of the -- one (1) of the
8 things I wondered about was the AEMP design document.
9 I think ENR recommended it be submitted twelve (12)
10 months after licence issuance, but you had proposed
11 right -- to -- to submit it at once, or within sixty
12 (60) days.

13 And I just wondered if it was really
14 necessary to have that approved by the end of this
15 year. And -- and what I'm -- what I'm wondering is
16 when your first AEMP sample would be taken under that
17 AEMP. And I -- I guess I was thinking it wouldn't be
18 till next spring, but I wanted to confirm that with
19 you.

20 THE CHAIRPERSON: And, thanks. Just
21 for the record, John, I assume that was Undertaking
22 number 5?

23 MR. JOHN DONIHEE: Yes, sir.

24 THE CHAIRPERSON: Number 5, okay. It's
25 just like a Habs hockey game, you know, all these

1 scorings that are going. Thank you.

2

3 (BRIEF PAUSE)

4

5 MS. VERONICA CHISHOLM: Veronica
6 Chisholm, from De Beers. We submitted that updated
7 AEMP design document on April 16th, 2014. And we will
8 be doing AEMP monitoring as soon as we get our water
9 licence. So we're hoping that that report that we
10 submitted, that updated design document, which is the
11 second draft that we've -- it's Version 2, that we
12 submitted on April 16, could be considered as the AEMP,
13 that we can move forward that -- with that initial
14 sampling. And it -- that has included all of the
15 engagement, and comments, and commitments -- excuse me
16 -- made to date in that document.

17 DR. KATHY RACHER: Kathy Racher, for
18 the Board. Okay. Well, specifically my question was
19 when -- if -- if -- for example, if the Minister were
20 to sign the licence in early fall, when after that
21 would you be taking your first AEMP sample according to
22 the AEMP that you've got? Would it be -- are you
23 taking samples in winter, for example?

24 THE CHAIRPERSON: Thank you. Back to
25 De Beers.

1 (BRIEF PAUSE)

2

3 MR. JOHN FAITHFUL: Mr. Chair, John
4 Faithful, Golder Associates. In answer to Dr. Racher's
5 question, it's -- once the water licence been -- has
6 been issued and project activities commence, one (1) of
7 the -- one of the first project activities is -- is the
8 initiation of dewatering. And so some elements of the
9 AEMP monitoring would be initiated immediately. And
10 that -- that may -- more specifically, would include
11 hydrology monitoring, but may also include other
12 components such as water quality.

13 So we see some -- not so much urgency,
14 but we see that the AEMP monitoring would -- would be
15 initiated very shortly after the water licence
16 issuance. Thank you.

17 DR. KATHY RACHER: Kathy Racher, for
18 the Board. Thank you for that clarification. I guess
19 I can't get anymore undertakings out of you, so I'll --
20 I'll pass it on to -- to Dr. Hutchinson next to me.
21 Thanks.

22 DR. NEIL HUTCHINSON: Neil Hutchinson,
23 for the Board. Thank you, Kathy. Thank you, Mr.
24 Chair.

25 I'd like to come just a minute. We've

1 had some discussion with ENR this morning about site
2 specific water quality objectives and regional versus
3 lake specific baseline values. And I -- I've heard De
4 Beers say they -- they like the larger data set that
5 they -- they capture with the whole Kirk Lake
6 watershed, but I haven't heard them say why they
7 wouldn't like to do a lake specific N11 or Area 8 water
8 quality baseline. I haven't heard any good reason why
9 you wouldn't want to do that.

10 And I'd just like maybe you to -- to
11 elaborate on that?

12 THE CHAIRPERSON: Thank you for that
13 question and back to De Beers.

14

15 (BRIEF PAUSE)

16

17 DR. PETER CHAPMAN: Peter Chapman, for
18 Golder, Mr. -- Mr. Chair. Thanks, Neil, for that
19 question, and I apologize we hadn't clarified. There's
20 two (2) reasons. First of all, Kirk Lake is not --
21 these lakes are not closed systems. They don't exist
22 in isolation. They're connected. Fish -- it's --
23 water moves in and out. So we've -- you know, it's --
24 to just look at that one (1) system would not really
25 give you an idea of what things were exposed to.

1 The other is, when you're doing baseline
2 you want to get as big a data set as possible. So we -
3 - and I alluded to this in one (1) of my answers. We
4 do a couple of years of -- well, more than a couple
5 years of monitoring baseline to see what's there. But
6 by also looking at the local area, we get a bit more
7 robust idea of what the baseline is, again, that the
8 critters, the animals and plants that live in that lake
9 and all the lakes around it that are connected, are
10 exposed to.

11 DR. NEIL HUTCHINSON: Thank you. Neil
12 Hutchinson, for the Board. I would like to suggest
13 that the whole intent of setting water quality
14 objectives and accompany EQCs is to provide protection
15 to aquatic life in the receiver. If, for instance, you
16 were to develop a site-specific water quality objective
17 for nitrate in N11 you would probably want to use the
18 hardness values in N11 to correct that nitrate
19 objective, not the regional hardness values, because
20 they'd be quite different.

21 My only point is -- is that -- I can see
22 the points you're making, but our concern is that we
23 risk over protecting or under protecting Lake N11 by
24 adding more variance to the data set and getting
25 slightly different numbers, remembering that the whole

1 reason that you're doing this screening is to choose
2 those parameters for which water quality objectives and
3 EQCs will be set.

4 THE CHAIRPERSON: Thank you, Neil.
5 Over to De Beers.

6

7 (BRIEF PAUSE)

8

9 MR. JOHN FAITHFUL: Mr. Chair, John
10 Faithful, Golder Associates. So I'm going to sort of
11 provide an answer in two (2) places, I hope, Dr.
12 Hutchinson, is that the site-specific objectives --
13 site-specific water quality objectives or the water
14 quality objectives that we've -- we've chosen for --
15 for -- that we've selected as a result of examining the
16 local watershed do pres -- do result in protection of
17 the -- of -- of the receiving environment, whether it's
18 Lake N11 or Area 8, but take into account that some
19 parameters may be a little higher, some parameters may
20 be a little bit low -- a little lower on a -- on a
21 single lake basis.

22 Nevertheless, you brought up a comment
23 on -- on hardness. And it's not -- it's not
24 necessarily the hardness within the receiving
25 environment, or the background hardness, or the

1 baseline hardness that -- that will be protective, it's
2 also -- additive to that is the discharge, the effluent
3 and the hardness that that brings into it as well. And
4 that's also being factored into our derivation of EQCs.

5 So we do note that there is an
6 accumulation of hardness as a result of that discharge
7 over that three (3) year period, and that's been
8 factored into our EQC development to make sure -- to
9 ensure that there is protection of the receiving
10 environment.

11 Thank you, Mr. Chair.

12 DR. NEIL HUTCHINSON: Neil Hutchinson,
13 for the Board. Thank you. I -- I was not talking
14 specifically about your desire to set a hardness
15 corrected nitrate objective in this environment. I was
16 only pointing to that need that when one sets site-
17 specific objectives one uses water quality for that
18 site there. And I think it's an appropriate analog to
19 use baseline water quality for here. But I see we have
20 a difference of opinion, Mr. Chair, so I'll just move
21 on to the next question.

22 At our technical sessions in July, I had
23 raised the issue of discharge of -- of effluent that
24 will contain bacteria and possible concerns with
25 drinking water in N11, or Area 8, and reminding that

1 one (1) of the suggestions from the Mackenzie Valley
2 Impact Review Board was that drinking water had to be
3 protected.

4 Normally we protect by setting EQCs
5 where effluent meets the receiving environment. I
6 believe your response was that you're willing to accept
7 EQCs for discharge of water into the waste-water
8 management pond for bacteria, but you're concerned that
9 wildlife or other factors may contaminate that water
10 between the water management pond and Lake N11, or Area
11 8, and, therefore, you are unwilling to consider a
12 bacterial EQC for that point of discharge.

13 I guess my question is: Do you have
14 baseline data for N11, or Area 8, on the existing
15 background coliform concentrations there?

16 THE CHAIRPERSON: Thank you for that.
17 Over to De Beers.

18

19 (BRIEF PAUSE)

20

21 MR. JOHN FAITHFUL: Mr. Chair, John
22 Faithful, Golder Associates. We're going to -- we're
23 going to have a look at our data set to -- to confirm
24 the E. coli tests. I think one (1) of the constraints
25 about particularly sampling in the northern environment

1 and particularly -- it's not -- it's -- it's managed
2 for some of the remote monitoring, but we're also
3 cognizant of the fact that some of the data may be
4 limiting given that it has specific hold times.

5 And -- but we have a fairly
6 comprehensive data set for all of the lakes in the --
7 in the Kirk Lake watershed. We will screen them before
8 the end of the day to provide an answer with respect to
9 -- to baseline information for not only Lake N11, but
10 for -- for the other lakes within local watershed.
11 Thank you.

12 THE CHAIRPERSON: Thank you for that.
13 Did I detect an undertaking there, Neil, or was that a
14 --

15 DR. NEIL HUTCHINSON: Neil Hutchinson,
16 for the Board. I heard by end of day and I'll let John
17 Donihee say if that counts as an undertaking or not.
18 I'm not trying to compete with Kathy.

19

20 (BRIEF PAUSE)

21

22 DR. NEIL HUTCHINSON: No. Then -- Neil
23 Hutchinson for the Board. Yeah, thank you. And our
24 only concern is to see if in fact there are baseline
25 concerns with bacteria right now, if they are part of

1 existing background right there now, and are part of
2 the drinking water environment that exists there now.

3 Thank you. Neil Hutchinson for the
4 Board. You've requested -- although you've done your
5 modelling assuming a three (3) year period of discharge
6 from the water management pond, you've asked for the
7 opportunity to -- or the potential to extend that
8 period.

9 I'm just on -- wondering under what
10 circumstances you might find that necessary?

11 THE CHAIRPERSON: Thank you. Over to
12 De Beers.

13

14 (BRIEF PAUSE)

15

16 MR. JOHN FAITHFUL: Mr. Chair, John
17 Faithful, Golder Associates. Dr. Hutchi -- Dr.
18 Hutchinson, is that -- is that correct? Is that the --
19 the correct way that I should refer to you? Yes.

20 Dr. Hutchinson, thanks for the question.
21 You're -- you're correct. The -- the derivation of the
22 EQC is based on the -- on the premise of the three (3)
23 year modelling of operational discharge, and is
24 contingent on the various parameters or the various
25 modelled results that -- yeah, for the water management

1 pond and the receiving environment on that basis.

2 In -- in answer to your question about
3 the -- the potential for looking to op -- looking at
4 opportunities to extend discharge beyond that three (3)
5 year time frame could be -- could be based on a number
6 of factors. One (1) be -- one (1) being a -- an un --
7 unusually high snowpack or ice melt within the -- in --
8 within the controlled area that potentially wouldn't
9 result in changes to some of the modelled assumptions
10 that we've carried into the EQC design.

11 But I think we would know well in
12 advance of -- of year 3 as to what the climate
13 conditions are and as to how we're tracking with
14 respect to some of the -- the modelling for the water
15 management pond and -- and the downstream environment.

16 And that's not to say that it would be a
17 -- a broad based assumption on De Beers's part that
18 simply just allowing discharge to continue for -- into
19 the fourth year would be a -- would be a given. I
20 think that we understand that there are limitations to
21 the -- to the assumptions around the EQC modelling and
22 there would further discussions with the Board on that
23 -- on that basis. Thank you.

24 DR. NEIL HUTCHINSON: Neil Hutchinson
25 for the Board. Yes, thank -- thank you, John. Yeah,

1 my -- my concern -- there's kind of two (2) concerns
2 there. One (1) is -- is, of course, the increasing
3 baseline of concentrations in Lake N11 does influence
4 your EQC. So if in fact you had to go to year 4 there
5 might be a need to revisit the EQCs and we understand
6 that.

7 I -- I guess my -- my other concern is
8 just there is also a requirement under the Mackenzie
9 Valley Resource Management Act of minimizing pollutant
10 discharges. And -- and just a reminder that that would
11 have to be considered as part of that consideration at
12 that time.

13 THE CHAIRPERSON: Thanks for that. And
14 back over to De Beers.

15

16 (BRIEF PAUSE)

17

18 MS. VERONICA CHISHOLM: Veronica
19 Chisholm, from De Beers. Thanks for that question.
20 And -- and we designed our project around being
21 protective to the environment. That's why we've
22 limited the discharge for those three (3) years of
23 operation, so it is protective to the environment, and
24 protected of the downstream.

25 But we're well aware that in the event

1 that we had a torrential rainfall, increased snow, we
2 wouldn't -- we wouldn't have any changes necessarily to
3 the chemi -- the chemistry within the water management
4 pond; that if we did need to extend that -- say for
5 example we had additional TSS that needed to settle to
6 allow for some additional pumping. And those would be
7 the types of conditions where we would be looking to
8 extend that.

9 But -- but we're in agreement, and we're
10 aligned to protect the environment. We developed a
11 mine plan where we didn't have to have discharge beyond
12 that three (3) year point, but we want to be prepared
13 in the event that it may need to extend. Thank you.

14 THE CHAIRPERSON: Thank you for that.
15 Over to Dr. Hutchinson.

16 DR. NEIL HUTCHINSON: Thank you, Mr.
17 Chair. I'd like to talk a bit about -- there's some
18 discussion back and forth resulting from the technical
19 sessions about the choice of test species for sublethal
20 toxicity testing, and De Beers had submitted an
21 undertaking to -- or an IR to that.

22 And ENR have brought that -- that
23 question up again, and my understanding is that De
24 Beers are recommending -- are proposing to use the
25 rainbow trout early life stage assay at the end of pipe

1 assay and not the fathead minnow assay. And their
2 concern with ENR was ENR had asked them to do both and
3 sort that out, but they're proposing rainbow trout.

4 So I guess my question is: Part of your
5 IR also talked about concerns with the number of
6 accredited labs in the country that could do the
7 rainbow trout test, and you had mentioned there'd been
8 problems about getting the tests done at Snap Lake.

9 And I just wondered if you could
10 elaborate on what kind of problems you might have had
11 with the rainbow trout test and if you still have the
12 confidence to recommend that in -- in light of that?

13 THE CHAIRPERSON: Okay, thank you.
14 Over to De Beers.

15

16 (BRIEF PAUSE)

17

18 DR. PETER CHAPMAN: Peter Chapman,
19 Golder Associates. Thank you for that question, Neil.
20 Basically the problem you have, fathead minnow is a
21 very common test species used all across North America.
22 The rainbow trout is a little trickier, in terms of the
23 fact of getting the eggs.

24 And we've had problems with the Snap
25 Lake in a couple of ways. One was logistics. Of

1 course you have to sample and then collect another
2 sample, send it down, replenish, and so on. So we've
3 had problems getting the samples. And we've had
4 problems as well with the couple of labs we've tried in
5 terms of them getting fish eggs that were viable
6 because when you run a toxicity test you don't only
7 expose it to whatever you're testing, but you also have
8 clean water to make sure they're doing fine. And we've
9 had a couple of cases where in the clean water the eggs
10 just haven't survived because they weren't viable
11 enough.

12 So it becomes a little trickier. It's a
13 less standardized than the fathead minnow test.
14 However, despite that because -- and even though
15 Environment Canada is clear that you can use either
16 alternative, you know, fathead or rainbow trout, we're
17 going with the rainbow trout because it's most similar
18 to the fish species that are found up there. And when
19 you're doing toxicity tests, you're always better if
20 the lab test is most -- the -- what's used in the lab
21 is most similar to what's actually found in the field.

22 THE CHAIRPERSON: Thanks for that
23 clarity. And Neil...?

24 DR. NEIL HUTCHINSON: Thank you. Thank
25 -- thank you very much, Peter, and -- and I appreciate

1 all of the -- the problems that you've -- you've
2 mentioned. You would -- you would not -- I think your
3 analysis suggested that both species tend to be fairly
4 equally sensitive to some of the parameters of concern,
5 such as TDS.

6 And just if -- if in fact we did run
7 into issues with viability and supply, that you
8 wouldn't object to fathead minnows being -- being
9 elected as a test species, but you just prefer, for --
10 for a good reason, to use rainbow trout as a salmonid
11 species.

12 THE CHAIRPERSON: Thank you. Over to
13 De Beers.

14

15 (BRIEF PAUSE)

16

17 DR. PETER CHAPMAN: Peter Chapman here,
18 Golder Associates. If -- if we have -- continue to
19 have problems and the Board, the inspector, are in
20 agreement that we should switch to fathead, we'd do
21 that. But we'd use one or the other, not both. And
22 realize also, in our response to the IR, we were
23 talking about TDS. And the predicted maximum TDS
24 concentration is only 310 milligrams per litre.

25 And you may remember from the Wek'eezhii

1 Board decision on Ekati -- sorry, on Diavik, that the
2 deve -- the defa -- they got a default benchmark of 500
3 milligrams per litre, which is a general default --
4 default value below -- above which you -- sorry, below
5 which you don't expect to see effect. So at three-ten
6 (310) we're not really expecting to see much of
7 anything.

8 DR. NEIL HUTCHINSON: Neil Hutchinson,
9 for the Board. Thank -- thank you. I appreciate that.
10 And we'd do the testing to confirm that. Just one (1)
11 more line of questioning, Mr. Chair. This is coming
12 back to reclamation, and two (2) worthy, although maybe
13 competitive, proposals.

14 One (1) is maybe keeping the water
15 management pond as close to Kennady Lake water as you
16 can, so there's -- there's less recovery to happen, and
17 then the other is ensuring meromixis, ensuring
18 stability of -- of the water in the pits afterwards.

19 And I was wondering if you had
20 considered developing action levels or triggers, or
21 even collecting saline groundwater inputs from active
22 pits and diverting them deliberately into the unactive
23 (sic) pits to improve that as you go, which of course
24 would keep the saline water out of the water management
25 pond and -- and less need to discharge it to the

1 external environment. And, of course, it would also
2 promote your meromixis.

3 Is that something that you would be
4 willing to consider in your closing plans?

5 THE CHAIRPERSON: And thank you for
6 that. Over to De Beers.

7

8 (BRIEF PAUSE)

9

10 MS. VERONICA CHISHOLM: Veronica
11 Chisholm, with De Beers. Yes, that is the plan. That
12 seems like a lot of discussion to -- to give you that
13 short answer. So one (1) of the things that we've
14 committed to do was to do some research, and
15 monitoring, and follow-up programs to exac -- exactly
16 evaluate that type of contingency. And that's an easy
17 one.

18 And so it is an option that De Beers
19 would consider, in terms of pumping the higher TDS
20 water to -- to establish those meromixis and recover
21 Kennady Lake quicker, so.

22 DR. NEIL HUTCHINSON: Neil Hutchinson,
23 for the Board. Thank you. That's all my questions.

24 THE CHAIRPERSON: Okay. Thank you for
25 that, Neil. And so now we go to further from the

1 staff, or from legal.

2

3 (BRIEF PAUSE)

4

5 MR. JOHN DONIHEE: Thank you, Mr.

6 Chairman, it's John Donihee. I -- I just have one (1)

7 matter that I'd like to explore briefly with -- with De

8 Beers. It relates to the requirement in the Waters Act

9 for the Board to satisfy itself that the financial

10 capacity of the applicant is sufficient to deal with

11 the completion of the undertaking, and ultimately, of

12 course, closure and reclamation when the time comes.

13 The -- the question really has more to

14 do with the -- the effect of the Joint Venture

15 Agreement on this question of financial capacity. We

16 don't have very much information on the -- on the

17 record about your joint venture partner, Mountain

18 Province Diamonds Inc. And -- and that may well be

19 fine.

20 I guess my question is: From the

21 standpoint of the way the joint venture agreement

22 works, let's assume that whatever number we pick in the

23 end for the -- the security is going to be a very large

24 number, fifty (50) -- somewhere between 50 and \$80

25 million.

1 And -- and what I'm wondering really is
2 does De Beers provide that. Are -- are you liable to
3 provide that funding on behalf of the joint venture,
4 and then you work with Mountain Province to -- to get
5 their share of it, or how does it work? Because I --
6 my concern is simply to make sure that we have
7 sufficient information on the record about both parties
8 if in fact both parties are -- are liable to contribute
9 to that security requirement.

10 THE CHAIRPERSON: Thank you, John.
11 Over to De Beers.

12 MR. GLEN KOROPCHUK: Thanks, Mr. Chair.
13 Glen Koropchuk, De Beers. Right now, the way the joint
14 venture is structured is we are taking out the
15 securities. But like all the funding of the joint
16 venture, we will then have recourse to Mountain
17 Province to fund that. So to date, that's how it's
18 worked and that's how it'll continue to work. They are
19 responsible for their -- for their costs, but we are
20 the operator. Thank you.

21 THE CHAIRPERSON: Thank you. Further
22 on that, John?

23 MR. JOHN DONIHEE: Thank you. John
24 Donihee. That -- that's it, Mr. Chairman. Thank you
25 very much for that answer.

1 THE CHAIRPERSON: Okay. Further from
2 Board staff? Okay, we'll go then to the Board members.
3 Generally, we've always had a policy where members
4 usually vet their questions through the executive
5 director and his staff, but they do have the option if
6 they have anything further to add to that. So Joseph
7 Mackenzie...?

8 MR. JOE MACKENZIE: I don't have any
9 questions.

10 THE CHAIRPERSON: Floyd Adlem...?

11 MR. FLOYD ADLEM: I have no questions.

12 THE CHAIRPERSON: And Frank...?

13 MR. FRANK MCKAY: I have no questions,
14 Mr. Chair.

15 THE CHAIRPERSON: Okay, thank you all
16 for that. Zabey, do you want to take quick coffee
17 before going to the next one? Okay. So how about if
18 we do a fast one this time, ten (10) minutes. Great.
19

20 --- Upon recessing at 2:59 p.m.

21 --- Upon resuming at 3:16 p.m.

22

23 THE CHAIRPERSON: Okay, coffee break is
24 over. If we could have everybody start taking their
25 seats, please, we will go to our next presentation,

1 which is Government of Northwest Territories, ENR.

2 Thank you.

3

4 PRESENTATION BY GNWT-ENR:

5 MR. ROBERT JENKINS: Thank you, Mr.

6 Chair. My name is Robert Jenkins. I'm the director of

7 Water Resources with the Government of the Northwest

8 Territories, Department of Environment and Natural

9 Resources. You may know me formerly from the band

10 named -- named AANDC, move through devolution. I know

11 that -- that I'll try not to -- to give the wrong

12 organization through this presentation, but sometimes

13 it just -- just rolls off the tongue.

14 With me today I have Ms. Lisa Dyer.

15 She's the director of environment. To my far left I

16 have Mr. Sean Whitaker. He's the mining specialist

17 with the Environment Division. To my right --

18 immediate right I have Mr. Paul Green. He is with the

19 Water Resources Division. And to my far right I have

20 Ms. Lara Fletcher. She's with Brodie Consulting

21 Limited.

22 We do have some people on the phone. I

23 -- I hope we have some people on the phone. We're

24 trying to push the -- push technology a little bit. We

25 should have Mr. Dave Huebert, Stantec Consulting

1 Limited; Mr. Don MacDonald of MacDonald Environmental
2 Services Limited, and Mr. John Brodie of Brodie
3 Consulting Limited.

4 So today we will be -- I'll be sharing
5 the presentation with -- with Ms. Dyer. I will be sort
6 of moving back and forth on -- on several different
7 topics.

8 THE CHAIRPERSON: Sorry, Mr. Jenkins.
9 Could you perhaps have them confirm that they are on
10 the phone for the record?

11 MR. ROBERT JENKINS: Sure.

12 THE CHAIRPERSON: If they could say
13 hello or hi, or...

14 MR. ROBERT JENKINS: Let's go through.
15 Dave, are you on the phone? That's a good start.
16 We'll go back to Dave after the other two (2) say
17 they're there.

18 Don, are you there? It's getting
19 better.

20 John...?

21 MR. JOHN BRODIE (BY PHONE): Hi, it's
22 John Brodie. I'm here. I can hear you. Not very
23 well, but I can hear you.

24 MR. ROBERT JENKINS: We are one (1) for
25 three (3). Let's move back through and see if -- see

1 if somebody signed in in the last two (2) seconds since
2 I asked.

3 Don MacDonald, are you out there
4 somewhere?

5 MR. DON MACDONALD (BY PHONE): Of
6 course.

7 MR. ROBERT JENKINS: Ah. And Dave, are
8 you on the line?

9 We're missing Dave. But that won't stop
10 us from moving on, Mr. Chair.

11 So before I start the presentation, as -
12 - as I mentioned this morning it's important to note
13 that this is the first public hearing for a Type A
14 water licence application since -- since Aboriginal
15 Affairs and Northern Development Canada's
16 responsibilities for land and water management in the
17 Northwest Territories devolved to the Government of the
18 Northwest Territories. And as -- as I think most
19 everybody is aware that happened on April 1st of this
20 year.

21 The Minister of -- of Environment and
22 Natural Resources is -- is now responsible for the
23 approval of Type A water licences for activities
24 including -- including the Gahcho Kue Project,
25 activities that are located on lands transferred

1 through the devolution final agreement.

2 So just a -- a brief presentation
3 overview. The department's intervention focussed on
4 the -- the following areas: construction and
5 operational management plans, waste management, site
6 specific water quality objectives, effluent quality
7 criteria, Aquatic Effects Monitoring Program and plans,
8 adaptive management and management response, closure
9 and reclamation, reclamation security. And today we'll
10 present to the Board the results of our -- of our
11 technical review and any recommendations that are, in
12 our opinion, should be applied to the Gahcho Kue
13 Project as it moves forward.

14 Just as a bit of a -- a background on --
15 on who will present what. Ms. Dyer will -- will talk
16 to construction and operational management plans, waste
17 management, adaptive management and management
18 response, and closure and reclamation. And I will
19 speak to the topics of site-specific water quality
20 objectives, effluent quality criteria, Aquatic Effects
21 Monitoring Program, and reclamation security.

22 So with that we'll move into a first
23 topic, management plans, and I will pass it over to Ms.
24 Dyer.

25 MS. LISA DYER: Good afternoon. As

1 Robert introduced me, I'm Lisa Dyer. I'm the Director
2 of Environment with Environment and Natural Resources.

3 De Beers has submitted a number of
4 management plans for review as part of this water
5 licence review process based on their updated project
6 description. De Beers has correctly identified that it
7 is these management plans that are key to minimizing
8 impacts to the environment that may result from their
9 project. It is ENR's opinion that these draft
10 management plans should be updated and submitted for
11 approval prior to De Beers undertaking any activities
12 covered by the plans.

13 The management plans that have been
14 provided for review are preliminary and lack detail
15 regarding management action, monitoring and management
16 response for specific activities undertaken during
17 different phases of the project. Different phases of
18 the project will require different management action,
19 monitoring, and response.

20 The next slide. ENR outlined a number
21 of construction-related management plans that should be
22 required prior to dike construction and dewatering of
23 Kennady Lake. In our written submission, ENR describes
24 the types of plans that are necessary for the Gahcho
25 Kue Project, and identifies what should be included

1 within these plans.

2 For example: A dike construction
3 management plan, which would be specific to dike
4 construction and include mitigation, monitoring, and
5 thresholds for sedimentation. A construction water
6 management plan specific to dewatering activities and
7 provides details regarding specific mitigation and
8 monitoring such as pumping rates, downstream flow
9 monitoring, hydrological threshold such as water
10 levels, outflow rates, erosion; as well as additional
11 details and operational management actions proposed for
12 the various inline treatment systems.

13 A construction and erosion -- a
14 construction, erosion, and sedimentation plan which
15 would be specific to erosional mitigation measures and
16 provides details regarding type of monitoring and
17 frequency, sedimentation thresholds within the water
18 management pond as it is dewatered, and specific
19 erosion and sedimentation mitigations proposed for the
20 downstream environment, such as lake outflows --
21 outlets and newly created channels.

22 In addition to the above, ENR's written
23 submission outlined specific concerns related to the
24 use of field turbidity measurements as a surrogate for
25 total suspended solids in water. De Beers is proposing

1 the use of such a relationship within its management
2 plans which will be used to identify if management
3 action is needed at the site.

4 ENR agrees that a relationship between
5 turbidity and total suspended solids can be developed;
6 however, this relationship must be site specific and
7 continually verified using site-specific data. For the
8 proposed management plans to be effective, the
9 development of a site-specific turb -- turbidity and
10 TSS relationship is required.

11 The next slide. Thank you. The
12 following three (3) slides identify ENR's eleven (11)
13 recommendations regarding the development of
14 construction and operation management plans. ENR --
15 ENR notes that in their response to interventions, De
16 Beers agreed to submit a Dike Construction Management
17 Plan, a Construction Water Management Plan, and
18 Construction and Erosion -- a Construction Erosion and
19 Construction Management Plan, as well as develop a TSS
20 and turbidity relationship. ENR would like to thank De
21 Beers for agreeing to its recommendations, and looks
22 forward to working with the Proponent moving forward to
23 ensure that these plans are robust and comprehensive.

24 In the interest of time, I won't go
25 through all the eleven (11) recommendations that we

1 have made, but we have submitted then, and I think
2 everyone has had an opportunity to see them. So I will
3 move onto slide 8, unless anyone would like to
4 specifically go through the recommendations.

5 Okay. So the next topic that I would
6 like to discuss is waste management and incineration
7 management. Within its written intervention, ENR has
8 identified a number of concerns with current versions
9 of Waste and Incineration Management Plan. The
10 Proponent is committed to working with ENR and
11 Environment Canada to further discuss waste management
12 and incineration management concerns, and issues
13 identified with the Gahcho Kue Project.

14 ENR is pleased with this commitment and
15 looks further -- looks forward to further discussions.
16 But it is important to -- for the Board to understand
17 that we have not had any of these formal meetings to-
18 date. ENR understands that De Beers is committed to
19 looking into alternative options for waste management,
20 however, few commitments have been provided. The
21 Department anticipates that any results from future
22 meetings would be incorporated into the final Waste
23 Management Plan and Incineration Management Plan.

24 At this time, ENR provides the following
25 for the Board's consideration. ENR suggests that the

1 Proponent submit for Board approval an updated Waste
2 Management Plan and Incineration Management Plan within
3 thirty (30) days of the issuance of a land use permit
4 or water licence. All technical comments should be
5 addressed by the Proponent to reduce the potential for
6 environmental impacts from waste management.

7 If there is any significant alternations
8 to operations during the life of the project, for
9 example design or storage of materials, or there's
10 alternative methods for disposal. ENR recommends that
11 the waste management and incineration management plans
12 be submitted at a minimum of sixty (60) days prior to
13 any change in operations, for approval by the Board.
14 And I'd just like to note that De Beers has agreed for
15 updating these plans, and we are appreciative of that.

16 ENR also recommends that the Mackenzie
17 Valley Land and Water Board include a requirement for
18 stack testing for the project's incinerator to ensure
19 its operation is compliant with the CCME/CWS standards
20 for dioxins, furans, and mercury emissions. ENR notes
21 that the Board authorizes the Waste Management Plan,
22 and thus the Board is authorizing the incineration of
23 waste in the Northwest Territories.

24 Thus, testing should be incorporated
25 into the licence as a regular -- regular -- regulatory

1 tool at an established frequency. And we'd like to
2 note that De Beers has agreed to include a provision
3 for stack testing in the Incineration Management Plan.

4 ENR suggests that the Mackenzie Valley
5 Land and Water Board include a testing requirement for
6 waste oil and residual ash, including analytical
7 criteria in the Proponent's water licence for the
8 appropriate management of potentially hazardous waste.
9 And again, De Beers has agreed to include testing
10 requirements in the Waste Management Plan.

11 I'll now pass the presentation over to
12 Robert.

13 MR. ROBERT JENKINS: Thank you, Mr.
14 Chair. It's, Robert Jenkins, with ENR. Mr. Chair, ENR
15 views water quality objectives, or site-specific water
16 quality objectives, as the standard for water which
17 should be maintained in order to preserve the present
18 and future integrity and uses of an aquatic ecosystem.

19 Consequently, water quality objectives
20 must consider a number of factors, such as use of the
21 aquatic ecosystem, existing background concentrations,
22 or objectives that may be reasonably achieved through
23 the use of best management practices and effluent
24 treatment technologies. These views are reflected in -
25 - in NWT policy documents pertaining to water

1 management, such as the NWT Water Storage Strategy, the
2 goal of which is that waters that flow into, within, or
3 through the NWT remain substantially unaltered in
4 quality, quantity, and rates of flow.

5 And in the guiding principles of the
6 Mackenzie Valley Land and Water Board's Water and
7 Effluent Quality Management Policy, one (1) of which is
8 pollution prevention. The use of processes, practices,
9 materials, products, or energy that avoid or minimize
10 the creation of pollutants and reduce the overall risk
11 to human health and the environment.

12 This idea is further reenforced in the
13 objectives of the same Water and Effluent Quality
14 Management Policy, one (1) of which is the amount of
15 waste to be deposited to the receiving environment is
16 minimized.

17 Mr. Chair, De Beers has proposed water
18 quality objectives for the Gahcho Kue project. ENR
19 continues to have concerns with the water quality
20 objective protocol and assumptions as proposed by De
21 Beers for -- for Lake N11. It's important to note that
22 ENR was unable to review and include recommendations
23 within its written intervention regarding the proposed
24 site-specific water quality objectives for Area 8.
25 This information was provided several days in advance

1 of the deadline for interventions.

2 With respect to the water quality
3 objective protocol and assumptions for -- for N11, it
4 appears that under this protocol if the base
5 concentrations are lower, the resulting water quality
6 objective could be higher. However, if higher baseline
7 concentrations are used, the water quality objective
8 could be -- could be lower.

9 ENR illustrated this concept in Table 1
10 of its written intervention. In this example, the
11 concentration of aluminum at the edge of the -- the
12 mixing zone is estimated at .039 milligrams per litre.
13 At the upper limit concentration of aluminum -- aluminum
14 naturally occurring in the receiving environment is
15 assumed to be .045 milligrams per litre. Then .045
16 milligrams per litre is selected as the water quality
17 objective, as the concentration at the end of the
18 mixing zone falls within the range of the regional
19 baseline.

20 However, if the aluminum concentration
21 naturally occurring in the receiving environment is
22 assumed to be .009 milligrams per litre, following the
23 protocol, the water quality objective defaults to the
24 CCME guideline of .1 milligrams per litre, as the
25 concentration at the edge of the mixing zone exceeds

1 the range of regional baseline.

2 So this -- this is concerning to ENR.

3 Such an approach does not appear to align with the
4 spirit of the NWT water stewardship strategy or with
5 the goals and objectives of the NWT -- of the Mackenzie
6 Valley Land and Water Board's water and effluent
7 quality management policy.

8 ENR notes that using a regional value,
9 the Kirk Lake watershed, as an estimate of baseline
10 water quality in Lake N11 may not be reflective of the
11 site-specific range of baseline conditions in -- in
12 Lake N11; that the regional baseline value for a
13 parameter is higher than that observed in Lake N11 and
14 the water quality objective is set to be reflective of
15 that regional baseline level.

16 Lake N11 will not be afforded the same
17 level of protection as other water bodies in the
18 watershed. Depending on the specific water quality of
19 Lake N11 versus values observed regionally, water
20 quality objectives based on regional baseline values
21 could allow for discharges higher than the upper limit
22 observed in Lake N11.

23 As an example for copper, the mean
24 concentration in Lake N11 is .6 micrograms per litre.
25 The mean plus two (2) standard deviations is 1.2

1 micrograms per litre, and the maximum concentration is
2 1.9 micrograms per litre. The regional data set for
3 copper has a mean of .8 micrograms per litre and a mean
4 plus two (2) standard deviations of 2.7 micrograms per
5 litre and a maximum concentration of eight (8).

6 So while the mean values are relatively
7 close between Lake N11 and the regional data set, the
8 maximum mean plus two (2) standard deviation values --
9 values are notably higher for the regional data set.
10 Of note, the mean plus two (2) standard deviation was
11 used to identify the upper limit of naturally occurring
12 conditions, which is then used in the protocol to help
13 determine the water quality objective.

14 As Lake N11 is the primary receiving
15 water body for operational discharges, effects to this
16 water body should be mitigated to the greatest extent
17 practical. ENR also has concerns with the hardness
18 used by De Beers when adopting -- when adapting generic
19 guidelines for use in Lake N11. De Beers has selected
20 50 milligrams per litre, which is the expected
21 hardness, in Lake N11 at the time of the maximum --
22 maximum operational discharge.

23 Current mean hardness in Lake N11 is
24 five (5), with a maximum reported hardness of ten (10).
25 ENR maintains that the principles of pollution

1 prevention require that the naturally occurring
2 hardness should be used when modifying water quality
3 objectives for use in the receiving environment, not a
4 future estimate of anthropogenically modified hardness.

5 Again, Mr. Chair, as mentioned
6 previously, ENR maintains that smaller changes in
7 receiving water quality provide greater confidence that
8 the important components of the receiving aquatic
9 ecosystem will be -- will be preserved.

10 Mr. Chair, it is -- it is important to -
11 - to note that we've had some very quick discussions
12 with the -- with the Proponent today on some of these -
13 - some of these items. And the Proponent has
14 identified that some information may be available that
15 may help ENR and -- and may help address our concerns.

16 I would like to just say that we are
17 always open to taking a second look at things. And --
18 and if that second look results in a change to our
19 review or to the conclusions that we've -- we've made,
20 we would be -- we would identify that to the Board in
21 our closing statements.

22 So our recommendations at this time,
23 we've recommended that the Board use the narrative
24 statements established by the Mackenzie Valley Review
25 Board in Suggestion 1 and 2 when deriving site-specific

1 water quality objectives for Lake N11, Area 8, and
2 Kennady Lake post-closure.

3 We recommend that specific baseline
4 values as opposed to regional baselines values be used
5 when deriving site-specific water quality objectives in
6 Lake N11, Area 8, and Kennady Lake.

7 We recommend that the site-specific
8 water quality objective for mercury should be set to
9 concentrations that are within the range of naturally
10 occurring con -- background concentrations in Lake N11,
11 Area 8, and Kennady Lake.

12 And we recommend that the hardness
13 concentration used for calculating hardness-dependent
14 site-specific water quality objectives reflect the
15 baseline hardness concentration and not the altered
16 conditions predicted as a result of mining activities.

17 The next area that I'll discuss is in
18 regards to effluent quality criteria. De Beers has
19 proposed effluent quality criteria for five (5)
20 parameters and used a dilution factor to back-calculate
21 concentrations from their proposed water quality
22 objectives located at the edge of a 200 metre dilution
23 zone.

24 This dilution rate may be -- may be --
25 the dilution rate proposed at the onset of operations

1 may be appropriate during the ori -- initial stages of
2 discharge, but it may not remain accurate with time,
3 and it's our understanding that it was not modelled
4 after year 3.

5 For Lake N11, the volume of effluent is
6 large compared to the size of the lake and the
7 watershed -- and the watershed input. With time,
8 contaminants will increase within the lake as a whole,
9 reducing the volume of clean water which is available
10 to mix with and dilute the effluent. As a result, the
11 available dilution will be reduced and a lower dilution
12 factor may be needed.

13 ENR is also concerned with the
14 completeness of the list of effluent quality criteria
15 proposed by De Beers. EQC are a primary means through
16 which regulatory control over effluent discharges is
17 exercised at a site. Potential discharges from the
18 Gahcho Kue Project are that -- are expected to fall
19 generally within several -- several categories.

20 The first, saline groundwater from
21 seepage of groundwater into the open mine pits. The
22 constituents of potential concern there include total
23 dissolved solids and -- and metals. Contact water from
24 seepage through tailings and waste rock. Constituents
25 of potential concern include pH, metals, and

1 phosphorus. Processed water from mining operations.
2 The constituents of potential concern include metals,
3 ammonia, and petroleum hydrocarbons.

4 Sewage from the sewage treatment
5 facility. Constituents of potential concern there
6 include coliform bacteria, nitrogen compounds, and
7 phosphorus, and then there's natural runoff from
8 ongoing dewatering of Kennady Lake, and the -- the
9 concern there is in regards to total suspended solids.

10 EQC for the operation should reflect the
11 -- the constituents of potential concern for each
12 potential discharge. We do acknowledge that a separate
13 EQC will also need to be developed for discharges to
14 Area -- Area 8 by Lake J1b.

15 So ENR recommends that the Board take
16 the approach of minimizing changes to the receiving
17 environment as a means of minimizing environmental
18 impacts to Lake N11, Area 8, and the downstream aquatic
19 ecosystem when setting effluent quality criteria.

20 We recommend that the Board include
21 effluent quality criteria for TDS, chloride, fluoride,
22 arsenic, and chromium, as well as nitrate as 'N', total
23 ammonia as 'N', total phosphorous, total suspended
24 solids, and pH for discharges to Lake N11 and Area 8.

25 The last recommendation that we had was

1 in regards to dilution factor 5. We've had some
2 discussions with people this morning, and this is
3 something where we've -- we've -- we need to go back
4 and re -- re-evaluate this -- this recommendation. So
5 this is one that we need to have some -- some further
6 discussions with Board staff, with -- with other
7 Intervenors, and with -- with the Proponent, and this
8 is the one that we need to take another look at. So
9 this is one that we need to go back and we'll provide
10 an update again in closing statements.

11

12 (BRIEF PAUSE)

13

14 MR. ROBERT JENKINS: Mr. Chair, De
15 Beers had previously indicated that water will only
16 need to be discharged to the environment from the water
17 management pond control structures for a period of
18 three (3) years limited to the open water season.

19 The Proponent stated that the operation
20 does not require a water treatment plant, as it will
21 store any accumulating water within the water
22 management pond, and they've noted that the water
23 management pond has ample capacity to store mine water
24 until closure.

25 In addition, in response to

1 interventions, De Beers has indicated that they have
2 derived their effluent quality criteria for Lake N11
3 based on the existing Water Management Plan that
4 assumes discharge of effluent from year 1 to year 3.

5 ENR is concerned that water in the water
6 management pond may degrade to a level that cannot be
7 discharged to the environment beyond year 3 of
8 operations. Restricting water discharge in the licence
9 to a fix -- a fixed period, which was -- which is used
10 as the period upon which the proposed EQC had been
11 developed, will ensure that the proper contingencies
12 and controls are established, will ultimately protect
13 the -- the downstream aquatic environment, and ensure
14 compliance with the regulatory limits established in
15 the water licence.

16 It's important, though, to -- to note
17 that if De Beers wishes to discharge into later
18 operational years, EQC can be established, but they
19 should be established based on lower dilution rates to
20 account for effluent buildup in Lake N11 over time.

21 So the last area I'd like to touch on
22 before we move on -- on from this slide is in regards
23 to De Beers's request to change toxicity tests, from
24 using rainbow trout -- or, sorry, change toxicity tests
25 regarding rainbow trout and fathead minnow. We noted

1 in our written intervention that the two (2) organisms
2 show different sensitivities to different total
3 dissolved solid contaminates.

4 At this time, it's not clear which test
5 organism is ultimately more sensitive to the
6 predominate constituents of the TDS in the Gahcho Kue
7 Projects mine water. We'd recommend that both tests be
8 utilized moving forward until such time as it -- it is
9 apparent which species should be primarily used.

10 So we recommend that the water discharge
11 period during operations be restricted to three (3)
12 years as previously proposed by De Beers. If any
13 additional water is discharged later in the mine life,
14 the EQCs must be established and they must be met
15 before a discharge to the immediate receiving waters.

16 We recommend that the utilization of
17 both the early life stage rainbow trout and larval
18 fathead minnow toxicity tests for at least one (1) year
19 of mine effluent discharge during operations to
20 determine which species will be more sensitive to TDS
21 originating from the mine. The results would assist
22 the Board in making a final decision with respect to
23 this issue, in addition to input from the Proponent and
24 other stakeholders.

25 So, Mr. Chair, I'll move on now to

1 Aquatic Effects Monitoring Programs. The Mackenzie
2 Valley Environmental Impact Review Board, the -- the
3 environmental impact report required a follow-up
4 program which included a requirement to follow, at the
5 time, Aboriginal Affairs Northern Development Canada's
6 Aquatic Effects Monitoring Program guidelines.

7 ENR believes that the 2009 AEMP
8 Guidelines provide a solid basis for first identifying
9 the potential for, and then monitoring project-related
10 effects to the downstream receiving environment. The
11 guidelines outline an eight (8) step process towards
12 AEMP development, and it's important that traditional
13 knowledge and Western science be incorporated in the
14 development of the defensible and robust Aquatic
15 Effects Monitoring Program.

16 ENR is pleased that De Beers is working
17 with regulators and with interest -- interested parties
18 to develop the scope and design of the AEMP, and has --
19 and has considered and has adjusted their AEMP based
20 upon feedback. The conceptual AEMP design initially
21 proposed by De Beers was based on exposure and -- and
22 multiple pseudo-reference lake -- a multi-control
23 impact design to determine whether impacts are
24 occurring in a downstream environment.

25 We provided a number of concerns with --

1 with this conceptual AEMP in our written intervention,
2 and during the -- during the AEMP working group
3 meetings. We now understand that De Beers has adjusted
4 its -- its design to be asymmetric before or after
5 control impact, or BACI design. It's important that
6 the AEMP have clear linkages to a management response
7 framework, which would include action levels and
8 associated response actions.

9 We look forward to -- the Department
10 looks forward to evaluating the -- the updated AEMP
11 that's been provided, and providing any additional
12 feedback that it may have to both De Beers and to the
13 Board.

14 So we recommend that De Beers Canada be
15 required to follow the -- the guidelines for designing
16 and implementing Aquatic Effects Monitoring Programs
17 for development projects in the NWT June 2009, and the
18 development of its -- of its AEMP associated action
19 levels, and related management response framework for
20 the Gahcho Kue Project.

21 We feel that it should be submitted to
22 the Board for review and approval twelve (12) months
23 following licence issuance, or prior to discharge of
24 mine water to the receiving environment. We recommend
25 that the recently formed AEMP working group continue to

1 develop an AEMP for the Gahcho Kue Project and refine
2 it as necessary. We recommend that action levels be
3 set in the AEMP for aquatic effects based upon the
4 findings from the Environmental Impact Report.

5 We also recommend that the AEMP be
6 redesigned based upon the -- the BACI framework in
7 conjunction with the AEMP working group. Again, we
8 know that that's been done. We haven't had the
9 opportunity to evaluate it yet, but we do understand
10 that there has been a change in -- in design.

11 We recommend that the proponent address
12 deficiencies associated with the plankton baseline data
13 and -- and to continue discussions in regards to
14 sampling frequencies. And we think that, moving
15 forward, if we get concurrence on some of the details
16 on sampling of these items, we would have a better
17 understanding of seasonal plankton community dynamics,
18 including any bloom formation, annual productivity
19 estimates, and trophic status, and its vulnerability to
20 project-related impacts. So we need to have some
21 further discussions, I think, just to resolve some
22 outstanding differences and opinion on -- on frequency.

23 We do, again, have a recommendation that
24 we -- that the -- the AEMP should be modified to
25 provide for a more intensive plankton sampling effort,

1 with a shorter sampling interval. We do note that De
2 Beers has clarified some aspects of -- of the sampling
3 program in regards to this, and now we understand it
4 will be initiated once every four (4) weeks, proposed
5 for June, July, and August. Again, we haven't
6 undertaken a full review of the updated AEMP. I
7 understand that that was submitted on the 16th of
8 April.

9 MS. LISA DYER: For the record, it's
10 Lisa Dyer. I will be taking over the presentation from
11 Robert, and I will be covering the topics of adaptive
12 management, enclosure, and reclamation.

13 Mr. Chair, adaptive management is
14 important -- is an important component of any
15 operation, and the Gahcho Way -- Gahcho Kue Diamond
16 Project is no exception.

17 ENR would like to acknowledge De Beer --
18 De Beers for committing to applying the principles of
19 adaptive management to a number of operational plans
20 for the mine. However, an adaptive management --
21 management response, in order to be effective, it needs
22 several components, and these are pre-defined action
23 levels or thresholds, proposed mitigation designs,
24 policies and practices linked to those action levels as
25 a clear and testable starting point for adaptive

1 management.

2 ENR is of the opinion that a standalone
3 management response plan is preferred. It is
4 envisioned that this plan will be an umbrella document
5 that should include all aspects of operation. ENR
6 notes that individually, all these plans would require
7 action levels that would lead to response.

8 However, the first trigger for
9 management response would be the exceedance of a low
10 action level trigger. In our experience, management
11 response plans require the input and agreement of all
12 parties, and for this reason, a working group approach
13 may help in development of the plan.

14 We have several recommendations, and ENR
15 recommends that the Board require a standalone site-
16 wide adaptive management -- management response plan
17 for approval ninety (90) days following issuance of the
18 water licence. ENR also recommends that the Board
19 provide clear definitions of adaptive management terms
20 such as action level, management response framework,
21 and use consistent wording within the licence where
22 you're referring to adaptive management plan, or
23 management response framework.

24 ENR recommends that the Board explicitly
25 require an adaptive management -- management response

1 plan for the mine. The plan should include an
2 overarching framework as well as action levels from
3 other specific management plans such as the
4 Geochemistry Monitoring Plan, the Dewatering Monitoring
5 Plan, the Groundwater Monitoring Plan, the Air
6 Quality Monitoring Plan, and
7 the Wildlife Effects Monitoring Plan, as well as the
8 Wildlife and Wildlife Habitat Protection Plan,
9 Explosive Management Plan, and the Erosion and Sediment
10 Management Plan.

11 I would now like to move on to our
12 recommendations on closure and reclamation. Mr. Chair,
13 De Beers has submitted a draft Closure and Reclamation
14 Plan as part of its water licence application. The
15 plan is conceptual and should be updated based on input
16 from Aboriginal groups, interested parties, and
17 regulators.

18 A few areas of concern exist with the
19 current plan, which should be resolved prior to
20 submission of the plan for review and approval, as part
21 of the water licence. Over the course of the security
22 review process, De Beers has identified a few areas
23 where closure options are available to help reduce
24 potential impacts post-co -- post-closure.

25 At the end of operations, the water in

1 the water management pond containing elevated --
2 elevated nutrient ionic, cationic, and metal parameters
3 will be transferred to Tuzo pit. The water management
4 pond will then be reconnected to the surrounding
5 watersheds and will be allowed to refill. The rate of
6 refilling will be supplemented through active pumping
7 of water from Lake N11.

8 De Beers has proposed that the poor
9 water quality stored in the water management pond would
10 be moved into Tuzo pit. ENR has concern with regard to
11 the post-closure water quality in the water management
12 pond and the stability of the chemocline post-closure.
13 ENR is also concerned with the amount of time required
14 for the water management pond, Kennady Lake, to
15 reintegrate into the local ecosystem under De Bil --
16 under De Beers's refilling strategy.

17 In its technical review, Brodie
18 Consulting Limited recommended the water quality within
19 the water management pond be monitored during mine
20 life, and that an option of pumping the entire pond
21 volume into Tuzo pit at closure be investigated to
22 reduce the time required for Kennady Lake to return to
23 a viable and self-sustaining ecosystem that is
24 compatible with the regional watershed.

25 Mr. Chair, ENR believes that this

1 recommendation aligns with the Mackenzie Valley
2 Environmental Impact Review Board suggestion number 3
3 that states:

4 "During operations, closure planning
5 should identify and develop methods
6 to reduce the period of time required
7 for recovery of the refilled Kennady
8 Lake."

9 Mr. Chair, ENR recommends that a working
10 group be established to assist De Beers in the closure
11 and reclamation planning process to help define closure
12 options, goals, objectives, and criteria. We'd like to
13 note that De Beers has agreed to this recommendation.

14 ENR also recommends that the Board
15 require that an interim closure and reclamation plan be
16 submitted for review and approval within one (1) year
17 of issuance of the water licence. ENR notes that
18 working group meetings would likely occur to assist in
19 closure planning within a year's time.

20 ENR recommends that a key element of
21 closure planning process during operation should be to
22 identify and develop methods to reduce the period of
23 time required for recovery of the water management
24 pond. This should include pumping the entire contents
25 to Tuzo pit to reduce the time to close Kennady Lake

1 and return it to a sustainable ecosystem. ENR notes
2 that De Beers has recommended -- has agreed to this
3 recommendation.

4 Finally, ENR recommends that the closure
5 goals, objectives, and criteria be developed for the
6 water management plan that must be met prior and
7 following reconnection with the downstream environment.
8 These closure goals, objectives, and criteria should be
9 developed in consultation with Aboriginal groups,
10 interested parties, and regulators. And just again,
11 we'd like to note that De Beers is comfortable with
12 those recommendations.

13 MR. ROBERT JENKINS: Thank you, Mr.
14 Chair. It's Robert Jenkins again, with -- with ENR.
15 The final topic of our presentation today is
16 reclamation security. As the Board is aware, there are
17 defined legislative responsibilities regarding the
18 setting and holding of reclamation security against
19 projects that occur in the Northwest Territories.

20 The Board ensures that an appropriate
21 security amount is established within a water licence
22 and land use permit authorizations so that the cost of
23 reclamation, including shutdown, closure, and post-
24 closure, is borne by the operator of the mine rather
25 than the public. It is government's responsibility to

1 -- to manage this security through time and -- and to
2 ensure that it's held in an appropriate form.

3 ENR retained Brodie Consulting Limited
4 to conduct an assessment of reclamation security
5 required for the Gahcho Kue project. Brodie Consulting
6 conducted a review of the mine plan and closure designs
7 in preparing this estimate. They also reviewed the --
8 the cost estimate prepared by De Beers, and prepared a
9 standalone estimate of reclamation liability. And --
10 and the estimate as provided was split be -- between
11 land use and water use related liabilities. Specific
12 details and aspects of the estimate are included within
13 our written intervention.

14 In the end, there were a few areas of
15 difference in the estimates as submitted by ENR and by
16 De Beers. The De Beers's estimate was conducted in an
17 alternate format that's somewhat different than the
18 reclaimed model which has -- which has been used by
19 ENR.

20 During the security review process,
21 there were a few closure items identified that would
22 enhance closure conditions at the end of operations.
23 However, at this time, these closure options were not
24 included in De Beers's estimate of total liability,
25 which was presented to the Board.

1 The estimate provided by ENR included
2 unit costs from the reclaimed model. In some areas,
3 the De Beers's estimate utilized different unit costs,
4 and there were some guiding principles that were
5 included in the ENR estimate, such as no provision for
6 -- for salvage or resale of goods on site which were
7 not used in the De Beers's cost estimate.

8 In the end, there -- there were two (2)
9 major areas of difference between the two (2) estimates
10 that accounted for about 71 percent of the respective
11 \$34 million difference between -- between the
12 estimates, and these were related to estimated costs
13 associated with the waste rock pile, overburden storage
14 and reworking at closure, and mobilization/
15 demobilization costs.

16 De Beers's current plan for potentially
17 acid-generating waste rock is to place this material
18 within the waste rock piles where a portion will be
19 submerged post-closure. There is insufficient storage
20 volume for all the PAG material to be submerged.

21 An alternate strategy preferred by the
22 department is to segregate the PAG material for
23 disposal into a mined out pit, which would be flooded
24 post-closure. We believe this strategy rese --
25 represents the best management practice, also being

1 practical and -- and achievable.

2 In regards to differences relating to
3 overburden storage and reworking, De Beers has
4 committed to assessing the feasibility of covering and
5 re-vegetating the waste rock piles. It appears that
6 re-vegetating the waste rock piles is potentially
7 feasible at the Gahcho Kue location, since overburden
8 materials will be available.

9 We note that in other jurisdictions such
10 as BC, Ontario, they do require an overburden cover
11 over waste rock piles if available and where feasible.
12 We also do want to identify that some of the -- the
13 other Intervenors to this process, some of the First
14 Nation groups, have identified their preference to have
15 re-vegetation strongly considered moving forward.

16 The last major area of difference
17 between the respective estimates is in regards to the
18 mobilization/demobilization aspect of the estimates.
19 It is a little difficult to directly compare the
20 differences there, and -- and we're not entirely sure,
21 although if you stacked the two (2) estimates side by
22 side, it appears that there is quite a bit of
23 difference between the two (2).

24 We're not sure whether or not some of
25 the aspects of the mobilization and demobilization are

1 embedded in other areas within the -- within the De
2 Beers's estimate. So unfortunately, it's a little diff
3 -- difficult to compare the two (2) directly, and we
4 can't provide much more detail or rationale behind the
5 differences.

6 In our intervention, the department
7 attempted to scheduled the proposed security on -- on
8 several key project milestones where increments to the
9 onsite liability would be greatest. We do acknowledge
10 that De Beers has agreed to -- to look at key project
11 milestones based on the mine plan.

12 We note that the Company has agreed to
13 the preconstruction liability amount sequenced 50/50
14 over the construction phase, and we appreciate that,
15 but we do recognize that there is a standing difference
16 in opinion on the subsequent amounts through -- through
17 the mine life.

18 However, it does appear that the
19 differences in opinion appear to be based upon the --
20 the amounts estimated and not the approach in
21 sequencing security and the submission of security
22 through time, so that's an important -- important piece
23 to add.

24 So, Mr. Chair, at this time we do
25 recommend that the Board set the total amount of

1 security at eighty-four million four hundred and
2 seventy-one thousand seven hundred (84,471,700). We
3 split that between a water-related liability of 67
4 million -- just over 67 1/2 million, and a land-related
5 liability of -- of just under 17 million. The water-
6 related liability we feel should be placed within the
7 water licence, and the land-related liability within
8 the land use permit or other appropriate land-based --
9 or land use authorizations.

10 We do note that this total estimate will
11 be reviewed through time, through the life of the
12 project, and will -- will need to be -- likely need to
13 be adjusted where appropriate, based on the available
14 information at the time.

15 In regards to the scheduling of security
16 in the water licence, we've -- we've recommended that
17 the -- the total liability associated with the project
18 prior to construction at just over 19 million,
19 comprised of a water-related liability of -- of
20 approximately 7.2 million and a land-related liability
21 of approximately 11.8 million. And we do feel that
22 this security could be scheduled over the construction
23 period.

24 We note again that -- that the -- it's
25 our understanding that De Beers has agreed to this --

1 to this number and is open to splitting the security
2 provision over the proposed construction period.

3 We recommend that the -- the liability
4 associated with the Gahcho Kue Project prior to mining
5 and milling, and -- and we assume that to be year 1 of
6 operations, at -- at 37 -- approximately 37.6 million,
7 comprised of a water-related liability of approximately
8 23.8 million and a land liability of approximately 13.8
9 million.

10 And our last recommendation is that --
11 in regards to sequencing of securities is that in year
12 4, coinciding with the end of mining in -- in Hearne
13 Pit at -- at -- the liability -- total liability
14 estimated at 79 -- approximately 79.7 million,
15 comprised of a water-related liability of 64.5 million
16 and land liability of 15.2 million.

17 Again, we feel that the -- the water-
18 related liability should be placed within the water
19 licence, and the land-related liability placed in the
20 land use permit or another appropriate land use
21 authorization.

22 So, Mr. Chair, this concludes our
23 presentation, and we'd like to thank the Board for --
24 for providing us the opportunity to speak today and --
25 and to present our intervention and our associated

1 recommendations. We would like to thank the Proponent.
2 We've -- we've had many very good discussions through
3 time, and we look forward to continued discussions.

4 We look forward to -- it's very
5 important that we look -- you know, look forward and
6 continue to work together in advance of a draft water
7 licence coming out and -- and ultimately the project
8 moving forward. So again, we look forward to reviewing
9 the draft licence moving forward, and providing our
10 closing -- closing arguments to the Board.

11 And at this time, we're open to any
12 questions that the Board and Intervenors may have.
13 Thank you.

14 THE CHAIRPERSON: Yeah, thank you for
15 your presentation. We had some gentlemen on the phone
16 that they -- did they have any comments for you,
17 Robert? We've got a bunch of people on the phone. Do
18 they have anything to add, or are they sort of there?

19 MR. ROBERT JENKINS: Mr. Chair, it's --
20 it's Robert Jenkins. And I'm glad that they're there,
21 but in context of the presentation, no, they don't --
22 don't have anything to add. But they are on the phone
23 to help us in answering questions.

24

25 QUESTION PERIOD:

1 THE CHAIRPERSON: Okay. Great. Just
2 didn't want them to think we left them out or forgot
3 about them. So thank you again for that. And so we'll
4 start then with the -- with the presentation -- with
5 the questioning to ENR, and the order of questioning
6 we'll be starting with De Beers Canada.

7

8 (BRIEF PAUSE)

9

10 MS. VERONICA CHISHOLM: Thank you, Mr.
11 Chair. We -- we just have a -- a few questions. So
12 the one (1) question that we had, and we would just
13 like ENR to provide some clarification around this,
14 whether there's really a requirement in Ontario and BC
15 to re-vegetate mine rock piles?

16 If they could just indicate whether --
17 if they can provide some clarification if that's a
18 requirement in those provinces?

19 THE CHAIRPERSON: Thank you. Over to
20 Robert.

21 MS. LARA FLETCHER: Lara Fletcher,
22 Brodie Consulting. And, John, you can step in if I'm
23 incorrect, but I believe it's 1/2 metre of overburden.
24 That's what's required.

25

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: If you could just
4 click your mic off there unless John has a... Maybe he
5 went home. Over to -- over to De Beers.

6 MS. VERONICA CHISHOLM: Veronica
7 Chisholm, from De Beers. Thanks for that. I'm just
8 wondering if you can help us, point us to the
9 regulation in BC for that one, because I'm just not
10 familiar with it. And -- and I believe that you just
11 said that it was a cover and not necessarily a re-
12 vegetation.

13 If you can just clarify that, right?

14 MS. LARA FLETCHER: John, are you
15 there?

16 MR. JOHN BRODIE (BY PHONE): Yes, I am.
17 It's, John Brodie. I can certainly find that reference
18 and provide that for De Beers.

19 THE CHAIRPERSON: Okay. John
20 Donihee...?

21 MR. JOHN DONIHEE: Thank you, Mr.
22 Chairman. It's, John Donihee, Board counsel. I -- I
23 think we'd like you to provide it for the Board. De
24 Beers may well be enlightened, but they won't be
25 writing the licence. So if possible if we could take

1 that as Undertaking number 6 then from ENR. And that's
2 to identify the regulations -- or regulatory framework
3 for placing overburden on waste rock piles. Mine --
4 was it waste rock or mine rock, waste rock? Okay.

5 MS. VERONICA CHISHOLM: The same thing,
6 but also relating to the vegetative cover, if that's a
7 regulatory requirement, and if they can provide us that
8 regulation, I think it would be helpful for all of us.

9 MR. JOHN DONIHEE: Thank you very much.

10 THE CHAIRPERSON: And let's not get too
11 far ahead of ourselves yet. You didn't -- you didn't
12 give me your name, for the record --

13 MS. VERONICA CHISHOLM: Okay.

14 THE CHAIRPERSON: -- or -- or John
15 Donihee, so it wasn't just you.

16 MR. JOHN DONIHEE: Sorry, Mr. Chairman,
17 it's John Donihee. And, Mr. Brodie, I just wanted to
18 remind you that May 15th is the deadline for a
19 submission of undertakings. Thank you, sir.

20 MR. JOHN BRODIE (BY PHONE): It -- it's
21 John Brodie. I couldn't quite hear that comment.

22 MR. JOHN DONIHEE: It's John Donihee,
23 Board counsel, again. I just pointed out that the
24 undertakings have to be submitted by May the 15th.

25 MR. JOHN BRODIE (BY PHONE): It's John

1 Brodie. That's no problem.

2

3 --- UNDERTAKING NO. 6: GNWT-ENR to provide to the
4 MVLWB any regulatory
5 reference(s) for
6 re-vegetation covers on
7 waste rock piles due May
8 15, 2014

9

10 THE CHAIRPERSON: Okay. Thank you.
11 Further from De Beers?

12 MS. VERONICA CHISHOLM: Veronica
13 Chisholm, from De Beers. I -- I have one (1) other
14 question, and this relates to the -- the concern that
15 ENR had with respect to refilling Kennady Lake and --
16 at -- at closure.

17 I'm just wondering if you would agree
18 that our commitment to do the research and monitoring
19 and look at the options, as we discussed this morning,
20 of moving some of the groundwater into the pits, would
21 that help to alleviate some of your concerns, those
22 commitments that we have, in terms of your uncertainty
23 about refilling Kennady Lake? And just a comment on
24 that would be helpful. Thank you, Mr. Chair.

25 THE CHAIRPERSON: Thank you for that.

1 Over to Robert.

2

3 (BRIEF PAUSE)

4

5 MR. ROBERT JENKINS: Thank you, Mr.

6 Chair. It's Robert Jenkins, with ENR.

7 Yeah, I think that, you know, obviously

8 moving forward, there's lots of -- there's many

9 different items that were going to require reclamation

10 research and incorporation into, obviously, ultimate

11 closure designs. So I think that, yes, some of those

12 things will -- will help, most definitely.

13 THE CHAIRPERSON: Okay. Thank you for

14 that. Over to De Beers.

15

16 (BRIEF PAUSE)

17

18 MS. VERONICA CHISHOLM: Veronica

19 Chisholm, with De Beers. That's all our questioning.

20 Thank you.

21 THE CHAIRPERSON: Okay. Thank you to

22 De Beers for those questions, and the next order, it

23 would be Environment Canada.

24 MS. SARAH-LACEY MCMILLAN: Good

25 afternoon. It's Sarah-Lacey McMillan, with Environment

1 Canada. We have no questions.

2 THE CHAIRPERSON: Okay. Thank you.

3 Then the next is Deninu Kue First Nation.

4

5 (BRIEF PAUSE)

6

7 MR. MARC D'ENTREMONT: Hi. It's Marc

8 d'Entremont, with the DKFN. I just have one (1)

9 question. It's a bit of a long one, so here we go.

10 So in the management plans that I've
11 reviewed, when it comes to adaptive management or
12 responsive framework, specific action levels -- so this
13 -- these are the plans that De Beers has prepared.

14 Specific action levels are identified for negligible or
15 low level effects, and it's stated in these plans that
16 action levels for moderate or high-level effects will
17 be determined based on the outcomes of the monitoring.

18 Now, we've heard through the discussions
19 today that for some components of the project, several
20 options have already been identified which can
21 potentially be related to action levels.

22 So for ENR, my question is, and it's in
23 response to your slide on adaptive management and the
24 management response and the recommendation regarding
25 the standalone response plan and the recommendations

1 for clear definitions around adaptive management and
2 action levels.

3 So the question is, for this standalone
4 plan and the ones that would come out -- out of it,
5 would you like to see specific action levels for
6 moderate or high-level effects being identified?

7 THE CHAIRPERSON: Okay. Thank you for
8 the question, and over to GNWT.

9

10 (BRIEF PAUSE)

11

12 MR. SEAN WHITAKER: Sean Whitaker,
13 Government of the Northwest Territories Department of
14 Environment and Natural Resources. It's ENR's opinion
15 that by setting a low-level threshold, once that's
16 achieved, you then would set your moderate and high.
17 So your investigation of solution, investigation of
18 cause, you would -- you'd trigger your low-level
19 threshold.

20 You'd have a substantive, a clear
21 defined low level, and at that point, through this --
22 all stakeholders, Aboriginal groups, and regulators,
23 the Proponent, and the Board, you would then establish
24 your moderate and high at that point. So not until you
25 hit your low-level threshold, so you don't have to do

1 extra work without having ever hit it.

2 So it could be a chloride number. You
3 hit a chloride number, and then it goes up for
4 statistical significance. So we all agree on the low-
5 level threshold, and then you would establish your
6 moderate and high after that. So you wouldn't need a
7 moderate and high threshold if you never hit your low
8 level. I hope that answers your question on the GNWT's
9 position.

10 THE CHAIRPERSON: Okay. Thank you.
11 Further from the Deninu Kue First Nation.

12 MR. MARC D'ENTREMONT: Thank you. Marc
13 d'Entremont for the DKFN. So I understand what you're
14 saying, and -- and the hopes that you wouldn't have to
15 hit the moderate or high.

16 But I guess my -- my question would be,
17 would you still have those moderate or high kind of
18 already identified, or some which may or may not be pre
19 -- prescriptive, but at least it's almost a benchmark
20 there that can then be reviewed if the low-level
21 threshold was exceeded?

22 THE CHAIRPERSON: Okay. Thank you.
23 Back to ENR.

24

25 (BRIEF PAUSE)

1 MR. SEAN WHITAKER: Sean Whitaker,
2 Environment and Natural Resources. So there would be
3 in a critical effect -- that would be the end, the no-
4 go zone, essentially. If this effect were to happen,
5 that's usually defined in the EIR process. So it'd --
6 a critical effect size. There's some major change
7 you've identified in your response framework, and then
8 you set your low-level threshold.

9 But underneath that low-level threshold,
10 there's other triggers that you're going to be hitting.
11 So you'd be doing trend analysis. You would be doing
12 all of those things that are defined in an adaptive
13 management framework.

14 So, for example, if your plankton
15 community is changing, that's going to trigger a
16 question, Why is that changing? Why is the population
17 changing? And then we're already -- you've established
18 your low level. We know what we're not going to all --
19 like, the low level's set, and so we have all the
20 triggers underneath it monitoring it.

21 And then once we -- if you were to hit
22 that low level, that will require a different thought
23 process and a different solution. It could be water
24 treatment. It could be a larger option. Usually
25 moderate thresholds and high-level thresholds, you're

1 getting near your critical -- critical stage that we
2 don't want projects to go to.

3 So -- but those are big changes. So you
4 have your small steps underneath that, and then once we
5 get to that step, you hit that low-level threshold,
6 then we have to start talking big fundamental changes,
7 and that's what adaptive management's supposed -- so
8 you -- you wouldn't define them, because you wouldn't
9 know what it could be.

10 It could be something as simple as a
11 waste rock pile seeping more than it was supposed to,
12 and that could require a completely different thing.
13 It's an unknown -- unknown at that point.

14 So you set your low level, saying, At
15 this point, this is a change that's cautionary, and
16 then the moderate and high to your critical effect,
17 something that you can't happen -- have happen, and so
18 that's why you would only set the low level, and then
19 we would talk fundamental changes through the Board
20 process at that point.

21 THE CHAIRPERSON: Okay. Thank you for
22 a great response. Anything further?

23 MR. MARC D'ENTREMONT: Thank you. Marc
24 d'Entremont from the DKFN. No, that answers my
25 question. Thank you.

1 THE CHAIRPERSON: And next up on the
2 order of questioning is the Yellowknives Dene First
3 Nation.

4 MR. TODD SLACK: Thank you, Mr. Chair.
5 Todd Slack, on behalf of the Yellowknives. And I want
6 to thank the GNWT for an excellent presentation. And I
7 just have a few questions that focus on areas of their
8 mandate that they didn't happen to cover.

9 I guess my first question is: Two (2)
10 years ago there was a fair amount of discussion between
11 GNWT and the Proponent that an MOU would be established
12 both for air quality as a waste management monitoring
13 and test -- and testing regime, but also in -- in terms
14 of the Wildlife Effects Management Plan. I believe
15 that this was to try to provide an instrument so as to
16 codify the expected responsibilities as well as provide
17 some kind of dispute resolution system; however, I
18 can't say for certain. I'm wondering if the GNWT can
19 give us an update as to where progress stands, what's
20 been happening with that process, and when we can
21 expect this to be delivered hopefully within the -- the
22 regulatory process? Thank you.

23 THE CHAIRPERSON: Thank you, Todd.
24 Over to GNWT.

25

1 (BRIEF PAUSE)

2

3 MS. ANDREA PATENAUDE: Hello. I am
4 Andrea Patenaude, GNWT-ENR Wildlife Division. I can
5 speak on behalf of the -- or in terms of the MOU with
6 wildlife for the development of mutually agreeable
7 WWHPP and WEMP. That is an MOU process that's been
8 developing, and in fact it has just gone up to senior
9 level management for signing. And so there is a letter
10 that will be going out any time now, perhaps -- yeah,
11 any time. As soon as we get it signed. So it's up
12 there and it's happening.

13 So there is progress, and it's out --
14 almost out the door.

15 MS. LISA DYER: And Lisa Dyer, Director
16 of Environment. I can give an update on the air
17 quality MOU. We're not quite at the state as the
18 wildlife, but we -- it is undergoing senior level
19 review right now. And I would anticipate that it would
20 be ready within the next couple of months.

21 This is not an excuse, but Aileen
22 Stevens, who was working on it, decided to have a baby
23 so we're just getting -- we're -- we're kind of just at
24 the end stages of getting it reviewed at this point.

25 THE CHAIRPERSON: Okay. Thank you.

1 Zabey, was there anything to add to those two (2)
2 questions?

3 Okay, great. Todd, back to you.

4 MR. TODD SLACK: Thank you, Mr. Chair.
5 And that's good to hear. It's good to see that process
6 coming to an end.

7 As presently presented, does GNWT
8 believe that the Closure Plan will result in the site
9 being reclaimed in such a way that it'll meet the broad
10 goals that are set out, that it will reflect the
11 surrounding environment, and will again represent
12 viable caribou habitat? Yeah.

13 THE CHAIRPERSON: Thank you. Over to
14 ENR.

15

16 (BRIEF PAUSE)

17

18 MR. ROBERT JENKINS: Thank you, Mr.
19 Chair. It's Robert Jenkins with ENR. I think that,
20 you know, moving forward obviously there's still some
21 work that needs to be done in -- in determination of --
22 of a closure plan. I mean, a big component of that is
23 -- is developing your -- your -- you know, and refining
24 through time your -- your goals, your -- your
25 objectives, your -- you know, the options that -- that

1 you'll undertake to make sure that at the end closure
2 of the site is something that -- that -- you know, the
3 inputs from the parties and -- and Aboriginal groups
4 and First Nations, you know, are -- find acceptable.

5 And so I think that there still needs to
6 be some more work done in defining, you know,
7 everything moving forward in terms of -- terms of
8 closure of the Gahcho Kue site. Again, a big component
9 of that is having input from all the groups.

10 THE CHAIRPERSON: Thank you. Further,
11 Todd?

12 MR. TODD SLACK: That's great. Thanks,
13 Mr. Chair. And I appreciate that I'm changing topics
14 almost every question here. I -- the Yellowknives have
15 been wondering, does the GNWT believe that the current
16 WWHPP is going to be effective as it relates to habitat
17 effects for determining zone of influence,
18 distribution, behaviour, those kind of things, as
19 required by -- for the measures issued by the Review
20 Panel? And here we're speaking only to the winter
21 road.

22 THE CHAIRPERSON: Thank you. Over to
23 ENR.

24 MS. ANDREA PATENAUDE: Andrea
25 Patenaude, ENR. I don't want to say any more about the

1 current WWHPP because the next draft is on its way, as
2 well. But I will say that ENR has collaborated with De
3 Beers in what we think is going to represent a
4 substantial improvement on the WWHPP from its draft
5 form. We have yet to see, but we've had some
6 productive conversations about directions that it could
7 go.

8 So I'm going to hold off on making a
9 judgment at this point, but I feel like it's promising.

10 THE CHAIRPERSON: Thank you. And back
11 to Mr. Todd Slack.

12 MR. TODD SLACK: Thank you, Mr. Chair.
13 Todd Slack, on behalf of the Yellowknives. I'm
14 wondering if GNWT has reviewed the -- the WWHPP and the
15 WEMP and if they can talk to whether they feel that the
16 low level threshold and the significance thresholds
17 that are in place that link those two (2) plans, if
18 they think that they're effective in terms of meeting
19 the measures as set out by the Review Boar -- or sorry,
20 the Review Panel. Thank you.

21 THE CHAIRPERSON: Thank you. Over to
22 ENR.

23

24 (BRIEF PAUSE)

25

1 MS. ANDREA PATENAUDE: Andrea
2 Patenaude, ENR. I -- in the opinion of ENR, as I
3 mentioned, yes, we've rev -- reviewed the WWHPP; yes,
4 we've reviewed the WEMP. Development of threshold
5 levels was one (1) of the areas that on some items we
6 had -- had some comments on. At this point, again,
7 after our discussions with De Beers about the changes
8 that they're looking to make to their WWHPP and the
9 WEMP, I feel confident at this point saying that the --
10 they seem to have understood where we were coming from
11 and have -- again, I -- I'm looking forward to seeing
12 the next drafts.

13 THE CHAIRPERSON: Thank you. Further
14 from Yellowknives?

15 MR. TODD SLACK: Thank you, Mr. Chair.
16 Can I -- I'll just, as a point of clarification then,
17 as the -- the GNWT is privy to information that we
18 haven't seen, I'm wondering if they can -- if they
19 would clarify their comments in terms of what's there
20 right now and if they would say what's on the record or
21 the registry right now, and if they say that that
22 adaptive management framework needs significant
23 progress.

24 THE CHAIRPERSON: Okay. Thank you.
25 Over to ENR.

1

2

(BRIEF PAUSE)

3

4

MS. ANDREA PATENAUDE: Andrea

5

Patenaude, for ENR. Can you restate the question,

6

please.

7

MR. TODD SLACK: Sure. Todd Slack, for

8

the Yellowknives. The original question was to ask --

9

we were asking about the adaptive management framework

10

that links the WWHPP and the WEMP and is the measure

11

from the Review Panel. So the que -- the original

12

question was to -- has GNWT assessed this framework,

13

the low-level effects limit and the significance

14

threshold, and do they feel that they're appropriate to

15

adequately address the measure as it was set out by the

16

Review Board?

17

Now, their -- sorry, their response was

18

that they believe that the next iteration represents

19

significant progress. However, as it's neither on the

20

registry, nor have we reviewed it, the question that

21

was just asked was: Do they think, as it currently

22

stands, it could use significant improvement?

23

THE CHAIRPERSON: Okay. Thank you.

24

ENR...?

25

1 (BRIEF PAUSE)

2

3 MS. ANDREA PATENAUDE: All right.

4 Andrea Patenaude, ENR. So -- okay, if I'm

5 understanding correctly, okay, because what we have is

6 there is an adaptive management framework that De Beers

7 has provided in regards to how they will be managing

8 their plants. There's also an adaptive management

9 component to what I would say is the cumulative effects

10 framework that ENR Wildlife Division has produced, a

11 draft framework for -- that is part of ENR's response

12 to Measure A -- or sorry, Measure 3, but also other

13 measures in other EA processes, funnily enough.

14 But as part of kind of our own ongoing

15 effort to get something going that will address Measure

16 3, and I -- I would argue that we're working towards

17 that, there is -- see, wildlife it's a little bit

18 different. With aquatic monitoring, you have an

19 adaptive management framework. You have very clear

20 thresholds, you have criteria that are established.

21 You have bodies out there that are developing the

22 criterias.

23 It's kind of a different can of worms in

24 the wildlife end of things. So if you're asking as to

25 whether what ENR has seen in the version of WWHPP -- in

1 the WWHPP and WEMP version, if we -- did we see those
2 clear links in that version to some idea towards
3 adaptive management that we think would satisfy some
4 level of incorporation for the purposes of, I guess,
5 improving the wildlife management, then I would say the
6 feedback we gave in addition to what was there, again,
7 provides me with confidence that they will be able to
8 improve -- that -- that they have a plan in place that
9 they will be able to use.

10 And that they have provided some -- in
11 some cases initial thresholds and action levels. In
12 other cases we provided some comments that I think that
13 they will use that we'll see in that next version. So
14 as to whether what was provided in the WHIP and the
15 WEMP, if that meets exactly the, I guess, adaptive
16 management framework that is being used to discuss the
17 water quality end of things, I mean, no, it's not as
18 specific as that.

19 THE CHAIRPERSON: Okay, thank you for
20 that explanation. Anything further from Yellowknives?

21 MR. TODD SLACK: Todd Slack from the
22 Yellowknives. Well, I'm afraid I -- I have to ask
23 another clarification, if I may?

24 So if this isn't going to be a system
25 similar to the -- if it isn't going to be a system

1 similar to the framework used in the aquatic side of
2 things, in which there is low-level thresholds, medium,
3 high, and significant thresholds, can you please
4 describe what the adaptive management framework which
5 links the WEMP and the WWHPP is going to be, and -- and
6 how it's going to work to address that?

7 THE CHAIRPERSON: Thank you. Over to
8 ENR.

9 MS. ANDREA PATENAUDE: Well -- Andrea
10 Patenaude, ENR. We're still looking for thresholds,
11 and action levels. It's just that in the original
12 iterations of the WWHPP and the WEMP, because there
13 aren't existing criteria for a number -- because there
14 aren't bodies out there regulating a lot of the things
15 that we talk about in the WWHPP and the WEMP there's
16 some back and forth in figuring out exactly what an
17 action level will look like for certain things.

18 So for instance monitoring your site for
19 wildlife attractants, you know. If -- you know,
20 through surveillance monitoring. I mean, based on
21 their experience thus far and -- I mean, the need to
22 propose, Okay, we see 'X' number of carnivores on site,
23 or carnivore tracks. Like, there's -- we need to see
24 why they're on site. Like we -- we needed some more
25 information about what is going to trigger some

1 actions, but the metrics are a little bit trickier. So
2 I'd say, Let's wait and see.

3 THE CHAIRPERSON: Okay, thank you for
4 that. Todd Slack, what do you think, you kind of
5 whipped down there? Maybe they'll ask you for coffee
6 and you can have a little discussion of that.

7 MR. TODD SLACK: Thank you, Mr. Chair.
8 I feel as though I'm whipped. I wonder if we can just
9 take this potentially as an undertaking to -- if GNWT
10 can provide the comments that they have submitted
11 because unfortunately we don't -- this is a plan for
12 approval, the -- the WWHPP, pardon me, is a plan for
13 approval by your Board.

14 So without being privy to the knowledge
15 that they have, or having a solid understanding of what
16 the adaptive management framework is, it's -- I'm at a
17 very difficult position to try and understand where we
18 actually stand, and how the Yellowknives can provide
19 meaningful comments in terms of meeting the measure --
20 Part 2 of Measure 1, where it says:

21 "The Caribou Protection Plan should
22 include an adaptive management
23 framework."

24 So I'm just at a bit of a loss.

25 THE CHAIRPERSON: Okay. Thank you,

1 Todd. I can -- I can sense your frustration and
2 perhaps, Rebecca, could you...

3

4 (BRIEF PAUSE)

5

6 THE CHAIRPERSON: While they're talking
7 there, if -- De Beers, you had a comment you'd like to
8 make, that's fine.

9

MS. VERONICA CHISHOLM: Thank you, Mr.
10 Chair. I think this might help. We're developing --
11 we've received comments from a number of parties on the
12 WWHPP and the WEMP where advancing those plans, we're -
13 - we will have action levels. We will have management
14 responses. We will put that out for review. And we
15 will incorporate -- and all of that will be placed on
16 the record.

17 And if the Yellowknives Dene could wait
18 till the next iteration of the WEMP and the WWHPP I
19 think that he will see how far we have advanced that,
20 and how we have clearly demonstrated how we have
21 achieved those measures. So I think we'd like to offer
22 that, that we're going to be submitting revised drafts
23 of the WEMP and the WWHPP where we've advanced and
24 incorporated comments not only from ENR but also from
25 the Yellowknives Dene and from other parties. So I

1 hope that helps this conversation.

2 THE CHAIRPERSON: Well, I thank you for
3 that. I don't think it -- it could hurt it. Rebecca,
4 did you want -- you're still in discussion there?
5 That's fine.

6 Todd, did you have anything you'd like
7 to add to De Beers?

8

9 (BRIEF PAUSE)

10

11 MR. TODD SLACK: Todd Slack, for the
12 Yellowknives. I just had to think with my team there
13 for a minute. Unfortunately, we're in this position
14 where this is the approval phase, and we have to submit
15 comments on this in the next few days, or, well, next
16 two (2) or three (3) weeks.

17 If that -- if the next iteration can be
18 provided within -- within that time period, and we're
19 free to comment it -- on it as part of our closing
20 comments, we would be happy to -- to do that.

21 THE CHAIRPERSON: Okay. Thank you.
22 Did you have something, Zabey? And then we can come
23 back to De Beers.

24 MR. ZABEY NEVITT: Yeah. Zabey Nevitt,
25 with the Board. My first question would be to the

1 GNWT. I think what Todd is asking for is any specific
2 comments that you have as on the Wildlife Habitat --
3 Wildlife and Wildlife Habitat Protection Management
4 Plan.

5 Does the GNWT have any willingness to
6 provide those to Todd and the Yellowknives Dene?

7 MS. ANDREA PATENAUDE: Andrea
8 Patenaude, ENR.

9 MR. TODD SLACK: Sure.

10 MR. ZABEY NEVITT: I don't know whether
11 we need that as an undertaking specifically, or just a
12 commitment that you will provide them. Sorry, Zabey
13 Nevitt, with the Board.

14 MS. ANDREA PATENAUDE: Andrea
15 Patenaude, ENR. As in, we would like me -- or ENR to
16 furnish this to the Board, or to specifically YKDFN?

17 MR. ZABEY NEVITT: Okay. Zabey Nevitt,
18 with the Board. Question to Todd: Do you believe this
19 is relevant evidence that needs to be put in front of
20 the Board for -- to assist us in our decision making on
21 the water licence and land use permit terms and
22 conditions?

23 MR. TODD SLACK: Todd Slack, with the
24 Yellowknives. Yes, I believe it should go on the
25 registry as the WWHPP is part of the approved plans.

1 MR. ZABEY NEVITT: Zabey Nevitt, with
2 the Board. Then I suggest that it is taken as an
3 undertaking, and if ENR is prepared to provide those
4 comments, it be put on the Board's registry.

5 THE CHAIRPERSON: Thanks for that,
6 Zabey. Did -- did De Beers have a follow-up before I
7 get back to ENR?

8 MS. VERONICA CHISHOLM: Ver -- Veronica
9 Chisholm, from De Beers. I was going to help the
10 process by saying, 1) we will submit the updates to the
11 WEMP and the WWHPP by the end of May, and we'll include
12 in an appendix all of GNWT's comments and our response
13 to those comments as a complete -- as an appendix to
14 those reports, so that all the parties could see it and
15 it's housed within those reports.

16 So the -- ultimately, that's the
17 decision of the Board, whatever you'd prefer. We'd
18 probably do it anyways.

19 MR. ZABEY NEVITT: Zabey Nevitt, with
20 the Board. I guess the only issue with that is you're
21 looking at the end of May, and we're looking at -- the
22 Intervenors want to provide comment on these before.

23 So as an undertaking deadline, if May
24 the 15th was the undertaking deadline, the GNWT can
25 provide that and Todd can use that as he needs to in

1 his closing arguments.

2

3 --- UNDERTAKING NO. 7: GNWT-ENR to provide to the
4 MVLWB any comments or
5 documents provided to De
6 Beers Canada Inc. in
7 relation to the Wildlife
8 and Wildlife Habitat
9 Protection Plan and the
10 Wildlife Effects Monitoring
11 Plan due May 15, 2014
12

13 THE CHAIRPERSON: Okay. Thanks, Todd.
14 Then are you happy with an undertaking for May 15th?

15 MR. TODD SLACK: Todd Slack, on behalf
16 of the Yellowknives. Absolutely.

17 THE CHAIRPERSON: And so ENR has agreed
18 to do the undertaking by May 15th.

19 MS. ANDREA PATENAUDE: Andrea
20 Patenaude, ENR. Yes, by May 15th we will provide those
21 to the registry.

22 THE CHAIRPERSON: Wonderful. Todd, do
23 you have anything further?

24 MR. TODD SLACK: Todd Slack, with the
25 Yellowknives. I have one (1) more question, but I

1 believe it's a little out of scope, and will probably -
2 - we'll take your guidance from this morning and speak
3 to it in the presentation. Thanks.

4 THE CHAIRPERSON: Okay. Then thank you
5 to the Yellowknives Dene First Nation, and next up for
6 questioning is the North Slave Metis Alliance.

7

8 (BRIEF PAUSE)

9

10 THE CHAIRPERSON: No North Slave Metis
11 Alliance? Are there any registered speakers since this
12 morning? I don't believe there's anybody on the
13 teleconference line. Any comments or questioning from
14 the general public?

15

16 (BRIEF PAUSE)

17

18 THE CHAIRPERSON: Then we'll go to the
19 Board staff, technical advisors, and legal.

20 MR. ZABEY NEVITT: Zabey Nevitt, with
21 the Board. We'd request, actually, that we ask our
22 questions tomorrow morning, if we could.

23 THE CHAIRPERSON: Tomorrow morning
24 probably works for everybody, because the Habs are
25 going to win the game starting at 5:30, so, you know.

1 Okay, so is there any housekeep -- keeping issues that
2 you -- you want to talk to that? Yes.

3 MR. ZABEY NEVITT: Yeah. It's Zabey
4 Nevitt, with the Board. Oh.

5

6 (BRIEF PAUSE)

7

8 MR. ZABEY NEVITT: Sorry, it's Zabey
9 Nevitt, with the Board. We've just realized that one
10 (1) of our questions is for Don MacDonald, who I
11 understand isn't available tomorrow morning, so if we
12 could just have Neil ask the one (1) question or the
13 line of questioning he has for Don, that -- that would
14 be appreciated.

15 THE CHAIRPERSON: That doesn't any
16 create any problem. So, Neil...?

17 DR. NEIL HUTCHINSON: Neil Hutchinson,
18 for the Board. Thank you, Mr. Chair, and let me
19 reassure you I'm as big a Haps fan as you are.

20 Is -- is Don MacDonald still on the
21 line?

22 MR. DON MACDONALD (BY PHONE): Yes, I
23 am.

24 DR. NEIL HUTCHINSON: Hi, Don.

25 MR. DON MACDONALD (BY PHONE): How are

1 you doing, Neil?

2 DR. NEIL HUTCHINSON: Don -- Don, ENR
3 has recommended toxicity testing using two (2) species,
4 fathead minnow and rainbow trout, early live stages,
5 partly in response to uncertainty in the relative
6 sensitivity of each of the species. De Beers, in a
7 Information Request from our tech sessions, completed a
8 review and concluded that the fathead minnow had
9 similar or greater sensitivity than the rainbow trout,
10 and is not likely to be less sensitive.

11 This morning, in questioning to De Beers
12 that -- that you weren't here for, De Beers stated
13 they're concerned with -- with obtaining a reliable
14 supply of early life stages of rainbow trout for
15 toxicity testing, concerns with the logistics of
16 shipping sufficient volumes of effluent over the time
17 period required for an early life stage test.

18 Yet in the end, De Beers still propose
19 to use rainbow trout for toxicity testing at the end of
20 the pipe, because they consider it's a more appropriate
21 species, considering the native community of fish.

22 So I guess my question to is, should the
23 Board's -- Board be more concerned with the sensitivity
24 of the test species that are used for the end-of-pipe
25 testing, or the availability and a reliable supply of

1 test organisms so that the test can be carried out
2 reliably?

3 MR. DON MACDONALD (BY PHONE): And
4 thank you, Mr. Chair. This is Don MacDonald, for ENR,
5 and that's a -- always a good question, and where -- so
6 there -- there's a number of uncertainties, first of
7 all, about -- about water quality in and -- about
8 evaluations of water quality.

9 So one (1) of the uncertainties is
10 associated with the water quality modelling that's
11 done, and I -- I think there's a -- a general
12 understanding that water quality modelling is an
13 imperfect science and -- and results in tools that help
14 us to make decisions, but aren't necessarily accurate
15 tools -- fully accurate tools.

16 So this -- some of the other
17 uncertainties are -- relate to the water quality
18 objectives and how much certainty we have in those, so
19 there's uncertainty about what the exposure's going to
20 be. There's also uncertainty about what effect levels
21 could be, and, you know, I sort of focus on nitrate as
22 one (1) of them, one (1) of the uncertainties, because
23 CCME, for example, has concluded that the toxicity of -
24 - there's not enough information to evaluate the effect
25 of hardness on the toxicity of nitrate.

1 And in fact, when you look at the
2 underlying data, there's no information related to
3 rainbow trout that is usable for the purposes of
4 understanding a relationship between nitrate and -- and
5 toxicity.

6 The other problem we have is that we
7 have all of these water quality objectives that are
8 developed in -- in isolation from one another, and so
9 we're sort of left with this question about what
10 happens when we -- when we see these mixtures all put
11 together and ultimately released into the environment?

12 And that's really the -- the purpose of
13 these toxicity tests, is to help us to better
14 understand the level of protection that we think we're
15 affording with tools like water quality objectives as
16 evaluated using the water quality modelling that's been
17 done for the site.

18 So this was a -- a long-winded preamble
19 to say I -- I don't think it's a case of -- of being
20 more worried about one thing or the other. From --
21 from our perspective, what we need is a robust toxicity
22 testing program that provides a basis for understanding
23 the toxicity of releases to the environment on some --
24 and -- and a rainbow trout toxicity test will do that.

25 This morning we heard that -- that that

1 test is more relevant for some reason to the fish
2 species that occur in -- in this watershed than -- than
3 what the fathead minnow test is. I don't think that
4 that's correct, because we have both salmonids and --
5 and cyprinids, which are what the fathead minnows are.
6 Both of those occur within the watershed.

7 And so both of those tests really are --
8 are relevant for -- for understanding what different
9 types of fish species -- what their sensitivities could
10 be to the types of substances that will be released
11 into the environment.

12 One of the things we didn't talk about
13 this morning was -- was the potential for including
14 toxicity tests with invertebrates in a -- in sort of a
15 robust suite of tests that -- that could be used for
16 evaluating environmental toxicity of the -- of the
17 releases.

18 But when you look at the underlying data
19 on the toxicity of things like the constituents of --
20 that make up the total dissolved solids, things like
21 the chloride or nitrate, fluoride, for example, what we
22 see is for -- for at least some of those variables,
23 invertebrates are among the most sensitive species, so
24 -- particularly water fleas or daphnids, so including a
25 long-term toxicity test with species like Ceriodaphnia

1 dubia is -- is highly relevant.

2 So -- and Neil, what I did was I avoided
3 answering your question because I think it's -- it's
4 not a case of the Board having to make a decision about
5 which of these two (2) tests is more relevant. I
6 really believe that there is a need for a robust suite
7 of tests that include both of those species and an
8 invertebrate species that -- that provide relevant
9 information on -- on how toxic this -- this mixture of
10 contaminants could be.

11 DR. NEIL HUTCHINSON: Neil Hutchinson,
12 for the Board. Although not answering my question
13 directly, Don, you gave me lots to think about, and
14 lots of information. Thank you very much.

15 MR. DON MACDONALD (BY PHONE): My
16 pleasure. Thank you.

17 THE CHAIRPERSON: Thank you for both of
18 you there. Is there anything else, Neil? No further
19 from the Board, Zabey?

20

21 (BRIEF PAUSE)

22

23 THE CHAIRPERSON: Yes, and you can --
24 yes, then you can adjourn.

25 MR. ZABEY NEVITT: Thank you. Zabey

1 Nevitt, with the Board. We gave the Chair erroneous
2 information earlier, so I'm hoping his hockey team wins
3 tonight so he doesn't stay mad at us.

4 Just the -- some dates that we -- we
5 spoke of earlier in terms of the closing arguments were
6 not quite the right ones.

7 The closing arguments have been updated
8 to June 24th for Intervenor, De Beers closing
9 arguments are due June 30th, and the most recent work
10 plan can be found on the -- the public registry. I
11 think there's -- may also be copies sitting at the
12 front of the room here. Okay. That was all. Thank
13 you.

14 THE CHAIRPERSON: And that ends our
15 first day of the public hearing, so we'll adjourn till
16 nine o'clock tomorrow morning.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: Sorry, do -- did --
21 you had a question?

22 MS. VERONICA CHISHOLM: Veronica
23 Chisholm, from De Beers. No, we just had a couple of
24 things that I told you would take five (5) minutes, and
25 we -- we thought we would read those into the registry,

1 and the -- and they will take less than five (5)
2 minutes.

3 So one (1) question that came up from
4 ENR this morning that we said we would just look up is
5 a reference for information that will be provided with
6 a -- that provides a relative understanding of the
7 similarities. So that's been included in the updated
8 AEMP in Section 7.2.2, starting on page 7-8. So that's
9 the AEMP that was submitted on April 16th.

10 ENR also asked a question about water
11 storage capacity in Kennady Lake, and in the Gahcho Kue
12 draft Water Management Plan submitted in November 2013,
13 there's an Attachment 21.2, and that water storage
14 capacity is provided in Figure 13.

15 And then I'll have Dan Johnson just
16 respond to ENR Lara Fletcher about where we included
17 mine rock deposited; that's of Dike L. I believe that
18 was your quest -- the coarse PK infill. So I'll just
19 have Dan add that part in.

20 MR. DAN JOHNSON: Dan Johnson, JDS. In
21 the reclamation cost submittal the area behind Dike L
22 and -- and year 1 was done as part of -- the Dike L
23 reclamation itself was included in the higher level,
24 and then years 4, 7, 11, the quantity was there, but
25 there was no unit price applied to that, as that was

1 considered an operational fill as part of the thing
2 considered to be filled in by the operation.

3 So there wasn't the unit cost to that.

4 We do note that the -- if you did apply the -- the
5 RECLAIM model unit price of three dollars (\$3) per
6 cubic metre it would equate to a \$2.25 million increase
7 in those three (3) year estimates.

8 And finally, I would note that that was
9 the amount on the -- the last slide 21 on the De Beers
10 presentation that was indicated in there. That was the
11 \$3.4 million difference when you include the indirects.
12 That was that -- that amount there, so. Thank you.

13 THE CHAIRPERSON: Thank you for that.
14 Further from De Beers?

15 MR. MICHAEL HERRELL: It's, Mike
16 Herrell, from Golder. Mr. Chair, Ms. Shaw asked a
17 question earlier this afternoon, I believe, about the
18 relative flow proportions from the various site
19 facilities during operations and in closure, so I have
20 these numbers available.

21 During operations, during the dewatering
22 period the relative flow to the water management pond
23 from the fine PK facility is four (4) to -- it ranges
24 from 4 to 11 percent. There's a range there because
25 the facility grows and you get more water from that

1 facility.

2 I do want to add a -- a clarification on
3 that number. That represents the total flow through
4 Dike L, so that will also include some natural runoff
5 that will be located to the east of Dike L, not
6 necessarily just water in contact with the -- with the
7 fine PK, but that's the relative percentage that comes
8 from the fine PK facility east of Dike L.

9 The west mine rock pile ranges from zero
10 to 0.4 percent. The south mine rock pile represents
11 zero to 0.8 percent of the total flow to the water
12 management pond. And the coarse PK pile ranges from
13 0.2 to 0.5 percent. So in total the -- the relative
14 proportions from the fine -- or from all the -- the
15 mine site waste management facilities ranges from 4.6
16 to 12.3 percent. So I think that's in line with the
17 number that Shannon had quoted earlier this afternoon.

18 During post-closure the -- the rela --
19 the total percentage of -- from the -- the various
20 facilities represents about 20 percent of the -- the
21 drainage through all of Kennady Lake, not just the
22 water management pond. The coarse PK pile accounts for
23 2 percent of the total flow. The fine PK facility, 9
24 percent. The west mine rock pile 4 percent. And the
25 south mine rock pile 5 percent. Thank you.

1 THE CHAIRPERSON: Thank you. So before
2 we leave, is there anything else?

3 Okay. The Board and -- and the -- and
4 the staff have no problem staying as late as you have
5 to. And that's never -- that's never an issue, as long
6 as everybody gets the information and their happy, then
7 it's been a great day.

8 So we'll see everybody at 9:00 -- or
9 8:30 in the morning, get started by 9:00.

10 Thank you. We're adjourned.

11

12 --- Upon adjourning at 5:01 p.m.

13

14 Certified correct,

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20 _____
Bob Keelaghan, Mr.

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MACKENZIE VALLEY LAND

AND WATER BOARD

Gahcho Kue Mine

WATER LICENCE AND LAND USE PERMIT APPLICATIONS

De Beers Canada Incorporated

MV2005L2-0015 and MV2005C0032

PUBLIC HEARING

Panel Members:

Chairperson	Willard Hagen
Member	Joseph Mackenzie
Member	Frank McKay
Member	Floyd Adlem

HELD AT:

Tree of Peace

Yellowknife, NT

May 7, 2014

Day 2 of 2

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1) First Nation

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3 Matt Hoover) North Slave Metis

4) Alliance

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1 --- Upon commencing at 9:01 a.m.

2

3 THE CHAIRPERSON: Good morning to
4 everyone. Thank you for being back and on time. And
5 we're going to get started at nine o'clock. So we'll
6 continue with where we left off yesterday afternoon,
7 and that is questions to GNWT-ENR. And we had left it
8 at the staff starting first thing this morning. So I
9 will turn it over to the staff.

10

11 GNWT-ENR PRESENTATION QUESTION PERIOD CONTINUED:

12 MS. REBECCA CHOUINARD: Thank you, Mr.
13 Chair. It's Rebecca Chouinard, with Board staff. I've
14 just one (1) little question that I promised I would
15 deliver.

16 I am just wondering if you have any
17 thoughts on what an appropriate term would be for the
18 water licence and, if so, the rationale.

19

20 (BRIEF PAUSE)

21

22 MR. ROBERT JENKINS: Thank you, Mr.
23 Chair. It's Robert Jenkins, with ENR. A lot of
24 talking here internally about that little -- that
25 little question you said that you'd ask. It's a bit

1 bigger of a question, although it was a very short one.

2 We haven't provided in our intervention

3 any recommendations on -- on a term for the licence.

4 We do recognize that the legislation now allows a life

5 of project licence, although the legislation formerly

6 offered a -- you know, up to twenty-five (25) year term

7 could be -- could be authorized. So in either case,

8 there is the ability to -- for the Board to permit this

9 -- this operation for the entire length.

10 Often what we've seen in recent licences

11 that have been issued been in the range of eight (8) to

12 fifteen (15) years. Those have been sort of the

13 standard lengths that have been -- been permitted.

14 Often they're aligned with -- with key aspects of the

15 project, you know, a couple years before you get into

16 closure, where you've got a lot of data and you can

17 start thinking and have a good discussion about --

18 about how things should be closed off.

19 But we do -- we do need to recognize

20 that if a longer licence is issued, there is the

21 ability through amendments for a public hearing to be

22 held. I guess that's sort of a long-winded way of

23 getting to I don't -- I don't have an answer for you or

24 -- or a recommendation here on the spot. It's

25 something that we can -- we'll go back and think about

1 and put a bit of rationale and -- and something in our
2 closing statements, if that's considered appropriate by
3 the Board.

4 THE CHAIRPERSON: And thank you for
5 that. And, Rebecca, further?

6 MS. REBECCA CHOUINARD: Thank you, Mr.
7 Chair. Rebecca Chouinard. No further questions. And
8 we'll look for your position on that in your closing
9 arguments. Thank you.

10 THE CHAIRPERSON: Okay. Thank you for
11 that. Further from the staff?

12 MS. JEN POTTEN: Hi. This is Jen
13 Potten, for Board staff. ENR, would you be able to
14 verify with your security estimate if in the \$84
15 million the -- that includes the amount of security
16 that has been currently posted with the existing land
17 use permit and water licences that have been issued to
18 De Beers for this project?

19 THE CHAIRPERSON: Thank you for that,
20 Jen. Over to ENR.

21

22 (BRIEF PAUSE)

23

24 MR. ROBERT JENKINS: It's Robert
25 Jenkins, with ENR. The estimate that we put forward is

1 -- is the estimate that we have for the Gahcho Kue
2 project and it's -- it's in its entirety.

3 THE CHAIRPERSON: Okay. Thank you for
4 that. Further from technical or legal?

5 MR. JOHN DONIHEE: Thank you, Mr.
6 Chairman. It's John Donihee. I'm Board counsel. I
7 have a couple of questions about the follow-up programs
8 that were recommended by the Environmental Impact
9 Review Panel. And more specifically, I guess, I -- I
10 guess what I'm hoping you can do, because the -- at the
11 time that the panel's report was issued, of course, was
12 pre-devolution, and now we have a different minister
13 responsible for carrying out some of those programs.

14 And I'm -- I'm just hoping that we can
15 explore that a bit and -- and that you can give me some
16 indication of your department's views on how, for
17 example, the follow-up programs with respect to water
18 and aquatic effects, how you see them being addressed.

19 I mean, the -- the minister has an
20 obligation, as I read the Act under -- under 1 --
21 Section 136, to do everything that's necessary to bring
22 the panel's report into -- into effect. And obviously,
23 that would include some role now in -- in dealing with
24 the follow-up programs.

25 So maybe before I -- I ask a more

1 specific question, I'm -- I'm just -- is it your
2 understanding, you know, that as a result of changes in
3 responsibilities for your minister that ENR is going to
4 be playing the primary role in -- in seeing to the
5 implementation of these follow-up programs?

6 THE CHAIRPERSON: Thanks for that,
7 John. Over to ENR.

8

9 (BRIEF PAUSE)

10

11 MR. ROBERT JENKINS: Thank you, Mr.
12 Chair. It's Robert Jenkins, with ENR. Some great
13 questions this morning from staff. I first just want
14 to thank you for those great questions that have our
15 minds going at light speed at -- at 9:00 a.m. in the
16 morning.

17 I guess to -- to put it in -- to take a,
18 I guess, a little bit of a step back, yeah, there are a
19 number of measures, you know, in the report of EA. And
20 -- and those, as we all are aware, measures and reports
21 in the EA need to be implemented moving forward.

22 Some of those measures were directed at
23 the GNWT and AANDC at the time. And, yes, April 1st,
24 the magic happened and -- and there was a transfer of
25 responsibilities over to the Territory government from

1 AANDC, but AANDC still does have some residual
2 responsibilities in the NWT and -- and some of those
3 are in -- in with respect to EA.

4 I -- I'm not privy of -- of any sort of
5 discussions between my current government and my former
6 government on -- on how they are going to interact with
7 respect to ensuring that this -- these measures get
8 implemented.

9 But, you know, a -- a lot of the follow-
10 up programs are in areas that are now -- do rest
11 primarily with the GNWT, so it would seem inherent
12 that, yes, if there is going to be someone who is --
13 is, I guess, a primary and a secondary, that the GNWT
14 would likely be primary.

15 MR. JOHN DONIHEE: Thank you, Mr.
16 Chairman. John Donihee again, and -- and thank you,
17 Mr. Jenkins.

18 What I'm hoping to do with these
19 questions is really just to sort of sort out what the
20 Board's role is and -- and what the Applicant and
21 Intervenors can anticipate, being it a licence or a
22 permit, and which -- which other things are more
23 generally responsibilities of government. So that --
24 that's the reason for the question.

25 And, you know, the -- the follow-up

1 programs, I -- I guess just to be clear, I -- I -- my
2 understanding would be that they're -- it's -- that's
3 something that different than a measure, which, you
4 know, there -- there's three (3) measures in the -- in
5 the report of -- of the -- the panel. And -- and the -
6 - so the -- the question I want to ask now is really on
7 -- for water and aquatic effects, if you -- if you look
8 at the -- the follow-up measure that was recommended
9 there, the panel seemed to anticipate that that would
10 primarily be dealt with through the Aquatic Effects
11 Monitoring Program, which is normally part of a water
12 licence.

13 And -- and so my question for ENR is
14 whether that would be your view of it as well, that,
15 you know, the matters that are set out to be dealt
16 with, or addressed in -- in the follow-up program to
17 deal with water and aquatic effects are essentially
18 contained within the Aquatic Effects Monitoring
19 Program?

20 Do you see a role beyond that for your
21 department and -- and ultimately your minister as the
22 approving authority? Or is ENR satisfied that if the
23 AEMP that's developed in the normal way through --
24 through the water licensing process, if the AEMP is
25 satisfactory, that that will deal with that particular

1 follow-up program that was recommended by the panel?

2 THE CHAIRPERSON: And thanks for that,
3 John. Back to ENR.

4

5 (BRIEF PAUSE)

6

7 MR. ROBERT JENKINS: Thank you, Mr.
8 Chair. It's Robert Jenkins, with ENR. Yes, I mean, I
9 think, you know, as it -- as it reads, it talks about
10 the Aquatic Effects Monitoring Program. It talks about
11 water and aquatic effects being incorporated into that.
12 It also talks about fish and -- and having that as an
13 aspect of the Aquatic Effects Monitoring Program.
14 That's part of the follow-up program in that -- in that
15 piece that was issues by MVEIRB.

16 As well, I think it would help to
17 satisfy some of the -- some of the roles and
18 responsibilities as stated in here about follow-up
19 programs should be developed by the Proponent in
20 collaboration with regulatory, community, stakeholder
21 input, consideration of traditional knowledge. These
22 are all things that -- that do get embedded into the --
23 the AEMP.

24 So I would say that, yes, I think that
25 that would -- that would satisfy that.

1 MR. JOHN DONIHEE: Thank you, Mr.
2 Chairman. John Donihee. Okay. I thank you for that.
3 I -- I want to move on then, because the -- the panel
4 also recommended a follow-up program with respect to
5 two (2) matters related to wildlife, which are also
6 your department's jurisdiction: one (1) dealing with
7 barren-ground caribou and habitat, and the other one
8 dealing with wildlife -- other wildlife and species at
9 risk, which again are matters under your minister's
10 purview.

11 So the -- the question here really is
12 just wanting to try and provide a -- some evidence on
13 the record that makes is clear where, you know, a -- a
14 Land and Water Board's authorities begin and end in --
15 in respect to some of these wildlife matters and where,
16 you know, your government, your department's
17 responsibilities rest in -- in relation to,
18 particularly, you know, things like species at risk and
19 -- and wildlife populations, as opposed to habitat.

20 So -- so the -- the question really is -
21 - is simply: Would -- would you agree that, you know,
22 from the standpoint of this Board's jurisdiction, that
23 really on the water side there's very little that the
24 Land and Water Board can do about wildlife and wildlife
25 habitat, and that on the land use permitting side, that

1 the Land and Water Board's responsibilities are limited
2 to conditions in a land use permit that can address
3 wildlife habitat?

4 THE CHAIRPERSON: Thanks, John. Over
5 to ENR.

6

7 (BRIEF PAUSE)

8

9 MR. ROBERT JENKINS: Thank you, Mr.
10 Chair. It's Robert Jenkins, with ENR. I think I'd
11 like to go back on this one and -- and have the
12 discussion with -- with some of my colleagues. What I
13 would suggest is that if the question, if I -- if I
14 could, I guess, rephrase it slightly, and -- and I'm
15 sure you'll correct me if -- if I take it too much out
16 of -- out of scope.

17 But it seems to me that the crux of the
18 matter is -- is how -- or what areas of jurisdiction
19 would the -- does the Board have in regards to this
20 follow-up program respecting barren land, you know,
21 caribou, caribou habitat, wildlife habitat? So sort of
22 what areas, you know, does the GNWT feel falls under
23 the jurisdiction of the Board in -- in regards to
24 implementing those versus the areas that would have to
25 be implemented by another body?

1 MR. JOHN DONIHEE: Thank you, Mr.
2 Chairman. That -- that might be -- I -- I'm going to
3 agree that it's probably better, and we can move --
4 move along more quickly this morning, if perhaps the --
5 the GNWT-ENR would respond to these matters in its
6 final argument rather than us -- I realize there --
7 there's some legal content or background to these
8 questions, and I apologize if I caught you by surprise.

9 But -- but it's quite important from the
10 Board's standpoint, because I think the -- the record
11 has been used as a repository in some ways for a number
12 of submissions that -- you know, we -- we don't vet
13 things before they're filed. They tend to come in, and
14 -- and they end up on the record.

15 And then afterwards when the Board
16 deliberates to make a decision, we're often called to
17 advise the Board, and -- and deal with issues of:
18 Well, is that within our jurisdiction or not. It's
19 actually on the record. You know, should we be dealing
20 with it. How do we deal with it?

21 So we'd like some help from -- we'd like
22 ENR's views on -- on some of these things. And to be
23 clear then, what I'm asking about at least in -- in the
24 question I just asked and I have one (1) more for you
25 before we're through, but -- but the question I just

1 asked was, you know: Please give the Board ENR's views
2 with respect to the scope of the Board's authority over
3 wildlife habitat and -- and wildlife in -- in relation
4 to some of the materials that are on the record and in
5 -- in specific relation to those follow-up measures
6 because, as a regulator, the Board has it -- its own
7 obligations to -- to address follow-up measures. So
8 that's the first part of what I'm asking you, if -- if
9 you will do an argument.

10 And I'll -- I'll go to the second point,
11 as well, I guess, and it has to do with some of the air
12 quality issues that have -- have come up, and I -- I
13 know you're very familiar with the definition of
14 'waste', given your current and former in --
15 involvement in these kinds of matters.

16 And the -- the issue that -- that arises
17 has been arising on a rather regular basis before the
18 Board has to do with the assumption that, you know,
19 anything, essentially, that has to do with an
20 incinerator can be dealt with in a water licence, and I
21 think there are some limits on the Board's authorities
22 in that respect as well. The Board regulates the
23 deposit of waste into water, as -- as you know very
24 well, and you can look at the definitions.

25 But I would -- I would like to hear from

1 ENR, if you're willing to make those submissions, on
2 your views about the scope of that authority and -- and
3 why, in particular, you know, that ENR and the GNWT is
4 not looking at its own legislation, the Environmental
5 Protection Act, as a -- as a source of authority to
6 deal with some of these matters, rather than, you know,
7 this fuzzy sort of approach that -- that's emerged as
8 to just, you know, whether everything that comes out of
9 the stack is waste.

10 So anyway, I -- I hope you understand
11 the -- the questions, if you're clear with them, and if
12 you would just confirm for the Board that ENR is
13 comfortable responding to them in final argument, then
14 those would be my questions, Mr. Chairman.

15 THE CHAIRPERSON: Thanks, John.

16 Further from ENR?

17

18 (BRIEF PAUSE)

19

20 MR. ROBERT JENKINS: Thank you, Mr.
21 Chair. It's Robert Jenkins, with ENR. We will
22 endeavour to -- to address those -- those items, the --
23 what you discussed about wildlife habitat and -- and
24 air in -- in context of -- of jurisdiction, in context
25 of the follow-up program that came out in the report of

1 EA, so we will endeavour to provide input and -- and
2 something for the Board in our closing statements.

3 THE CHAIRPERSON: Great. Thanks.
4 Further...?

5 MR. ZABEY NEVITT: Zabey Nevitt, with
6 the Board. I just have a question in relation to the
7 government's responsibilities in the determinations of
8 adequacy of consultation prior to the enactment of
9 devolution. The minister of AANDC would, of course,
10 make that determination as part of their approval of a
11 water licence.

12 Can we assume that as the minister of
13 ENR is now the approving authority for the water
14 licences, that that same kind of determination of
15 adequacy of Crown consultation will -- will be carried
16 out by the minister of ENR?

17 MR. ROBERT JENKINS: Thank you, Mr.
18 Chair. It's Robert Jenkins, with ENR. Yeah, the --
19 the onus is on the -- the minister of ENR now, as the
20 approving body of this water licence, to ensure that
21 the Crown consultation obligations have been met.

22 Obviously, a big part of this assessment
23 relies upon the Board process, the opportunity for
24 parties to participate in that process, the concerns
25 raised, and obviously, how those concerns were

1 addressed in -- in the water licence which is
2 presented.

3 So I guess in short, yes, but the -- as
4 you're aware, the Board plays a very big part in that.

5 THE CHAIRPERSON: Thank you for that.
6 Further for Board staff, technical? I'll thank you,
7 ENR, for taking all their questions into consideration,
8 coming back at some point. It's -- I think they're
9 very important questions for the Board here to make to
10 further decisions.

11 I think I mentioned yesterday that we
12 have an unofficial agreement that the -- most Board
13 members won't ask questions. We've got them through
14 the legal or through the staff. We would rather inhale
15 than exhale in the same meeting, and -- but they're
16 independent, so they do have the right. So I'll pass
17 it over to Joseph MacKenzie.

18 MR. JOE MACKENZIE: Joseph MacKenzie,
19 Board member. I have no question.

20 MR. FLOYD ADLEM: Floyd Adlem, I have
21 no questions.

22 MR. FRANK MCKAY: Frank McKay. I have
23 no questions, Mr. Chair.

24 THE CHAIRPERSON: Great. Thank you to
25 all -- all the members, and so our next round here will

1 be an Intervenor presentation by Environment Canada.

2

3 (BRIEF PAUSE)

4

5 THE CHAIRPERSON: If anybody wants to
6 grab a fast coffee or tea before we proceed, you are
7 more than welcome.

8

9 --- Upon recessing at 9:31 a.m.

10 --- Upon resuming at 9:33 a.m.

11

12 THE CHAIRPERSON: If everybody could
13 take their seats again, please. And we'll welcome
14 Environment Canada to do their presentation.

15

16 PRESENTATION BY ENVIRONMENT CANADA:

17 MS. SARAH-LACEY MCMILLAN: Good
18 morning, Mr. Chair, members of the board. My name is
19 Sarah-Lacey McMillan, and with me I have Ann Wilson and
20 Dave Fox. you for the opportunity to present
21 Environment Canada's intervention on this water license
22 application. The department would like to acknowledge
23 the professional manner in which De Beers and the
24 consultants have displayed throughout the water licence
25 application process, and the cooperative approach taken

1 to work through the outstanding issues.

2 Environment Canada is of the opinion
3 that the conclusion drawn by De Beers in general are
4 supported by the analysis, and EC acknowledges and
5 appreciates the efforts and -- and will continue to
6 invest in monitoring.

7 The specifics of EC's outstanding issues
8 are outlined in this presentation, and deal with the
9 fresh water environment and the waste management, and
10 we'll be presenting on behalf of the Department for the
11 freshwater, and then Dave will continue on with some
12 waste management.

13 MS. ANNE WILSON: Thanks, Sarah-Lacey.
14 Good morning. My name is Anne Wilson, and I work on
15 water quality issues with Environment Canada. Today
16 I'll be presenting a number of concerns -- do you want
17 to flip the next slide -- relating to the freshwater
18 environment, and how contaminants are regulated, how
19 monitoring results are used, and some recommendations
20 on contingency and closure planning. I won't read the
21 whole list that's up there.

22 I'd like to start with Effluent Quality
23 Criteria. De Beers has provided a thorough review of
24 parameters based on pre-development information and
25 their modelling predictions. However, as experience

1 has shown us, we've got lots of hindsight on all the
2 other mining files we've looked at, modelling has
3 inherent uncertainties, and until we can have real
4 world data and calibrate the models and then update and
5 validate the predictions, there's always a degree of
6 uncertainty.

7 To address this, De Beers has proposed
8 that a form of adaptive management would be to start
9 with a proposed list of parameters as EQCs, then review
10 operational data, and add any that might subsequently
11 prove to be warranted. I take the opposite -- or the -
12 - the converse view that it would be reasonable to
13 regulate the typical parameters included for northern
14 mining operations and -- and based on what's in this
15 geology, and then adjust that at future renewals if
16 concentrations are sufficiently low or predictions are
17 validated.

18 Next slide. EC had also presented a
19 recommendation that total petroleum hydrocarbons be
20 included in the list of regulated criteria, and De
21 Beers has agreed to this at a level of 5 milligrams per
22 litre, which is pretty typical.

23 We would also like to see a broader list
24 of discharge criteria, and that this be applied to all
25 releases of effluent to the aquatic environment.

1 Additional parameters which may be considered for
2 inclusion with regulated limits could include sulphate,
3 chloride, cadmium, chromium, arsenic, copper, lead,
4 molybdenum, nickel, and zinc.

5 Inputs to the water management pond,
6 which will then be discharged to the receiving
7 environment, will come from groundwater via the mine
8 from surface runoff over the metals-rich lake bed
9 sediments and from seepage through the PKC filter dike,
10 and from waste rock storage areas, and coarse
11 kimberlite pile.

12 These could be sources -- and I know De
13 Beers has modelled what they expect to see coming from
14 these -- of the parameters that I've listed up there.
15 And I feel that these should be not only monitored, but
16 regulated at reasonable limits if they -- especially if
17 they're not going to be a problem for De Beers to
18 achieve as predicted, then there should be no jeopardy
19 in including those as regulated criteria.

20 Of course, one (1) of our fall-backs is
21 that the draft licence does include the requirement
22 that any discharges be non-acutely toxic. And -- and
23 that is always a nice integrator of the whole effluent
24 quality.

25 So next slide. So carrying on with

1 toxicity testing. Sublethal toxicity testing is a nice
2 tool which can provide an indication of effects what
3 you're -- of what you expect to see in the receiving
4 environment. It's one that the Environmental Effects
5 Monitoring -- Metal Mining Effluent regulations
6 requires. It's used to characterize effluent. And you
7 can see what's likely to happen to the biota in your
8 receiving environment.

9 De Beers is proposing to use it and it
10 will contribute to the weight of evidence approach in
11 evaluating effects. We've pointed out that testing
12 should be conducted on effluent at end-of-pipe, not in
13 the receiving environment. And De Beers has agreed to
14 this.

15 And I note that there will have to be a
16 few corrections in the AEMP, which I saw for the first
17 time yesterday for the updated draft, which still
18 referred to the mixing zone collection of samples. But
19 if that can be updated to the end-of-pipe, that would
20 be more accurate.

21 Next slide, please. So EC's
22 recommendations that are sublethal toxicity testing
23 should be conducted on samples collected from end-of-
24 pipe. And we would recommend that if results from
25 these tests indicate concern, then a tiered approach

1 could be used in which samples from within and at the
2 edge of the mixing zone also be evaluated.

3 Sub-lethal toxicity testing isn't quite
4 as clear cut as acute toxicity testing. That's got a
5 very clear fail rate. If you have 50 percent or --
6 more than 50 percent of your fish or your daphnids die,
7 then you've failed your test. Sub-lethal toxicity
8 testing is based on having an effect on a certain level
9 of the pop -- a certain amount of the population given
10 a concentration of effluent; so, for example, growth or
11 reproduction. And if you affect 25 percent of your
12 test organisms at a given lev -- concentration of
13 effluent, then you've either passed or failed.

14 And we don't have a good yardstick for
15 this. So I would like to see some discussions with the
16 Proponent of what concentration of effluent would be a
17 trigger for action in their Response Plan. Currently,
18 they are saying if there's anything below 100 percent
19 effluent showing chronic toxicity, then they would take
20 further action. That might give rise to too many, what
21 I -- I might call false positives. I -- because
22 biological organisms do have some variability. I just
23 wanted to note that.

24 Next slide, please. I'm going to switch
25 now to the -- further on the pre-defined action levels

1 and triggers. The Gahcho Kue panel statement was that:

2 "For adaptive management to be
3 effective, it needs pre-defined
4 action levels or thresholds and
5 proposed mitigation designs,
6 policies, and practices linked to
7 these action levels as a clear and
8 testable starting point for adaptive
9 management."

10 So as we had flagged yesterday, it's
11 important to have numeric thresholds and be very clear
12 on what constitutes a trigger or a benchmark for action
13 and take that into the Response Plan ahead of having to
14 do so. We do support the Proponent's use of industry
15 best management practices. And this will complement
16 the implementation of their Adaptive Management Plan.

17 So as noted, we recommend the
18 establishment of pre-defined action levels or triggers
19 and pre-defined alternative monitoring, mitigation, or
20 management actions. We noted yesterday that this could
21 fit as subsections of plans as appropriate. This could
22 feed into the Aquatic Effects Monitoring Plan; the
23 Groundwater Monitoring Plan, notably on the inflow
24 levels; on the seepage monitoring and management, on
25 the seepage quality, Sediment and Erosion Management

1 Plans, Dike Construction and Management Plans, and on
2 the water quality and Kennady Lake rec -- reconnection.
3 Closure. So EC concurs with the Gahcho
4 Kue panel that the information provided in the
5 Monitoring and Adaptive Management Plans should
6 demonstrate how the monitoring results are going to
7 inform management actions such as changes in their
8 mitigation designs, policies, and practices, in
9 particular, when such changes will be required and how
10 they'll be implemented in a timely manner. And we
11 recommend that these details be further established
12 during the licensing process here.

13 My next slide deals with the phosphorus
14 action levels and preliminary management responses. De
15 Beers proposes regulation of phosphorus through end-of-
16 pipe concentrations only, rather than the use of a
17 loading limit. Our concern, of course, is with the
18 potential for phosphorus to accumulate in the lake
19 sediments as the increases in production of the algal
20 populations end up dying off, going to the lake
21 sediment bottoms, where they decompose and use up the
22 oxygen that is limited in winter because of the ice
23 cover.

24 The next one. So we recommend tracking
25 of various eutrophication indicators. This should

1 include monitoring of winter oxygen levels in the
2 receiving environment lakes as well as the pro --
3 proposed primary productivity end point, such as the
4 phytoplankton that they are going to be monitoring
5 during the summer season.

6 De Beers has agreed to this, and I just
7 wanted to note that the timing will be important on
8 this. If the lake is going to have a depression in the
9 dissolved oxygen, typically you'd want to start looking
10 in January, February as opposed to the proposed April
11 monitoring which is scheduled.

12 So at least in the deepest basin of the
13 receiving environment lake, if there's concern with
14 oxygen, we would want to monitor monthly during the
15 winter. These monitoring results can then be used to
16 trigger mitigative action as appropriate.

17 EC had also flagged some concerns in
18 relation to mercury levels. When you have an
19 impoundment of a water body where the water levels are
20 raised, you often get methylation of the mercury, which
21 can then be available to the biota.

22 It's typical that you wouldn't see it in
23 the water so much, but you would see it accumulating in
24 the sediments where the benthic invertebrates would
25 take it up, and then the fish would eat those, and --

1 and start to accumulate it.

2 So our thought is that if you were
3 monitoring, which is proposed to be done anyways, and
4 see increases in the sediments, then we'd want to see
5 corrective action if possible taken before it actually
6 gets to be higher in the fish.

7 And I will acknowledge that mercury is
8 very problematic. It's difficult to address this in
9 the environment, and I think a lot of what can be done
10 will be limited to making sure that the fish aren't
11 used if it gets to that, or if there are alternatives
12 to reduce the amount of impoundment that has to be
13 done, so.

14 The next slide. Just summarize that
15 recommendation, EC recommends that in addition to fish
16 tissue levels, data for water and sediment mercury
17 should be reviewed on an ongoing basis, and mercury
18 levels tracked for increasing trends. The sediment
19 samples should be collected in areas that you would
20 expect to see the most sediment falling out, where the
21 sediment will be focussed, so probably the deepest
22 basins, depending on the areas of currents.

23 And prior to observing any upward trends
24 in mercury in sediment or fish, EC recommends that the
25 Proponent identify specific feasible management

1 response actions which could be taken, and as noted,
2 any limitations to what can practically be done.

3 Now, we had put a red flag up in
4 relation to the significance thresholds. Based on the
5 panel report, the -- the no-go areas are things like,
6 you know, the -- the water is not drinkable. Fish in
7 the lake can't survive, grow, or reproduce.

8 I got a little bit of comfort -- well, a
9 lot of comfort, actually, when I saw the revised draft
10 AEMP yesterday, which does note that these are no-go
11 scenarios, and my concern had been with the terminology
12 that these were significance thresholds. So really, we
13 see significance at lower levels that triggers action
14 so that you don't ever get up to these no-go scenarios,
15 to use the words in the AEMP.

16 We had recommended that the Proponent's
17 interpretation of a significance threshold be revisited
18 to ensure that that level represents an initial
19 boundary, which it does. It represents a low action
20 thre -- threshold as I understand it now, not a more
21 adversely affected state. So the AEMP addressed that
22 in Section 8.3.

23 We'd also noted that with respect to
24 spill contingency planning, there seemed to be a gap on
25 the runoff from the airstrip to the Area 8 sub-

1 watershed. We were concerned about possible spills
2 having deleterious effects on the fish in Area 8 sub-
3 watershed due to the airstrip. It just hadn't been
4 referenced in any of the plans. De Beers has responded
5 that this would fall under the overall Spill
6 Contingency Plan, and they will make sure it's included
7 in the planning.

8 So that -- our recommendation would be
9 met that we recommend Part H of the water licence
10 conditions applying to contingency planning require
11 contingency planning for any potential spills of
12 deleterious substances within the Area 8 watershed,
13 including from the airstrip.

14 Still on contingency measures. It had
15 been proposed that discharge of untreated sewage to an
16 adjacent wetland would be a contingency in case that
17 the sewage plant or upset conditions. While wetlands
18 do have a good assimilative capacity to treat
19 wastewater, that can be affected by how much discharge
20 is received, the retention time, the time of year and
21 precipitation, and so on. So we raised a concern that
22 there would be the potential for deleterious wastewater
23 reaching fish-bearing waters.

24 De Beers agreed and will update their
25 Spill Contingency Plan so that there will be other

1 options for retention or alternative management of camp
2 wastewater in the event of treatment plant issues.

3 Now looking towards closure. At
4 closure, it'll be very critical to maintaining good
5 quality water in the refilled Kennady Lake for the
6 saline water to be isolated at the bottom of Tuzo pit
7 under a chemocline. So the denser water would stay on
8 the bottom half of the pit or -- or whatever proportion
9 it is, and the freshwater would just sit on top of
10 that. There's precedent for that in some other mines.

11 And in this case, there are just two (2)
12 main areas of uncertainty: whether we're going to see
13 vertical diffusion, so some of the -- the constituents
14 of the bottom layer diffusing upward; and what kind of
15 groundwater inflows might drive the chemocline higher
16 or even result in -- in weakening it.

17 So following the refilling of the Tuzo
18 pit, model calibration can be done to existing
19 conditions -- again, that real-world data that I love -
20 - to evaluate the stability of the meromixic, or this
21 chemocline layer, to improve the confidence in that.
22 And I think we're going to need to have that, you know,
23 for closure planning.

24 So we're concerned with the maintaining
25 or enhancing chemocline stability in a meromixic state

1 in the Tuzo pit in particular. To that end, EC
2 recommends that the water licence Part J conditions
3 applying to closure and reclamation should include the
4 requirement that the Proponent provide a periodic
5 update on the progress of any related monitoring or
6 research on mechanisms that might affect the meromixis
7 and be relevant to closure predictions for water
8 quality.

9 Okay, now I'm going to put our mining
10 officer's hat on and -- and give you the geochemical
11 slides. We had a little bit of discussion on that
12 yesterday. The concern was identified that identifying
13 which rock is likely to be potentially acid generating
14 is going to be done only on the sulphur content. And
15 that is pretty standard. You see that with all the
16 mines. And we discussed yesterday about the rates that
17 that would be done at.

18 It's -- sulphur content is used in
19 conjunction with other tests to determine whether a
20 rock sample is likely to be potentially acid generating
21 or not, because even with low amounts of sulphur
22 content rocks may generate acid if there's low
23 neutralizing capacity in the rocks. And I understand
24 that that is the -- the case with a lot of the rocks in
25 the area. Therefore, including other methods would

1 ensure proper characterization of the rocks and help
2 determine placement of the rocks either appropriately
3 in the PAG or in the non-PAG pile during mine
4 operation.

5 EC recommends the Proponent include
6 other methods of characterization for the
7 classification of mine rocks in the proposed Mine Rock
8 Monitoring and Testing Plan. And yesterday, De Beers
9 did agree to periodically use other assays to this end.

10 Now I'm going to pass the mic over to
11 Dave Fox to talk about the incineration issues.

12 MR. DAVE FOX: Good morning, Mr. Chair.
13 As Anne said, I'm here to speak to the next couple of
14 slides on incineration of waste.

15 Inciner -- incineration of -- of waste
16 can be an environmentally sound method of disposing of
17 camp waste. However, there's a potential for the
18 formation and release of contaminants to the
19 environment if appropriate incineration technologies
20 and operating practices are not used. Of particular
21 concern are dioxins and furans, which can be formed as
22 a byproduct of incomplete combustion during the
23 incineration of waste. Dioxin -- dioxins and furans
24 are persistent in the environment. They're able to
25 bioaccumulate through the food chain, and are toxic to

1 fish and wildlife.

2 In the EC written intervention, we've
3 cited two (2) scientific studies that link incineration
4 of waste to adverse environmental impacts. The first
5 was an environmental fate modelling study, which found
6 that -- that proper waste incineration is unlikely to
7 have an adverse impacts to -- to environment. However,
8 poor incineration could lead to adverse impact to soil,
9 water, lake sediments, fish, and wildlife.

10 The second study was a sediment sampling
11 study conducted at Ekati diamond mine. This study
12 linked camp incineration waste to elevated levels of
13 dioxins and furans in the lake and lake sediments. Due
14 to the pot -- potential impacts to lake and lake
15 sediments, waste incineration should be managed through
16 water conditions of the water licence.

17 So, Mr. Chair, I want to be clear.
18 We're not asking the Board to -- to deal with an air
19 quality issue. We're -- we're asking the Board to deal
20 with a source of waste which has been shown to -- to
21 cause adverse impacts to lakes and lake sediments. So
22 we do not view this as an air quality issue. This --
23 this is a water issue, and which can be -- which we've
24 also shown can be controlled by proper equipment and
25 proper operating practices.

1

2

(BRIEF PAUSE)

3

4

MR. DAVE FOX: Sewage and sewage sludge have high moisture content and low heat content, which makes it difficult to burn and can lead to poor incineration performances. So it could -- could actually cause an increase of -- of contaminants to be formed and released. Sewage should only be burned in incineration equipment designed for this type of waste. Sewage should not be burned in the batch waste incinerators that are typically used in the North.

13

EC recommends that the Proponent include its commitment to not incinerate sewage or sewage sludge in its revised Incineration Management Plan. The Proponent has restated its commitment not to burn sewage and has agreed to revise its Incineration Plan - or Management Plan to reflect this.

19

However, if for whatever reason the Proponent reconsiders and decides to burn sewage, EC recommends that the Proponent provide the Board a letter from the manufacturer stating that the incinerator is designed to incinerate sewage. The letter should include previous stack testing results demonstrating that the incinerator can achieve the

1 Canada-wide standards for dioxins and furans while
2 incinerating sewage.

3 EC recommends the Proponent complete
4 stack testing of incinerator emissions for all
5 incinerators to ensure that they achieve the Canada-
6 wide standards for dioxins and furans and the Canada-
7 wide standards for -- for mercury.

8 Now, the -- the Canada-wide standards
9 for dioxins and furans, from our modelling study, had -
10 - was shown to be protective of the environment. So if
11 they achieve these -- these levels, we don't think
12 there will be an issue with -- with an accumulation of
13 dioxins and furans in the -- in the lake sediments. So
14 this is the link between the emission testing and the -
15 - and the -- the sediment impacts. So if they can
16 achieve these -- these standards, we're -- we're quite
17 confident there -- there shouldn't be an issue.

18 Then just further on -- on the
19 information that we need from these stack tests. It --
20 it's important that the stack tests are completed with
21 typical waste streams that are proposed by the
22 Proponent. The -- the emissions from the incinerator
23 varies dramatically depending on what's being burned in
24 it. So we want these tests conducted with typical
25 waste streams that we'd see at the mine. And the test

1 report that's submitted afterwards should include the
2 types of waste, the quantities and the -- and the types
3 of waste that are burned, in addition to the -- the
4 operating conditions for the -- the incinerator during
5 the test.

6 Now, incinerator testing has become more
7 common in the North. However, few -- few stack testing
8 reports have provided information on waste streams that
9 are used in the test. This information is -- is really
10 important to understand the results themselves. And so
11 we'd really like to see that included with the -- the
12 stack testing reports.

13 Now, I'll pass it back over the Sarah-
14 Lacey. Thank you.

15 MS. SARAH-LACEY MCMILLAN: So just in
16 conclusion, Environment Canada would like to thank the
17 Board for the opportunity to comment on the regulatory
18 process and that we hope that these technical comments
19 and recommendations are useful to the Board in their
20 decision-making process.

21

22 (BRIEF PAUSE)

23

24 QUESTION PERIOD:

25 THE CHAIRPERSON: Great. Thank you for

1 that presentation. So in order then of events, we will
2 go to De Beers for any questions.

3 MS. VERONICA CHISHOLM: Thank you, Mr.
4 Chair. Veronica Chisholm, from De Beers. We have no
5 questions. Thank you.

6

7 (BRIEF PAUSE)

8

9 THE CHAIRPERSON: Okay. Then I thank
10 you for that. Then we'll go to GNWT-ENR.

11 MR. SEAN WHITAKER: Sean Whitaker, with
12 the Government of the Northwest Territories,
13 Environment and Natural Resources Division. We thank
14 Environment Canada for that great presentation, and we
15 have no questions at this time.

16 THE CHAIRPERSON: Okay. Thank you.
17 Then we will go to the Deninu K'ue First Nation.

18

19 (BRIEF PAUSE)

20

21 MR. MARC D'ENTREMONT: Thank you, Mr.
22 Chair. It's Marc d'Entremont, from the DKFN. I just
23 have one (1) question and it's more for clarity, with
24 regards to slide number 9, about action levels and
25 triggers and management responses, where you mention

1 having pre-defined action levels and pre-defined
2 monitoring mitigation and management actions.

3 In some of the information we've seen,
4 there has been different levels in terms of negligible,
5 low, moderate, and high. So would -- again, for
6 clarity, would you like to see these pre-defined
7 measures at all these levels?

8 THE CHAIRPERSON: Thank you for that.
9 Back to Environment Canada.

10 MS. ANNE WILSON: Thank you. It's Anne
11 Wilson, with Environment Canada. It appears that
12 there's a good start on the negligible and the low and
13 that it's reasonable that we're going to see a tiered
14 approach that may vary from plan to plan, because we do
15 want to see thresholds for different components of the
16 project and different components of the environment.

17 So I think that there will be further
18 discussions of what those numbers should look like,
19 what the actual benchmarks or triggers should be, and
20 then how that will feed and flow from the low levels to
21 the medium and high, so. I think there is a little bit
22 more work to do, but I'm happy with the start on the
23 low ones so far.

24 THE CHAIRPERSON: Thank you for that.
25 Further from DKFN?

1 MR. MARC D'ENTREMONT: Marc
2 d'Entremont, DKFN. No, thank you for the response.
3 That's my -- that's the end of my -- that's all my
4 questions, thanks.

5 THE CHAIRPERSON: Okay. Thank you.
6 Then we will go to Yellowknives Dene First Nation.

7 MR. TODD SLACK: Todd Slack, for the
8 Yellowknives. No questions.

9 THE CHAIRPERSON: Thanks, Todd. North
10 Slave Metis Alliance...?

11 MR. MATT HOOVER: Matt Hoover, North
12 Slave Metis Alliance. No questions. Thank you.

13 THE CHAIRPERSON: Thank you for that.
14 Any registered speakers...?

15

16 (BRIEF PAUSE)

17

18 THE CHAIRPERSON: I don't believe
19 there's any persons on the conference call-in line.
20 Any questions from the general public?

21

22 (BRIEF PAUSE)

23

24 THE CHAIRPERSON: Then we'll turn it
25 over to Board staff, technical advisors, and legal.

1 MS. REBECCA CHOUINARD: Thank you, Mr.
2 Chair. It's Rebecca Chouinard, with Board Staff. Just
3 my one (1) question on term.

4 If you have any position on what you
5 think an appropriate water licence term would be, and
6 if so, the rationale.

7

8 (BRIEF PAUSE)

9

10 MS. ANNE WILSON: Okay. Thank you.
11 It's Anne Wilson with Environment Canada. The Pro --
12 Proponent has asked for a twenty (20) year term, so I
13 went through the activities. You've got two (2) years
14 of construction, followed by eleven (11) years of
15 operations, followed by twelve (12) years of -- of
16 closure monitoring.

17 If we looked at something in the
18 neighbourhood of a ten (10) year term, we would see a
19 good track record going into construction and
20 operation, while still having approximately a three (3)
21 year mine life to start the actions, finalize the
22 closure and reclamation planning, and then move into
23 review of everything for a second licence that would
24 then see them into the closure, so.

25 Ten (10) years is a bit longer than most

1 licences that have been issued, so that would be the
2 top end of what we would be comfortable seeing without
3 it being reopened and revisited.

4 MS. REBECCA CHOUINARD: Thank you,
5 Environment Canada. And, Mr. Chair, it's Rebecca
6 Chouinard, here, with the Board. I have no further
7 questions.

8 THE CHAIRPERSON: Okay. Thank you,
9 Rebecca. Further from technical?

10 DR. NEIL HUTCHINSON: Thank you, Mr.
11 Chair. Neil Hutchinson, for the Board. Environment
12 Canada, yesterday we heard discussions between ENR and
13 De Beers on the appropriate species to -- of fish to be
14 selected for toxicity testing, whether rainbow trout
15 should be used, fathead minnow test, or -- or both.

16 Did Environment Canada have any guidance
17 on that question?

18 MS. ANNE WILSON: Thank you. Anne
19 Wilson here. The point was made that we really want to
20 have the information from the sublethal toxicity
21 testing. If the species isn't perfect, then the key is
22 going to be that the test is achievable.

23 Snap Lake has had problems doing the
24 full early life stage test on the rainbow trout. The
25 fathead minnow test would be representative of the lake

1 chub in the lake, which aren't exactly a -- a valued
2 game species, but the rainbow trout might be seen to be
3 more representative of the lake trout that are also in
4 the lake.

5 We could have further discussions on
6 doing a shorter duration of the rainbow trout test in
7 order to make it doable. I believe that Snap Lake has
8 run into most -- most of their problems when they're
9 trying to do the third stage of it into a longer test
10 duration. The fathead minnow test is only seven (7)
11 days. It's routinely done and very easy to run.

12 So if it sounds like I'm sitting on the
13 fence, there are arguments for using either test, and I
14 don't know that it's necessary to do both tests, but
15 each one (1) would provide us information on chronic
16 effects on fish.

17 DR. NEIL HUTCHINSON: Neil Hutchinson,
18 for the Board. Thank you.

19 Any -- any guidance on other sublethal
20 test organisms that might be considered, or do you
21 think we should just stick to fish?

22 MS. ANNE WILSON: Anne Wilson here.
23 The Proponent is proposing in their draft AEMP to
24 include monitoring on the algal species and on the
25 Cladoceran Ceriodaphnia dubia. Those two (2) would be

1 pretty standard test species.

2 The Ceriodaphni (sic) are very sensitive
3 to the salinity, and so would provide good information
4 on that, and I don't know that it would be necessary to
5 actually move to a Hyalella test or to a -- a duckweed
6 test at that point, but those could be kept as a tiered
7 approach in the arsenal to further round out if there
8 were toxicity concerns seen.

9 THE CHAIRPERSON: Further from Board
10 staff?

11 DR. NEIL HUTCHINSON: Nothing else from
12 me, Mr. Chair.

13 DR. KATHY RACHER: Kathy Racher from
14 the Board. Thanks for your presentation. My one (1)
15 question is about your recommendation for if the test
16 results at the end-of-pipe for chronic toxicity tests
17 indicated some concerns that you may want to move --
18 have sort of a tiered approach going into testing in
19 the -- in the receiving environment and the mixing
20 zone, for example.

21 And I just -- I was trying to figure out
22 in terms of drafting the licence, were you thinking
23 that that tiered approach would be in the SNP? Like
24 the chronic toxicity tests at the end-of-pipe would
25 typically be stipulated in the Surveillance Network

1 Program, and we have, in -- in other licences, done
2 sort of a tiered approach. If -- if you fail this,
3 then -- then you do another test.

4 And I was wondering if -- if that's what
5 you envisioned, or if you envisioned mixing zone --
6 moving to mixing zone tests for chronic toxicity with
7 something you saw in the AEMP instead.

8 MS. ANNE WILSON: Thank you. Anne
9 Wilson here. I think it would fit nicely in the
10 proposed action levels in the AEMP response framework.
11 And the trick would be setting the number that
12 triggered that -- moving to that testing.

13 THE CHAIRPERSON: Further from the
14 Board from legal? Okay. Then thank you. John, did
15 you have something?

16 MR. JOHN DONIHEE: It's John Donihee,
17 Board counsel. Those -- those are all the questions
18 from counsel and staff. I -- I don't have any
19 questions. Thank you.

20 THE CHAIRPERSON: Okay. Thank you all
21 for that then. We'll go to the Board members. Joe
22 Mackenzie...?

23 MR. JOE MACKENZIE: Joe Mackenzie. I
24 don't have a question.

25 MR. FLOYD ADLEM: Floyd Adlem. I have

1 no questions.

2 MR. FRANK MCKAY: Frank McKay. No
3 questions, Mr. Chair.

4 THE CHAIRPERSON: Great. So thank you,
5 Environment Canada, for your presentations and your --
6 your answers. That's much appreciated. Did we want to
7 take a quick coffee break about now? So let's take a
8 fifteen (15) minute break then if you could. Thank
9 you.

10

11 --- Upon recessing at 10:07 a.m.

12 --- Upon resuming at 10:23 a.m.

13

14 THE CHAIRPERSON: Thank you for that
15 quick order. And just a quick information here is that
16 yesterday's transcripts from the hearing are up on our
17 -- on our public registry. So if anybody wants to
18 review them, they are there. So our next Intervenor
19 presentation is the Deninu K'ue First Nation. Welcome.
20 And it's all yours.

21

22 PRESENTATION BY DENINU K'UE FIRST NATION:

23 MR. MARC D'ENTREMONT: Thank you, Mr.
24 Chair. So as mentioned before, my name is Marc
25 d'Entremont. I'm a technical consultant to the Deninu

1 K'ue First Nation. And with me today is Mr. David
2 Pierrot, who is a councilman with DKFN. So again we'd
3 like to thank the Mackenzie Valley Land and Water Board
4 for hosting these hearings and De Beers for all the
5 information that's been shared to date.

6 I'll just start off by saying the DKFN
7 has been involved in this project for a number of years
8 now and -- and through the environmental review stage
9 process and in regard -- parts of several working
10 groups specific to wildlife and aquatics effects and --
11 and other things throughout the -- the time.

12 And I would just go on by saying DKFN
13 wants to be very clear, determined, and optimistic with
14 its involvement in this project that the DKFN rights,
15 duties, traditions, treaty, and way of life continue to
16 be paramount and accommodated in the deliberations,
17 final decision, directions, and recommendations of this
18 Board with regards to the -- De Beers's Gahcho Kue
19 diamond mine project's request to construct --
20 construct, operate, and reclaim a mine project within
21 the traditional territory of the DKFN.

22 And part of the DKFN's involvement in
23 this project has been the preparation of an
24 ethnohistory report describing DKFN's historic and
25 present day use of the land and waters within the

1 barren lands that embrace the Gahcho Kue site.

2 And one (1) of the outcomes of that
3 undertaking was the development of this sort of
4 traditional use map, which highlights some of the sort
5 of key areas of more so present day traditional use
6 with regards to sort of hunting, and trapping, and
7 fishing.

8 So our intervention today, it's -- it's
9 -- kind of builds on our written submission and covers
10 some general and specific comments with -- with regards
11 to the items that were identified in the draft water
12 licence.

13 So going forward, I'm going to touch
14 upon the general comments first, and then get into the
15 specific comments, and on -- on each slide -- I guess
16 the slides aren't numbered, but each slide, there's --
17 there's a reference to the response that De Beers has
18 provided in terms of the -- the numbering system, so
19 that'll show up in the sort of bottom left-hand corner.

20 So our general comments were with
21 regards to the updated Management and Monitoring Plans,
22 response framework, Ni Hadi Yati, and cumulative
23 effects. With regards to the updated Management and
24 Monitoring Plans, I guess I'll just start by saying the
25 draft water licence that we reviewed, these -- the

1 specific makeup of what is to go in these plans wasn't
2 included in any of the schedules. That had been left
3 out.

4 So one (1) of the main comments, then,
5 being timelines. So it seems typical with other water
6 licence issued by the Land and Water Board that a
7 ninety (90) day period is provided for the licensee to
8 resubmit these plans once the water licence is issued
9 by the Board, and it seems reasonable that that --
10 that's a sort of condition that carries forth in -- in
11 this permit. And then we also recommended that
12 construction activities not commence until these plans
13 -- these revised plans are submitted.

14 In its response, De Beers submits that a
15 sixty (60) day approval time should be sufficient for -
16 - for an informed decision, so they've kind of upped us
17 on the -- the ninety (90) period, which is great, and
18 they've also suggested that the Aquatic Effects
19 Monitoring Plan, the Sediment Erosion Plan, and the
20 Dike A Construction Plan, as they're currently written,
21 should be considered as final.

22 Just with regards to that response, I
23 just want to highlight some of the previous discussions
24 around the sort of Adaptive Management Plan and
25 strategy and -- and the response framework, and that

1 perhaps some of these plans need to be revisited based
2 on some of the outcomes from these hearings.

3 So with regards to the response
4 framework, and probably, you might see -- realize this
5 is one (1) of the topic that -- that's of kind of high
6 interest to myself based on some of the questions I've
7 been asking, so I've sort of prepared a bit of a longer
8 bit for this slide.

9 So in our intervention -- or in our
10 written interventions, we commented that the response
11 framework only appeared to be a component written
12 within the Aquatic Effect Monitoring Program, and De
13 Beers's response was that it -- it's addressed in not
14 just the AEMP, but other plans.

15 So I think one (1) of the outcomes to
16 that, as I mentioned, some of the previous discussions
17 during the hearings with regards to the response
18 framework kind of shows that there's still a little bit
19 of uncertainty and clarity around how this is made up,
20 and how it -- how it needs to be presented, and I would
21 sort of agree with what Environment Canada said earlier
22 about having -- how this response framework really
23 needs to be established during the permitting process.
24 And -- and again, sort of there needs to be some
25 clarity within the actual water licence and land use

1 permit around the -- the use of this response
2 framework.

3 I'll go on by saying -- kind of relating
4 this to what the GNWT said yesterday about potentially
5 having a -- an umbrella document for adaptive
6 management that has clear definitions for action levels
7 and management response framework, and again, also
8 building upon some of the earlier comments from
9 Environment Canada.

10 So as I said, it seems clear that some
11 additional work needs to be undertaken around the whole
12 adaptive management approach for this project,
13 particularly before the issuance of the permits, or the
14 permits need to be very clear on what the expectations
15 for adaptive management and/or the response framework
16 are.

17 So in the context of this project,
18 essentially adaptive management is carried out by
19 identifying what the potential effect is, applying the
20 mitigation to that effect, and monitoring the
21 effectiveness of that mitigation and then adapting the
22 mitigation where required to keep the effects to
23 acceptable levels.

24 And again, this is primarily applied
25 where there is certain levels of a -- levels of

1 uncertainty. And I think the response framework is a
2 simplified version of this, where the monitoring
3 results are linked to the management actions that are
4 to keep the effects to, again, to acceptable levels.

5 So now as I mentioned in our opening
6 statements, I think the experience that De Beers has
7 with mining and mining in Northern Canadian
8 Environments, plus with the current number of operating
9 diamond mines in the NWT, I think the level of
10 uncertainty around project-related effects and
11 effective mitigation should be low. Furthermore, the
12 amount of lessons learned from other projects can be
13 applied to those situations that may be unexpected.

14 And this knowledge should be applied to
15 identify appropriate levels of management actions --
16 again, referring back to the levels being negligible,
17 low, moderate, or high for some components -- and that
18 the proactive approach be taken that whether specific
19 triggers are identified and/or specific management
20 responses, recognizing that it's -- it's not going to
21 be the case for probably all plans, as kind of
22 mentioned in the previous presentation, but that
23 there's probably a lot more that can be done than --
24 than, I guess, what we've seen to date.

25 So again, this would be the preferred

1 approach, rather than identifying action levels and
2 appropriate responses through monitoring. And as I
3 said, it takes a more -- a bit more of a proactive
4 rather than a reactive resp -- approach to it. This is
5 not to say that ongoing monitoring is not important.
6 It's -- it's very valuable and it must continue,
7 primarily to ensure that compliance is maintained and
8 the effects as predicted are within those levels.

9 And again, sort of finally, looking at
10 the last point on this slide is that identifying kind
11 of response action levels and -- and mitigation kind of
12 within the -- the permitting stage provides that sort
13 of level of clarity to the entire response framework.

14 Now, moving onto Ni Hadi Yati, we had
15 recommended that the -- the water licence include a
16 provision for Ni Hadi Yati. So Ni Hadi Yati, it's
17 intended to be a form for indigenous parties to
18 increase their technical capacity, to assist with the
19 development and implementation of monitoring and
20 management plans for the project. As many of these
21 plans are conditions of the water licence, reference to
22 Ni Hadi Yati is warranted to facilitate full
23 transparency and accountability throughout the
24 regulatory process.

25 So that being said, our recommendation

1 was that the water licence not be issued until the Ni
2 Hadi Yati agreement between De Beers and the Aboriginal
3 parties is in place, as this remains an outstanding
4 commitment from the report of the environmental impact
5 review.

6 And I just want to reiterate the -- the
7 point mentioned by the North Slave Metis Alliance
8 yesterday that it still remains a little unclear as to
9 what the mandate of Ni Hadi Yati will be when it's
10 implemented. And De Beers's response, as they said
11 yesterday, they kind of disagree with our
12 recommendation. So I kind of leave this point open to
13 -- I guess for others to ask questions and to see what
14 the opinion of the Board is.

15 In regards to cumulative effects, so
16 cumulative effects, it's not specifically mentioned in
17 the draft licence, despite this being a major issue
18 throughout the environmental review process. And the
19 specific conditions for the various management and
20 monitoring plans must include provisions for measuring
21 potential cumulative effects to ensure that these are
22 addressed in the response framework. And our
23 expectation, I guess, would be that the specific
24 schedules that outlines what's to be included in the
25 various management and monitoring plans has a -- a

1 cumulative effects component.

2 In De Beers's response, they provided a
3 -- a lot of information regarding the work that they've
4 completed to date with regards to cumulative effects,
5 which has been primarily around wildlife and wildlife
6 habitat, and we'd like to acknowledge De Beers for
7 their work, and we think it's fantastic for what
8 they've done to date. However, we want to ensure that
9 other valued components, including aquatic social and
10 cultural, are not overseen here.

11 So getting into the specific comments
12 regarding our review of the water -- the draft water
13 licence. So on the slides, I've identified the -- the
14 parts and items that we're referring to. It's all
15 detailed in our -- in our written intervention, and I
16 kind of reiterate some of our -- our general comments
17 mentioned earlier here.

18 The first one was with regards to Ni
19 Hadi Yati, and rewording the licence -- rewording the
20 licence to include the fact that, you know -- you know,
21 have the Ni Hadi Yati agreement finalized before
22 issuing of the permit. And again, De Beers has
23 disagreed with this one, and I guess we look for input
24 from others on -- on this point.

25 The next comment regarding the

1 definitions in -- in the licence, and the confusion
2 around which minister is -- is included in the -- in
3 the definition with regards to the recent evolution, so
4 not a big point here. I think it's one that's easily
5 fixed, and again, just providing that -- that clarity
6 at the beginning of the -- the permit.

7 Comment around Part B in the General
8 Conditions, Item 9, around the calibration of meters
9 and devices, and I guess we would like to see that the
10 techniques and any calibration that's -- that's done
11 throughout the -- the monitoring, and that this be
12 captured within the annual reports. Whether we've got
13 the terminology correct in terms of whether -- whether
14 devices are calibrated or validated on-site, or
15 recalibrated if necessary. The main point is that --
16 that when this is done, that it be detailed in the
17 annual report.

18 With regards to the timing for the
19 submission of the annual report, we feel that a
20 deadline of March 31st of the -- the next calendar year
21 following the -- this -- assuming that the -- the
22 annual report will cover a period from January to
23 December, if -- if then that report is submitted the
24 following -- by the end of the following March, that
25 would essentially give De Beers a ninety (90) day

1 period to -- to finalize that report. We feel that's a
2 -- an appropriate time.

3 De Beers is requesting a date of May
4 1st, which is essentially an additional month. We'd
5 just like to add to that. I guess May is a -- a bit of
6 a busier period for people in terms of -- I guess the
7 spring hunt is on around that time, and -- and having
8 the ability and -- and the resources available to kind
9 of effectively review and comment on a report at that
10 period might be a bit more hindered, whereas if the
11 report's submitted at the end of March, the timing
12 would be a bit better for having, I guess, more
13 effective comments.

14 And again, we think it's ample time
15 available to -- to get a report prepared. Thinking
16 ahead that, too, as monitoring happens throughout the
17 year, the methods, results, and preliminary sort of
18 discussions can also be sort of drafted during that
19 time.

20

21 (BRIEF PAUSE)

22

23 MR. MARC D'ENTREMONT: So Part B,
24 General Conditions, Item 11. Again in -- in regards to
25 the provisions for the response framework, I won't

1 spend much time on this, as we've kind of already
2 discussed it. Again, as -- as our point here being
3 that if it's provided in Schedule 1, again, we haven't
4 -- that -- that detail wasn't included in the draft
5 review. So as long as it's clear in there. And I just
6 reiterate again the -- the importance of having this
7 response framework approach.

8 Our comments around Part B general
9 condition Item 19, where Measure 3A was identified, and
10 then kind of going back to the report of the
11 environmental impact review, we did not see a Measure
12 3A. So it just led to some sort of confusion as to
13 exactly what the -- the Board was referring to here. I
14 don't think we need to get into the details of this one
15 other -- again, just a little -- a little lack of
16 clarity and -- and some confusion around it. So
17 something for the -- I guess the Board to revisit in
18 the final permit.

19 With regards to, I guess, water
20 withdrawal, it's the -- the way the -- the draft
21 licence is written:

22 "In one (1) ice covered season, the
23 total water withdrawal from a single
24 water body outside of the controlled
25 area shall not exceed 10 percent of

1 the available water bod -- [sorry]
2 available water volume."

3 And again, just for clarity, that single
4 water body, I guess, is understood to be Area 8. So we
5 had recommended that instead of -- that Area 8 be
6 specifically identified.

7 In De Beers's response, they -- they
8 wanted it not to specifically say Area 8 to keep some
9 flexibility in -- in the licence. And they suggest,
10 too, I guess, if there were, I guess, an occasion where
11 another water body might be identified with -- for
12 potential water withdrawal.

13 So in response to that, I guess, we'd
14 like to know what the other water body would be. So,
15 again, maybe some clarity around that, in terms of
16 where other potential sources of water withdrawal might
17 be.

18 Our next comment was with regards to
19 some sort of just discrepancies in the timing of
20 construction plans, I believe, in terms of adding two
21 (2) or six (6) months before various things. Not --
22 not a sort of huge issue. Just again, I'm looking for
23 a bit more clarity. And I guess just to sort of refer
24 back to if -- if there's the requirement to kind of go
25 back and review some of the response framework, that

1 this be captured before any issuance of the licence and
2 any updates of -- of -- and revisions to any of these
3 plans.

4 Our next comment was with regards to
5 sort of signing off on engineered structures. And we
6 recommended that any as-built reports and drawings with
7 specifications be stamped by a professional engineer.
8 And De Beers agreed with us on this comment. That's
9 great.

10 The next comment, Part G, Item 1. The
11 draft licence was written as:

12 "The licensee shall manage water and
13 waste in with the objective of
14 minimizing the impacts of the project
15 on the quality and qua -- quantity
16 and quality of water in the receiving
17 environment through the use of
18 appropriate mitigations, monitor --
19 mitigation measures, monitoring, and
20 follow-up actions."

21 And we just recommended that -- to -- to
22 the end of that statement, that those actions be
23 outlined in the Water Management Plan and Waste
24 Management Plan. And again, this -- oh. And in De
25 Beers's response, they kind of agreed with that

1 wording, but they also added:

2 "Circumstances and situations not
3 specifically outlined in the draft
4 Management Plan and Waste Management
5 Plans shall use appropriate
6 mitigation monitoring and follow-up
7 actions, minimizing the impacts of
8 the project on the quantity and
9 quality of water in the receiving
10 environment."

11 Which then kind of led us to go, Well,
12 what circumstances and situations are they specifically
13 referring to? So again, the need for more clarity, and
14 then again building upon or using the -- the vast
15 knowledge that De Beers has attained through its
16 monitoring practices to date can -- I think there is a
17 opportunity to identify what these circumstances and
18 situations might be.

19

20 (BRIEF PAUSE)

21

22 MR. MARC D'ENTREMONT: Our next comment
23 was with regards to timing of water discharge and --
24 and having that detailed in the Management Plan, and in
25 De Beers's response, they have identified that kind of

1 the overall schedule will be included in the plan. The
2 specific -- I guess the specific timing will not be
3 there, but I think essentially, that's essentially what
4 we were looking for, that there would be some sort of
5 schedule, and that -- then that would be included,
6 which is good.

7

8

(BRIEF PAUSE)

9

10 MR. MARC D'ENTREMONT: I believe this
11 kind of the first of several slides regarding some of
12 the specific management plans, and then we just asked
13 that -- kind of the additional provision that, let's
14 see, that specific mitigation measures, monitoring, and
15 follow-up actions are identified in these plans, and
16 again, that would be linking back to the -- the larger
17 adaptive management strategy and sort of the response
18 framework.

19

20

(BRIEF PAUSE)

21

22 MR. MARC D'ENTREMONT: Again, this
23 comment is similar to the previous one (1) about having
24 the -- the monitoring and follow-up actions, and the
25 extra point here being as -- as we've discussed

1 throughout the -- the hearings, there are several
2 management and monitoring plans, and again, perhaps
3 consideration of that sort of larger umbrella document
4 that kind of ties everything together might be
5 worthwhile. And again this -- this slide just sort of
6 reiterates that point, so.

7 As does this one with the Dike
8 Management Plan. So again, include the mitigation
9 measures and monitoring and follow-up actions
10 identified in the plan, likewise for the processed
11 kimberlite or Mine Rock Management Plan.

12 In this comment with -- with regards to
13 dam safety review, we had recommended that the item
14 should stipulate that the inspection to be done by a
15 professional engineer.

16 In De Beers's response, they suggest
17 that:

18 "The weekly inspection will be
19 carried out by on-site personnel, and
20 the personnel will be trained by
21 professional engineers and follow
22 detailed procedures developed by a
23 professional engineer, and the
24 procedures will include reporting
25 requirements as indicated in item 28,

1 and a professional engineer will
2 perform an annual inspection during
3 the summer months with a full
4 geotechnical inspection -- inspection
5 report being prepared."

6 I would just go back and ask that with
7 regards to the weekly inspections, maybe De Beers can
8 confirm that these will also be sort of signed off by a
9 professional engineer, which I think is important. It
10 gets back down to sort of the accountability of sort of
11 professional practice, which is kind of required
12 throughout the -- the project as well.

13 So Item 30. There was a little
14 discrepancy with kind of referencing to previous items.
15 So we'll just -- kind of a -- detailed in our written
16 response so we don't need to get into it here.

17 Item 31. Again, with regards to dam
18 safety review. We had recommended that the dam safety
19 review should be completed on all dikes, regardless of
20 being identified of low consequence or not.

21 In De Beers's response, they stated
22 they'll follow the Canadian Dam Guidelines requiring
23 dam safety review of all significant dam classification
24 within a ten (10) year period, and all dikes listed in
25 the water licence will fall into this category and will

1 have dam safety reviews. The collection ponds are in a
2 low dam class, and do not require dam safety reviews at
3 a ten (10) year period.

4 However, De Beers agrees to reevaluate
5 the classification and need for dam safety review
6 throughout the project. So we think that action is a
7 very good one and a very good, proactive measure that
8 De Beers is taking, and we just want to commend them on
9 -- on being forthcoming on that point.

10 Item 32. Again, weekly inspections,
11 where we recommended that they -- they be conducted by
12 a professional engineer, and De Beers has stated that
13 these will be carried out by on-site personnel as
14 directed by a professional engineer, but again, I'd
15 just like to clarify whether any weekly inspection
16 reports are being signed off by a professional engineer
17 to, again, bring in that sort of professional
18 accountability.

19 Item 36, with regards to seepage
20 surveys. We recommend that the results of, I guess,
21 the reports of the seepage surveys be submitted within
22 ninety (90) days, and De Beers would like to include
23 these within the annual reports. However, I -- I
24 believe that within other water licences that have been
25 issued, seepage survey reports -- it's stipulated that

1 seepage survey reports be submitted within ninety (90)
2 day reporting periods, so I think we'd still like to
3 stick with that recommendation.

4 Item 43, again, there was discrepancies
5 with referencing previous items, so that also needs to
6 be corrected for the final.

7 And item 44, we asked the -- for the
8 inclusion of measuring pH, and that be identified, and
9 De Beers says -- or said that pH will be included in
10 the SNP and the AEMP monitoring, so again, we're just
11 happy to see that it's covered off.

12

13 (BRIEF PAUSE)

14

15 MR. MARC D'ENTREMONT: Let's see. In -
16 - in Part I, Item 5, in terms of the reporting for the
17 Aquatic Effects Monitoring. Going back to our -- our
18 previous comment about timing, we feel that the -- a
19 deadline date of March 31st is sufficient, and again,
20 it's -- the rationale being it would be a better --
21 it's ample -- I think it's ample time for getting a
22 report together, and it's better time for the community
23 to put some resources toward reviewing the reports.

24 And also provides the, you know, if the
25 results of -- of these reports require, you know, that

1 input back into the whole adaptive management process,
2 that that could then be implemented before the open
3 water season, where additional monitoring would
4 continue for that -- that upcoming year.

5

6 (BRIEF PAUSE)

7

8 MR. MARC D'ENTREMONT: And the final
9 comment, again, is regarding timing, so I don't --
10 don't have to reiterate that.

11 So just to close, I guess we believe
12 that the good working relationship, the use of best
13 scientific and technical -- technological practices,
14 traditional knowledge, and clear recommendations,
15 directions, monitoring, and inspection are reasonable
16 expectations and commitments, but most importantly, as
17 we've seen, open and transparent communication is
18 critical.

19 And finally, I think the water licence
20 and land use permit should provide a mechanism for the
21 Proponent to comply with the proactive measures to
22 protect the natural, social, and cultural environments
23 of the project -- around the project, and so that
24 concludes our intervention presentation, and thank you.
25

1 QUESTION PERIOD:

2 THE CHAIRPERSON: Thank you very much
3 for that presentation, and so in order of questioning,
4 then, we'll go to De Beers Canada.

5 MS. VERONICA CHISHOLM: Thank you, Mr.
6 Chair. Veronica Chisholm, from De Beers. I'd like to
7 thank the Deninu Kue for their presentation, and we --
8 we appreciate that you've acknowledged our responses to
9 your intervention in your presentation, so that was
10 very helpful, but we have no questions. Thank you.

11 THE CHAIRPERSON: Okay. Thank you for
12 that. Next is GNWT-ENR.

13 MR. SEAN WHITAKER: Thank you, Mr.
14 Chair. Sean Whitaker, with ENR. I do have one (1)
15 question for the DKFN, and it's a three (3) part
16 question, and it's just trying to understand where
17 you're coming from with the adaptive management.

18 So the first part is, how does the DKFN
19 envision the development of a -- an Adaptive Management
20 Plan? How would you like the triggers, and what action
21 levels would you like established? And why would you
22 like higher action levels, and specifically, the
23 moderate and high established in the adaptive
24 management framework?

25 I'm just trying to understand your

1 process so that we can move forward and incorporate
2 the DK -- DKFN's comments.

3 THE CHAIRPERSON: Thank you for that.
4 Over to DKFN.

5 MR. MARC D'ENTREMONT: Marc
6 d'Entremont, with the DKFN. Thank you for the
7 questions, Sean. So I'm going to answer the first one,
8 and then I may have to ask you to restate the -- the
9 next two (2), just so I'm clear.

10 I guess with regards to development of
11 the Adaptive Management Plan, I think that needs to be
12 done sort of in a open communicated process that --
13 with involvement of sort of all parties that are here
14 today. Again, so just so it's clear.

15 I think there are -- there are also sort
16 of a lot of -- I mean, to date, there's been a lot of
17 work done on adaptive management strategies, plans, and
18 -- and processes, so I think there's stuff to build
19 upon, and -- and De Beers has already taken several
20 steps in -- in creating that sort of plans for -- for
21 this project and other projects. So there's lots to
22 build upon. So it's essentially, at this point, I
23 think that's where we can go from.

24 So maybe you can ask the other two (2)
25 questions again.

1 THE CHAIRPERSON: Okay. Thanks. Back
2 to ENR.

3 MR. SEAN WHITAKER: Sean Whitaker,
4 Environment and Natural Res -- Resources. Thank you,
5 Mr. Chair. I'm just going to a follow-up just to that
6 one.

7 So would you envision a working group
8 similar to an AEMP working group for adaptive
9 management so it's open, or would it be through the
10 review of -- through the Board process, through
11 preliminary screening?

12 I'm just trying to understand for the
13 open communication, and whether it would be beneficial
14 to have a working group just on adaptive management, or
15 whether that it's sufficient through the Board process?
16 Thank you.

17 THE CHAIRPERSON: Okay. Thanks for
18 that. Over to DKFN.

19 MR. MARC D'ENTREMONT: Marc
20 d'Entremont, from the DKFN. Yeah, I -- I don't -- I'm
21 not sure if working groups are the best thing. I mean,
22 there always seems to be a working group forum for
23 specific issues and items. I -- I don't know if that's
24 the best approach at this point, or if it can be done
25 through the Board, or -- through the Board with input

1 from stakeholders.

2 I guess I'd be leaning towards that --
3 that -- the latter at this point, but I think I'd also
4 like to see what other -- other agencies would -- would
5 be interested in doing.

6 I think that said, the DKFN would like
7 to be involved with whatever would happen in terms of
8 moving this -- this piece forward.

9 THE CHAIRPERSON: Thank you. Further
10 from ENR?

11 MR. SEAN WHITAKER: Thank you, Mr.
12 Chair. Sean Whitaker, from ENR. Thank you for that
13 response. I was just trying to get where we were going
14 and how you'd like to see it.

15 The second part of that question was:
16 What triggers and action levels would you like
17 developed. And the third part of that is: Why would
18 you like those developed?

19 THE CHAIRPERSON: Thank you. Over to
20 DKFN.

21

22 (BRIEF PAUSE)

23

24 MR. MARC D'ENTREMONT: Marc
25 d'Entremont, from DKFN. I won't get into the specifics

1 of what triggers and action levels there are. I think
2 it's more important just to at least have triggers and
3 action levels, and -- and more so management responses
4 identified from the get go, kind of building upon what
5 Environment Canada said in their presentation. Let's -
6 - let's set some targets.

7 And obviously, the intent would be to --
8 to keep effects low so that the targets are not reached
9 at the lower level. But if we do have action levels,
10 and again, particularly management responses
11 identified, at least it's -- it's clear and it's open
12 in terms of what those are.

13 And again, throughout -- throughout the
14 whole sort of monitoring and adaptive approach,
15 potentially those can be modified as more information
16 is gathered and, again, going back to lessons learned
17 from projects and lessons learned from this project as
18 it -- as it proceeds.

19 So hopefully that answered your
20 question.

21 THE CHAIRPERSON: Thank you. ENR...?

22 MR. SEAN WHITAKER: Thank you, Mr.
23 Chair. The Department of Environment and Natural
24 Resources has no further questions, but we really
25 appreciate DKFN's presentation and written

1 intervention. Thank you.

2 THE CHAIRPERSON: Okay. Thank you for
3 that. Any questioning from Environment Canada?

4 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey
5 McMillan, with Environment Canada. Thank you for your
6 presentation and clarifications. We have no questions.

7 THE CHAIRPERSON: Okay. Thank you for
8 that then. And then we'll go to the Yellowknife Dene
9 First Nation.

10 MR. TODD SLACK: Todd Slack, on behalf
11 of the Yellowknives. No questions. Thanks.

12 THE CHAIRPERSON: Okay. Thank you.
13 Over to North Slave Metis Alliance.

14 MR. MATT HOOVER: Thank you. Matt
15 Hoover, North Slave Metis Alliance. No questions.
16 Thank you.

17 THE CHAIRPERSON: I'll ask if there's
18 any registered speakers that wish to speak. Anyone
19 from the general public? Anyone on our teleconference
20 line? So then we'll go over to Board staff and
21 technical and legal.

22 MS. REBECCA CHOUINARD: Thank you, Mr.
23 Chair. It's Rebecca Chouinard, for the Board. Thanks
24 very much for your presentation. I've got the same
25 question I had for everyone else.

1 Any thoughts on an appropriate water
2 licence term and, if so, any rationale for that?

3 MR. MARC D'ENTREMONT: Marc
4 d'Entremont, from DKFN. I'm very surprised by that
5 question. No, just kidding.

6 I -- I'll just begin by saying I think
7 we're a little uncomfortable with a twenty (20) year
8 term. And I probably just agree with some of the other
9 agencies, that maybe the best approach would be to have
10 a term that -- that takes into consideration the
11 various stages of the project.

12 I'm not -- like typical other ones we've
13 seen in the past have either been five (5) years or
14 eight (8) years or ten (10) years. I -- I think the
15 five (5) year period is probably too low because, you
16 know, it's going to cover construction and a couple
17 years of operation. And at that point, there's
18 probably really not a lot of information from -- and --
19 and trends will be identified from the project.

20 So perhaps something that like would --
21 would involve kind of review -- reviewing the whole
22 water licence again closer to the end of the -- the
23 project's operation period and as it sort of
24 transitions to the closure and reclamation period. So,
25 you know, eight (8) -- seven (7), eight (8), nine (9)

1 years, something like that.

2 THE CHAIRPERSON: Thank you. Further
3 from Board staff? John Donihee...?

4 MR. JOHN DONIHEE: Thank you, Mr.
5 Chairman. It's John Donihee. I'm Board counsel. And
6 I just have a question about your slide and the
7 difference of views, I guess, that you set out between
8 DKFN and De Beers with respect to Ni Hadi Yati and in -
9 - in particular the -- the recommendation that you're
10 making essentially that the water licence not be issued
11 until the agreement is -- is in place.

12 And I guess my question for you is:
13 What would you suggest happens if there's never
14 agreement between the First Nations and De Beers on
15 this issue?

16 THE CHAIRPERSON: Thanks, John. Over
17 to DKFN.

18

19 (BRIEF PAUSE)

20

21 MR. MARC D'ENTREMONT: Marc
22 d'Entremont, with the DKFN. Thank you for that
23 question. It -- yeah, I think it really touches on a -
24 - on a really important subject. Just conferring with
25 -- with Dave. So it's my understanding that there's

1 negotiations between all of the Aboriginal parties and
2 De Beers are still kind of ongoing. And like I say,
3 the -- the Ni Hadi Yati agreement's yet to be ratified.

4 I don't think, I guess -- when it comes
5 down to it, to answer your question, I don't think this
6 issue should kind of stop the project. So if there are
7 no agreements ever reached, I -- obviously, I think the
8 water licence needs to be issued.

9 I guess in the -- in the response to,
10 like I say, I just really need to reiterate that it's -
11 - I think the Ni Hadi Yati's an -- an important
12 initiative and that hopefully it will -- the agreement
13 will be achieved and it'll provide a mechanism for kind
14 of overseeing the project as it -- as it moves forward.
15 I did have another point, but -- you know, I guess to
16 answer your question, John, it would be the permit will
17 obviously have to proceed. Thanks.

18 MR. JOHN DONIHEE: Thank you, Mr.
19 Chairman. It's John Donihee again. And thank you very
20 much for that answer. I -- I certainly und --
21 understand, you know, the Ni Hadi Yati was a very
22 important topic discussed in front of the Impact Review
23 panel and it's -- it's certainly -- you know, the
24 concern, the desire to have this agreement satisfactory
25 settled and resolved I guess is evident on the record

1 for this proceeding as well.

2 I guess the -- the follow-up for -- for
3 me at the moment, though, is just to -- to remind you
4 perhaps that the ultimate decision maker on a Type A
5 water licence is -- is actually not the Board, but
6 rather, in -- in this instance, the minister of
7 Environment and Natural Resources.

8 And so I -- I'm wondering if, you know,
9 if DKFN has made it -- it -- any of its views about the
10 importance of Ni Hadi Yati available to the minister so
11 that he can consider those things when ultimately he
12 and his colleagues and cabinet sit down and decide
13 whether this licence ought to be issued?

14 MR. MARC D'ENTREMONT: Marc
15 d'Entremont, DKFN. Thanks, John. That's a very good
16 comment. I don't -- I don't think we've made our
17 approach to the ministry on this point and I think it's
18 a -- this is a good point we'll bring back to Chief and
19 Council. So thank you.

20 MR. JOHN DONIHEE: Thank you, Mr.
21 Chairman. Those are my questions.

22 THE CHAIRPERSON: Okay. Thank you. Is
23 there further from staff, technical? Then we will go
24 to Joseph Mackenzie.

25 MR. JOE MACKENZIE: Joseph Mackenzie.

1 No, I have no questions.

2 MR. FLOYD ADLEM: Floyd Adlem. I have
3 no questions.

4 MR. FRANK MCKAY: Frank McKay. I have
5 no questions, Mr. Chair.

6 THE CHAIRPERSON: Okay. So thank you
7 to the YKDFN (sic) for your presentation and que -- and
8 answers. We will now go to the North Slave Metis
9 Alliance.

10

11 (BRIEF PAUSE)

12

13 THE CHAIRPERSON: I just thought I'd
14 trick you from yesterday. You did that to me, so.
15 Yellowknife Dene First Nation...

16

17 PRESENTATION BY YELLOWKNIVES DENE FIRST NATION:

18 MR. TODD SLACK: Todd Slack on behalf
19 of the Yellowknives. Turnabout is fair play. Mr.
20 Chair, if it's okay, our presentation is quite simple,
21 and it just eliminates the -- or reiterates the
22 recommendations that we made in our intervention, so
23 I'm just going to leave it with this picture. It's one
24 that I really like.

25 And it -- it just -- it's very hopeful

1 to me, and that's what we're here today for. You know,
2 this mine is going ahead. That's going to happen.
3 We're -- what we're here today is to decide, well, How
4 is this mine going ahead? And we're very hopeful that
5 the highest standards of environmental stewardship will
6 be applied, and it's -- we're -- the regulatory process
7 is the instrument to do that.

8 During our -- our presentation, and in
9 our intervention, there's a number of things that are
10 outside of your Board's scope, and we accept that.
11 However, the voice of your Board is -- is -- would be
12 important to seeing those things done, and any
13 assistance that can be lent in terms of encouraging the
14 minister to do that would be very -- very much
15 appreciated, because these are essential things to
16 happen.

17 In our presentation, I'm going to talk
18 about four (4) issues, and these are not the -- the
19 whole -- like a holistic or exhaustive list of the
20 concerns that we have, but rather, the ones that we
21 think matter most, and the ones that we chose to
22 allocate our resources to.

23 And really what -- what we're -- we're
24 trying to focus on is truth in language. Just what
25 value is there in commitments, clarity on what those

1 commitments are, because different language means
2 different things to different people, obviously. And
3 then lastly, what the consequences of failure to adhere
4 to those commitments and standards will actually mean.

5 Now, you -- you've heard me say this
6 before, and the Yellowknives don't accept that
7 commitments by themselves have a great deal of value,
8 either by the developer or some of the commitments made
9 by the regulators. So what we're here today is to try
10 and ensure that these are -- have enforceability
11 attached to them, and with that common understanding
12 that hopefully we developed, possibly seeing these
13 enshrines -- these commitments enshrined wherever
14 possible as terms and conditions.

15 We're coming at this from the
16 Yellowknives's perspective, and we accept that the
17 project has their view, and GNWT has their view, but as
18 -- as we said before, and we'll reiterate all -- all --
19 many times, that as the guaranteed future land users of
20 the Chief Drygeese Territory, it's the Yellowknives
21 that are going to be most impacted by failed measures,
22 or failed commitments, or weak standards being applied.

23 We have a lot of experience with diamond
24 mining in the Chief Drygeese Territory. Ekati dates
25 back to 1996, and we know that when it's done right, it

1 can have relatively low impact. This is both during
2 operations, and we hope during -- or post-closure.
3 However, when it's done wrong, we see issue after issue
4 arising. We see warnings from the inspectors. We see
5 emergency action, and uncontrolled releases.

6 And unfortunately, that's what's been
7 happening at another De Beers mine here in the
8 Territory, and it's that past experience that helps
9 colour our view of what these commitments mean. We
10 take this project at their word, that they're going to
11 try and ensure that they're applying high environmental
12 standards, but we want to have that fallback position
13 so that it's not optional, that they have very little
14 leeway in terms of meeting those commitments.

15 So what exactly is the future? Is it
16 going to be operated and run in the way that we all
17 hope it should be, or is it going to be similar to less
18 well-run mines? And that's really where we're
19 focussing our -- our presentation here, offering
20 recommendations that will see the highest standard of
21 environmental stewardship be the only option going
22 forward.

23 I'll just take a minute to introduce the
24 measures -- or the issues that we're talking about.
25 And we've been involved in this project since it was

1 introduced in -- in -- into the regulatory system in
2 2005 -- thank you to our friends at De Beers for
3 reminding me. It's a long time.

4 There's a lot of evidence on the -- on
5 the registry. And ultimately, the Yellowknives'
6 primary concern is with caribou. The caribou in the --
7 and the Dene cannot be disconnected. The Elders have
8 told the Company, they've told the regulators, they've
9 told the Government mining operations have impacts on
10 the well-being of the herd. When the caribou herds are
11 suffering, the well-being of the Yellowknives Dene
12 suffers.

13 We feel that the Environmental Impact
14 Panel heard the Yellowknives' concerns on this and they
15 put measures in place that require mitigations to
16 reduce the impacts of mining. Unfortunately, a year
17 and a half later, and we've told you this in the PLUP
18 review, most of those measures either are unimplemented
19 or there's a lot of distancing between the intent of
20 the panel and what's actually being done. We'd like to
21 see this corrected and to see that the current plans
22 are no longer falling short.

23 So to that end, the federal and
24 territori -- territorial ministers must be pressed to
25 comply with the measures that they themselves signed

1 off on. We wish that there was a better mechanism to
2 compel that action, but there's little that we can do
3 except raise this issue in every venue that we have.

4 The framework that the GNWT and the
5 project talked about has no -- sorry, pardon me, the
6 cumulative effects framework that the GNWT and the
7 project have talked about has no regulatory or
8 legislative backing. It's a piece of paper. It's
9 ideas. This is good, but it doesn't get to the heart
10 of the measure.

11 The Yellowknives have fully participated
12 in that cumulative effect effort. But at the end of
13 the day, the outcome of the process that's currently --
14 the initiative currently underway is going to be
15 recommendations. Once we heard that, the Yellowknives
16 are -- are participating in a much less intensive
17 manner because we have recommendations for decades. We
18 have recommendations from 2013. There was a number of
19 workshops that started. The government has not
20 accepted those. And the -- we're -- we're continuing
21 to produce reports. Well, it's time that action
22 happens.

23 Recommendations are not what the panel
24 envisioned when they put their measure together.
25 Obviously, I'm not part of the panel, but I read that

1 language, and it's very clear that they wanted to see
2 something done. And unfortunately, there's nothing
3 more we can do. We hope that your Board can lend some
4 gravitas to this ask.

5 In terms of the other Board measures,
6 the Yellowknives feel that the -- there is room for
7 improvement. We acknowledge that De Beers has made
8 steps towards achieving these measures, particularly
9 developing Wildlife Effects Monitoring Program and the
10 Wildlife Habitat Protection Program. And I'm going to
11 refer to these as the WWHPP and the WEMP.

12 However, since that EA started, the
13 caribou population, and we all know what's happened,
14 it's declined at such a rate that it meets the
15 qualifications set out within Species At Risk.

16 The review panel acknowledged the -- the
17 critical role and the concerns around -- surrounding
18 the caribou and require the project to develop a
19 specific caribou protection plan. Recent documentation
20 from the Company noted that this is found within the
21 WEMP, but when you -- or within the WWHPP, pardon me.
22 When you go to that WWHPP, it's a single paragraph.

23 There are other aspects scattered
24 throughout documents, but this needs to be brought into
25 a single protection plan that addresses the key concern

1 of the Yellowknives. The Review Board -- or pardon me,
2 the review panel noted this concern. And they -- they
3 designed this measure to address this particular issue.

4 Again, I -- I think that we -- or I
5 hesitate to use the word 'we' after the question I
6 provided to the -- the Proponent earlier. I think that
7 most people -- most reasonable people, on reviewing the
8 available information, would agree that the measure has
9 not been complied with; that the WWHPP and the WEMP are
10 not going to avoid significant environmental impacts,
11 which they're -- they're aimed to help do.

12 Now, yesterday we heard about profound
13 and deep engagements of the Company mentioned. Well,
14 that is true. There has been an awful lot of
15 engagement. But it takes two (2) parties to have
16 profound engagement. Meaningful dialogue requires
17 listening.

18 The Yellowknives, for a long time, have
19 told this project that they're in caribou territory.
20 They didn't really believe us. We told the Company
21 that they needed to be ready to respond and have the
22 contingency plans and methodology in place for
23 monitoring caribou.

24 We have told the Company that the
25 methods weren't as good as they could have been, but

1 they chose to do it their own way. And because they
2 never thought that caribou would really be a problem
3 for them, they were unprepared when the, unexpected in
4 their mind, but wholly expected from the Yellowknives'
5 perspective, when that happened and they had caribou
6 incidents with their vehicles this winter.

7 And, Mr. Chair, I -- I just want to be
8 clear, the Yellowknives are not asking for anything
9 onerous or unusual. The ask is based on the best
10 practices developed at other sites. We're not looking
11 to reinvent the wheel here. The message is -- the
12 message is straightforward: Don't use the -- the
13 processes and methodology that didn't work. Use the
14 ones that exist now; use the ones that do work.

15 And this message has -- has been
16 provided to the Company for a number of years now and
17 it's unfortunate that we're still here asking for these
18 same -- same things. We're going to acknowledge that
19 there has been progress, particularly in the WEMP
20 development. But is it up -- up to the standards
21 expected of a -- a large industrial operation here in
22 this territory? I think, again, reasonable people
23 would agree that it's not.

24 Now, in terms of the -- the water
25 quality standards that we've been talking about the

1 last few days, it's become clear to me that there's a
2 stark difference in the approach. The project uses the
3 word 'protective' oft -- very often. And I'm sorry
4 that -- from the Yellowknives' perspective, simply not
5 being destructive does not mean that you're being
6 protective.

7 And yesterday when I asked that
8 question, it -- it had a purpose. It wasn't just
9 semantics. The Yellowknives do not agree with the
10 sense -- with the -- with the project's statement that
11 they are minim -- the EQCs are minimizing the amount of
12 change to the environment.

13 And we're not sure how the project looks
14 at the interventions that have been provided and how
15 they arrive at this position in which there is
16 consensus. When the project is depositing water that
17 contains hundreds or thousands of times the values of
18 the receiving environment, just as our word
19 'protective' differs, it seems that our view to the
20 word 'minimize' is quite different.

21 And just to put a -- a sharp point on
22 it, during the -- the EI -- environmental impact review
23 hearing the Yellowknives asked a question and Mr.
24 Faithful provided an answer that the steady-state
25 change post-closure in Kennady Lake was going to -- for

1 uranium was going to be eleven thousand (11,000) times
2 the level that it is now.

3 Well, we're not in a position to debate
4 whether that's harmful to the environment. But to say
5 that it's minimizing the amount of change, well, that
6 seems like an awfully big number to me, and it doesn't
7 seem like their minimizing the change when we all know
8 that they could do better.

9 The water from this area, from Kennady
10 Lake, it tastes good. The fish are healthy. They're
11 very good to eat. And the project says that isn't
12 going to change, at least downstream from the site.
13 Kennady Lake, obviously, I mean, we're going to see
14 some changes.

15 But the -- what the Yellowknives are
16 saying is that the baseline or the current status, that
17 really matters. And as we move away from that, we
18 should be very careful in terms of how much change
19 we're considering and how much is being permitted,
20 because once Humpty Dumpty is broken, it doesn't
21 matter; they can't put him back together.

22 Mr. Chair, you -- you know the phrase,
23 the -- the devil is in the details. And nowhere in my
24 experience has that been more true in closure
25 commitments. This is why throughout the process, the

1 Yellowknives have been pushing to see this closure plan
2 developed and advanced in a collaborative sense.

3 Ultimately, I don't think that we have
4 seen much progress on the closure plan either during
5 the engagements, during the EIR, and now we're at this
6 phase in which we're at the point of permitting the
7 development, without really knowing what's going to
8 happen after the mine.

9 The areas that the project has committed
10 to re-vegetate only really became semiclear to me --
11 and I'm been pushing for this -- at the technical
12 session a few weeks ago. We also learned at that
13 technical sessions that the project was planning on
14 burying much of the organic matter that would be
15 required for a successful re-vegetation.

16 I'm glad that the technical sessions
17 served its -- its purpose and that these matters came
18 to light. And now we -- the project has committed to
19 make certain changes to keep closure options open. And
20 that's the key of this stage, is that we're not making
21 operational decisions that remove options from the
22 table.

23 And we heard yesterday about the -- the
24 tall and steep rock piles. Well, that's another
25 closure option that should be considered down the road,

1 not simply in a unilateral manner by the project
2 saying, No, this is what we're going to do. We can't
3 have re-vegetation there. That's a matter for
4 discussion and decision in front of the regulatory
5 system.

6 We all -- I, we, again I think all want
7 to see this site returned to a productive state, and
8 here in this area, that's -- it -- it's for caribou,
9 it's for musk ox, it's for bears. And that's the
10 assumption that we're all buying into here, is that
11 this project will be able to do that.

12 Those folks, our friends at De Beers,
13 they can go get the diamonds. They can make money.
14 The people in the NWT benefit, and then the land is
15 returned to the people in this -- in such a way that
16 it's equally useful and -- and performs the same
17 functions as it did before the mine.

18 But unfortunately right now, we don't
19 know how or what the Company is going to do, because we
20 haven't had real conversations, despite asking, to --
21 to get towards that end. We're just not there yet.

22

23 (BRIEF PAUSE)

24

25 MR. TODD SLACK: And I -- I was

1 thinking about skipping over this, and I -- I can give
2 an example as to why this is so important now. There's
3 often the thought, Hey, we're just opening the mine
4 now. Let us figure that part out, and then we'll get
5 to closure.

6 Well, during these processes, and this
7 is happening at Snap Lake's interim closure, and I'm
8 not trying to just argue that fact, but they are
9 continuously going back to the commitments that were
10 made at the Environmental Assessment and Water
11 Licensing, and that is the reference point that they're
12 going back to.

13 So if we don't establish soon, now,
14 what's going to be re-vegetated, and what the site is
15 going to look like, and what the criteria that is going
16 to represent success is, well, down the -- in ten (10)
17 years, it's going to be an open question, and the case
18 to have these things app -- or to apply a high
19 environmental bar to these things is going to be much
20 more difficult. We've learned from the past, and this
21 is why we're seeking clarity now.

22 I'm going to speak to the measures a
23 little more directly than the -- the overview I -- I
24 just gave, and we -- the EA process was in -- in
25 progress for a long time. At the end of all that

1 effort, the panel issued three (3) measures, a number
2 of which I think are be -- before this Board, some of
3 which aren't.

4 These mitigations must be put in place
5 to lower the significant environmental impacts that
6 would have resulted if the project had proceeded as it
7 -- as it was presented to the panel.

8 Just a quick overview, measure 1
9 addressed the zone of influence, a creation of a
10 Protection Plan, and adaptive management. Measure 2
11 focussed on the winter road, caribou, behaviour
12 monitoring, and barriers to caribou movement. Measure
13 3 required the development and implementation of a
14 cumulative effects framework.

15 The Yellowknives believe that much of
16 Measure 1 and Measure 2 are firmly within this Board's
17 mandate and -- and this Board's legislative authority.

18 Coming back to Measure 1, it has a
19 number of subparts. It required the project to
20 minimize the impacts to caribou, that they must monitor
21 their zone of influence. We acknowledge that the
22 project has a plan -- has a plan to do this at the mine
23 site, but they've used a different methodology than
24 used at the other sites.

25 However, the key issue for this Board is

1 that it's not being done on the winter road, which is
2 part of the land use permit. This winter, the -- the
3 project plan was to utilize track counts for
4 distribution and habitat use along this winter road.

5 This is the same method that Ekati used
6 back in 2006, I think it was for their Misery Road. It
7 didn't work then. We don't know why the project thinks
8 it'll work now, and until we have that rationale, it
9 seems silly to dispense with a different method that
10 does work, aerial surveys, and apply this track survey
11 method.

12 The second part of this measure is to
13 demonstrate that the zone of influence is being
14 minimized. This will require the project to construct
15 its operations in different methods so that they can
16 see what works, what doesn't work. This is not being
17 done.

18 The measure requires the creation of a
19 Wildlife Effects Monitoring Program and a Wildlife --
20 and Wildlife Habitat Protection Plan, and it requires
21 these plans to be linked with a response framework to
22 be implemented, and we talked about this a bit
23 yesterday. As it stands right now, I -- the -- this --
24 this part of the measure has not been complied with.

25 Together, all these matters will have

1 formed part of the Caribou Protection Plan, and this
2 was a specific a requirement arising out of the panel
3 decision. This project has not produced it, or much of
4 the central foundation of that plan. And just so that
5 we're clear, this was required prior to construction.

6 And while we don't have a clear
7 definition as to when construction started from a
8 Yellowknives's point of view, and we argued this during
9 the PLUP, that started during this winter when the
10 first of the major hauling was undertaken. The
11 majority of this -- this measure falls within your
12 authority, from a Yellowknives perspective.

13 Measure 2, require the Company to
14 complete a number of winter road actions. They needed
15 to demonstrate that the way the winter road was
16 constructed and operated minimizes impacts to caribou
17 movement, and how they use the habitat in and adjacent
18 there. During the technical session, we -- we sought
19 clarity as to if this had been achieved. It hasn't.

20 Without having these different
21 mitigations in place, we can't know if it's working.
22 It may well emerge that the current practice is the
23 best practice, but right now, we don't know, and the
24 natural reaction is, Well, we've had a winter road for
25 an awfully long time, what do we know there? Well,

1 unfortunately because of the -- the time period that
2 road came into being, it doesn't have the same
3 requirements to lower its impact to the caribou herd,
4 or to demonstrate that it's minimizing effects.

5 The Project was directed to monitor
6 presence and behaviour of caribou along the winter
7 road. Prior to the road opening, we had expressed
8 significant concerns with the -- with the approach and
9 the methodology that were going to be used, as well as
10 the response plan. It -- this is -- behaviour
11 monitoring wasn't optional from -- from the Panel's
12 decision. It was -- it was required.

13 Now, once a caribou had been killed, we
14 acknowledge that the project reacted. They put in
15 place methodology. They were out there, and they were
16 doing work. Unfortunately -- and they responded quite
17 quickly, given the -- the situation, but these were
18 things that we had identified as weaknesses previously.
19 The methodology and response should have been in place
20 prior to it. They're in caribou terr -- territory.
21 They should have been ready.

22 And even if we look at the plan as its
23 evolved, even right now, the behaviour monitoring is
24 triggered if there's twenty (20) groups of twenty (20)
25 caribou. That's a lot of caribou, considering the

1 current status of the herd, and the original measure
2 wasn't optional. It -- we appreciate that we -- the
3 project doesn't want to do it if there's one (1)
4 caribou, and that makes sense, but the adaptive
5 management framework that was discussed needs to be
6 brought back and reconsidered, both in front of a --
7 the regulatory process and the habitat use along the
8 road, but also in collaboration with First Nations and
9 government.

10 So this part of the measure has been
11 partially imple -- implemented, and the final part of
12 this measure requires the Caribou Protection Plan, the
13 WEMP, and the WWHPP to address effects of caribou
14 movement through the habitat along that winter road.
15 We are not aware of a approach that will see this done.

16 And now lastly, and perhaps most
17 significantly, Measure 3 required the Crown to develop
18 accumulative effects monitoring and management
19 framework. This is not done, and the current
20 initiative will not see it done for years. AANDC's
21 minister signed the decision, and then as far as we
22 know, has done nothing.

23 And with respect to the -- the
24 monitoring and management requirements, GNWT has
25 undertaken an initiative. They've accepted funding

1 from the mines, but we don't have that monitoring
2 framework, nor is there any reporting on what they did
3 with that -- that money, or when we can expect
4 deliverables to achieve this measure.

5 And just as -- as a final point to this,
6 the -- the final part of that measure was annual
7 reporting. Well, we're going on two (2) years since
8 the -- the decision was accepted, and we don't have any
9 reporting as from what the government's been doing;
10 either of the governments, for that matte. So that
11 hasn't been done either.

12 And I -- I understand that this is
13 outside the -- the mandate of your Board. And the --
14 the question that Mr. Nevitt asked earlier is -- in
15 terms of consultation is important: Why am I bringing
16 it up here? Well, it's not by choice. CanNor and the
17 GNWT insists that this is the place to raise these
18 issues. There is no other consultation issue.

19 Their recent letter on the registry
20 makes it plain. For those matters within their
21 mandates, the Government of Canada and the Government
22 of the Northwest Territories will rely on the
23 consultative processes of the Review Board and the
24 MVLWB as the primary means for discharging any of their
25 consul -- any of their potential consultation

1 obligations.

2 We have seen in other processes, other
3 regulatory processes, where the Crown says, Well, just
4 because that -- it's there, it doesn't mean that there
5 won't be more consultation in the future. Mr. Chair, I
6 -- I've been around a while now. I've been involved in
7 a number of land use applications. I've been involved
8 in court cases against, well, unfortunately, the -- the
9 boards. There is no -- it never happens. There's
10 never any subsequent consultation. So like it or not,
11 this is it, and that's why we're bringing it up here.

12 Just to that end, and I'll wrap it up as
13 quickly as I can here, it should go without saying how
14 cumulative effects excess -- affects the exercise of
15 the Yellowknives Dene treaty rights. The Elders have
16 been clear. The Review Board has been clear. Action
17 is required to ensure that envi -- that cumulative
18 effects are properly managed and do not become
19 significant. This is a Crown requirement, both in
20 terms of accommodation of a constitutional right, but
21 as a prerequisite for this project to proceed.

22 At this point, the Yellowknives are
23 simply asking your Board to write to the minister. And
24 under Section 132, which says:

25 "The responsible minister shall carry

1 out the decision under Section 135 to
2 the extent of their respective
3 authorities."

4 I accept that this is not your job.
5 This is something the ministers should be doing on
6 their own. However, we cannot persuade them to take
7 these issues seriously and get the job done.

8 In terms of the -- the WEMP, we -- we
9 had a discussion yesterday where we -- we heard that a
10 MOU is being close to being completed. We simply
11 encourage GNWT to expedite its final sign-offs and
12 submit this to the registry prior to the final
13 comments.

14 We're not familiar with the -- with the
15 contents. We'll see it when you guys see it. But we
16 hope that it will put in pra -- put in place best
17 practices and a dispute resolution and provide some
18 mechanism until the new Wildlife Act comes into act --
19 or comes into place.

20 Similarly, we've talked about air
21 quality. There's an MOU in progress on that. It's
22 been a long time now. We'd like to see this completed
23 to provide some sort of tool so that we don't have to
24 bring this up again.

25

1 (BRIEF PAUSE)

2

3 MR. TODD SLACK: Accepting that there's
4 action afoot on the -- the WEMP, we believe that the
5 WWHPP, this is the Wildlife and Wildlife Habitat
6 Protection Plan, can be significantly improved,
7 particularly with respect to complying with the
8 guidance that already been provide -- provided in terms
9 of the measures and the follow-up programs that were in
10 the Board -- the -- the panel decision. Forgive me for
11 using those words interchangeably.

12 We don't want to belabour this point,
13 and perhaps it's too late for that, but this WWHPP
14 needs to be a systematic and thorough way to collect
15 data and ensure that the habitat along the winter road
16 and along the mine site are not per -- be not
17 detrimental to caribou and other wildlife.

18 It will eventually give us the knowledge
19 to operate the winter road according to best practices,
20 with a clear and protective response framework and a
21 clear understanding of what those impacts are. And the
22 impacts -- the impacts to -- to habitat, you can't
23 divorce the habitat from the animals. So the impacts
24 to habitat are -- affect the -- the movement. They
25 affect the health. They affect the distribution. All

1 of these are directly -- should be directly monitored
2 and feed into that Management Program.

3 Now, Mr. Chair, we didn't -- the
4 Yellowknives adopted a -- a for -- or recommendations
5 that -- that weren't prescriptive in nature. We didn't
6 want to say, Well, you must -- De Beers should do this.
7 We've tried to provide a framework to develop that
8 collaborative -- collaboratively with Board approval
9 where -- wherever possible and wherever applicable.

10 Those recommendations are found in a
11 working group again. And we believe that they should
12 be formed relatively quickly after the licence. This
13 working group should be -- the intent of this working
14 group should be to fix the existing plan, providing
15 clear language so that we can avoid disputes and
16 interpretation. It should require the development and
17 implementation of action levels, and it should be
18 improving -- focussed on improving the methodology and
19 tech -- techniques.

20 For example, to require the project to
21 monitor their impacts to habitat beyond just the visual
22 range, which is what they're doing now. So limit -- to
23 the limit of their own asserted zone of influence.

24

25 (BRIEF PAUSE)

1 MR. TODD SLACK: Lastly, the
2 Yellowknives believe that there's an opportunity to
3 mesh the TK monitoring with a winter road in order to
4 determine the community perspective with the impacts to
5 caribou and caribou habitat.

6 Now, Mr. Chair, we're getting into a --
7 an area that I'm less familiar with. I'm going to talk
8 about the water quality. I'm not going to pretend I'm
9 an expert. No one would believe me even if I was
10 pretending. I fully confe -- confess there are parts
11 of this stuff that I do not understand and I zone out
12 when I hear it.

13 But I think the GNWT presentation
14 provided a -- an important foundation fro the
15 Yellowknives' perspective. They provided policy
16 documents and references. Ultimately, clean water is
17 important and degradation of that resource shouldn't be
18 allowed when it isn't required.

19 Your staff and your experts talked about
20 the mecha -- the mechanics of how to arrive at numbers
21 and what those numbers mean. I can't and won't attest
22 to -- to those levels. But what I do know, I -- I do
23 the simple math and look at they want related versus
24 what the background is. And it doesn't seem like you
25 should be releasing proposed effluent with hundreds of

1 times the background concentration into a receiving
2 water body and call that protective.

3 You can't exceed the CCME by orders of
4 magnitude and call it protective. The CCMEs, well,
5 that's protective from a pollution perspective. The
6 background, that's protective from the Yellowknives'
7 perspective. That's the way the Creator made the land
8 and the water. The -- the Company's proposal, well,
9 we're not sure what it's protective of, but it
10 certainly is the easiest option.

11 Now, after the -- the technical sessions
12 I was reviewing the proposed effluent criteria and I
13 was -- I was quite surprised with how -- how much
14 higher the actual EQCs being presented were, how much
15 higher they were than the receiving environment. I --
16 I asked the Proponent if I had it right. I -- I
17 figured it was fifty (50) to seventy-five (75) times
18 for two (2) of the key -- key contaminants of concern.
19 Well, I -- I was pretty -- even simple math apparently
20 alludes me, because it was hundreds of times higher.

21 And in terms of yesterday, when heard
22 the minimizing change thing, again, it -- it comes back
23 to, Well, we know they could do better. What that
24 level should be, we can -- we don't have the expertise
25 or the resources to bring someone in who can translate

1 the Yellowknives' perspective, so we're forced to rely
2 on Board staff and the Waters folks.

3 It just seems like there's something
4 amiss here. Now, the Yellowknives, we're -- they're
5 not keen on dilution as the Water Treatment Plan,
6 preferring to keep the clean water clean. But if we
7 accept the -- the project's view that dilution is an
8 important thi -- important part of this, well, then we
9 start to look at what the level is at edge of the
10 mixing zone that we heard yesterday.

11 And it -- again, it presumes that the
12 predictions are right. And they're asking for your
13 permission, for the minister's permission, to pollute
14 the receiving environment to a level hundreds of times
15 higher, not just in terms of effluent, but within that
16 receiving environment.

17 I did the math and I'm sure De Beers
18 will check. And I came up with it's two hundred (200)
19 times higher for ammonia, a hundred and ti -- a hundred
20 and twenty (120) times higher for nitrate. That's not
21 protective of the environment. That's simply, at best,
22 not destructive to the flora and fauna that live in
23 that environment.

24 And for us, not destroying the
25 environment is not good enough. It should be

1 protecting the water. And we ask -- we're asking the
2 Board to take this vision and convert it into stringent
3 EQCs, because we can't tell you what those numbers are
4 going to be. Whether it's via the water strategy,
5 Board guidelines, or the common sense of the
6 Yellowknives Elders, degrading the water unnecessarily
7 simply shouldn't be acceptable.

8 Coming back to the -- the particulars of
9 closure. And minimal development, it's all about
10 balance. The benefits that are provided versus the
11 impacts both during operations and after closure. Now,
12 our skepticism of -- of the benefits is well noted in
13 the -- in the panel transcripts. And we're not going
14 to focus on the -- on -- on that.

15 But we -- the assumption is that those
16 benefits will outweigh the potential impacts. And it
17 is impossible to evaluate the imp -- the full impacts
18 at this point. We don't -- we -- we simply don't know
19 if the -- the current closure initiative will overcome
20 the not insignificant -- as the project noted there's a
21 lot of challenge to getting this site back to wildlife
22 habitat.

23 And here in the NWT we don't have a
24 tremendous history in terms of doing that. There's one
25 (1) mine that is approaching closure -- successful

1 closure, and that's Con Mine. But we do, within the
2 Chief Drygeese Territory alone, there's a hundred
3 contaminated sites. So the Yellowknives are very
4 focussed towards ensuring this end prod -- or this
5 endpoint.

6 It's been one (1) of the -- the
7 Yellowknives' principle areas of focus. And -- and the
8 Conceptual Plan, listen, it -- it corrects some of the
9 -- the limitations that we -- we've seen at other
10 sites. They're filling the pits to the degree
11 possible. That's good. It's more of a phased
12 approach. It's the first site where I think we're
13 going to see, or hopefully see, real progressive recl -
14 - reclamation. That's good that they can demonstrate
15 success as they proceed.

16 But however, the -- the closure approach
17 is still missing critical measure -- matters. It's
18 been vague about what their objectives will be. We
19 don't know where the vege -- as I said, we don't know
20 where the vegetation's going. The closure options are
21 being unilaterally removed from the -- the table.

22 And while I can't say that we would all
23 agree that shorter fatter rock piles would be more
24 suitable to the closure objectives, I think we would
25 all agree that this should be an option to be

1 considered during the regular -- or during the closure
2 discussion. That conversation has never been had
3 despite the Yellowknives' concerns and significant
4 desire to have this conversation.

5 In our intervention we talked about not
6 wanting a gravel pad. You know, worst-case scenario is
7 that this project walks away and we have gravel beside
8 a -- a formerly nice lake and there's lake trout in it.
9 And if we're not careful and very clear in our
10 intentions and language at this point, if we don't set
11 forth those objectives and requirements now, in fifteen
12 (15) years when the project gets around to drafting up
13 the final closure plan that might be what we get.

14 Again, the Snap Lake closure process
15 provides some insight into the Company perspective.
16 Nowhere in their closure objectives does they -- does
17 it say they will re-vegetate anything.

18 Right now the site is productive land.
19 It's supports caribou. It supports musk ox. It
20 supports bears and the complete Northern ecosystem.
21 And that ecosystem includes the Dene people. A closed
22 mine site that has no vegetation provides no benefit,
23 and the sustainable mining paradigm that we're being --
24 that we're buying into, it just doesn't hold up.

25 And as previously said, not being a

1 detriment to the environment if this site becomes
2 neutral, it doesn't harm wildlife, it doesn't harm the
3 water, that's not good enough for the Yellowknives. It
4 must return to its former state, where it provided
5 value.

6 Lastly -- or bringing this section to a
7 close, this is an eleven (11) year mine life. It's not
8 very long, especially considering the length of time
9 that the other closure plans have taken. Now, we will
10 benefit from efficiencies because we're good -- or we
11 have good plans to follow, but waiting really isn't
12 much of an option. Closure planning and research --
13 and particularly closure research cannot start too
14 soon.

15 To achieve this, again, the Yellowknives
16 have provided a recommendation framework. The Board
17 should require the Company to prepare -- prepare a
18 draft reclamation research plan to be completed within
19 six (6) months of the issuance of this licence. This
20 will allow the long-term research items, particularly
21 vegetation trials including the ones on the rock pile
22 that we were discussing the other day, to be comm --
23 commenced immediately, and inform the closure planning
24 process prior to be -- prior to be required -- prior to
25 the required final closure plan. Pardon me.

1 The Board should require a closure
2 working group to be initiated immediately after the
3 submission of this research reclamation plan. The
4 Board should provide direction to parties that
5 establishment of closure components and objectives
6 should collaboratively be completed within one (1)
7 year. These objectives should be aimed at ensuring
8 that the current land use wildlife habitat be the end
9 product.

10 The closure plan for the fine PK
11 storage, which we talked about at length during the
12 technical session, does not currently reflect any
13 vegetation or medium for vegetation growth. We don't
14 want gravel pads. This isn't reflective of the
15 surrounding environment, and it provides little
16 benefit. The Board should reject this portion of the
17 closure plan.

18 An interim closure and reclamation plo -
19 - plan conforming to the Board's published guidelines
20 should be submitted for approval prior to commissioning
21 of the mill. This is a critical issue that has not
22 been adequately dealt with, and it's not for lack of
23 trying. We understand that the project's trying to
24 open the mine, but -- and there isn't a terr --
25 terrific business case for them to consider how they're

1 going to close it at this early stage.

2 But for the Yellowknives, that is the
3 case. This project is going to go ahead. What do we
4 do in the meantime? We hope that the Board agrees with
5 the Yellowknives's perspective, and that they create
6 the need for that project to devote real and
7 substantial resources.

8 Then, Mr. Chair, the final issue that
9 I'm going to talk about is the closure water -- water
10 quality. And in the same way that the closure plan for
11 the -- the land components can be improved, we believe
12 that the project should be required to do better with
13 its post-closure water quality, as well.

14 Potentially, we're -- we're going to see
15 some real changes to the long-term water quality,
16 doubling -- doubling, tripling, or more -- far more
17 release of potential contaminates. The Yellowknives
18 accept that the lake is going to change, but how much
19 is the lake going to change?

20 We've heard some say that the lake
21 becoming more productive is a good thing. Well, the
22 Creator made that way -- that lake in a particular way
23 for a reason. The -- the Yellowknives have evolved in
24 -- in concert with the lands. The ecosystem reflects
25 the lands, and should we really be meddling with that,

1 or should we be aiming to do better?

2 And we believe that the Company can do
3 better. We hope that the Board identifies this as a
4 closure priority, and that it -- as it seems that
5 these, like, any changes to this out -- outcome will
6 likely require operational considerations.

7 Now, Mr. Chair, I just want to thank you
8 for the opportunity to bring these concerns in -- in
9 front of the Board, and I appreciate the Board's
10 perspective that some of these things shouldn't be
11 discussed here, but we're caught in a real Catch 22 on
12 that.

13 The Yellowknives certainly believe in
14 the concept behind sustainable mining, and that's the
15 goal here. Low impact, high benefits, and ultimately
16 they believe in it because they have to. This is a
17 site of almost -- or of the majority of the development
18 in the NWT, and the mines are here to stay. We've got
19 more on the way, and we're going to continue to work
20 both with the Board, the project, and the regulators to
21 find that balance to ensure well-being of the people
22 and the land and the water they depend on.

23 Now, that concludes my -- my
24 presentation. But if I might, I'll just address the
25 obvious questions that will come, and that's the water

1 -- water licence term. The Yellowknives think that a -
2 - a term that looks towards the mid-mine life is
3 appropriate. It allows the project to get up and
4 running, yet doesn't run for the life, and it provides
5 a life of project. It provides an important check and
6 balance, both on the predictions and the operations
7 that are being undertaken, and this is consistent with
8 the Yellowknives's submission in the Snap Lake case, as
9 well, if we're looking for precedent, where the
10 Yellowknives asked for a term, either five (5) or eight
11 (8) years, which would work in this case, as well.

12 The -- the Company can make improvements
13 to their environmental stewardship, and if we see that
14 in -- in the midterm review, that's the time where you
15 -- you provide a rest of the life project -- or rest of
16 the life licence.

17 And that concludes my comments. Thank
18 you for listening to the concerns. I appreciate it.

19 THE CHAIRPERSON: Well, thank you,
20 Todd, and to the Yellowknives Dene First Nation well-
21 thought-out presentation. When I first saw actually
22 your official six (6) pages, I was surprised. I
23 thought, That can't be Todd, so. I'm not surprised
24 anymore, though. Thank you.

25 Zabey, did you want to break for lunch,

1 or did you want to -- let's break for lunch. How about
2 if we take an hour, and then we'll get to some
3 questionings from De Beers Canada Inc? Thank you. One
4 (1) hour fifteen (15). Okay, one (1) hour fifteen (15)
5 to twenty (20).

6

7 --- Upon recessing at 11:58 a.m.

8 --- Upon resuming at 1:19 p.m.

9

10 QUESTION PERIOD:

11 THE CHAIRPERSON: So good afternoon to
12 everyone. Thanks for being back and at the right time.
13 And so we're going to be starting with order of
14 questioning for YKDFN. And we start off with De Beers
15 Canada.

16 MS. VERONICA CHISHOLM: Thank you, Mr.
17 Chair. First I'd like to thank Mr. Slack for the
18 presentation from the Yellowknives Dene. I thought it
19 was a very good and thorough presentation, so it's much
20 appreciated. And certainly from De Beers, we look
21 forward -- and when I say, "we," I mean De Beers --
22 looks forward to continuing to work with the
23 Yellowknives Dene.

24 And I believe that we, De Beers,
25 Yellowknives Dene, and all parties, share the common

1 goal of sound environmental stewardship for this mine.
2 So we certainly continue to look forward -- we, De
3 Beers, continue to look forward to any input that the
4 Yellowknives Dene have on any of the monitoring and
5 management plans. Thank you.

6 THE CHAIRPERSON: And thank you for
7 that. Next up for questions -- do you want to respond
8 to that at all, Todd, or...?

9 MR. TODD SLACK: No.

10 THE CHAIRPERSON: Next up for -- for
11 questions then is the ENR-GNWT.

12 MR. ROBERT JENKINS: Thank you, Mr.
13 Chair. It's Robert Jenkins, with ENR. I'd like to
14 thank the YK Dene for their presentation and expressing
15 their concerns. We have no questions.

16 THE CHAIRPERSON: Thank you, Robert.
17 Then so next up is Environment Canada.

18 MS. SARAH-LACEY MCMILLAN: Hi. It's
19 Sarah-Lacey McMillan, with Environment Canada. And we
20 have no questions.

21 THE CHAIRPERSON: Okay. Thank you for
22 that. Next up, Deninu K'ue First Nation.

23 MR. MARC D'ENTREMONT: It's Marc
24 d'Entremont, for the DKFN. We have no questions for
25 the Yellowknives Dene. Thanks.

1 THE CHAIRPERSON: Thank you. And North
2 Slave Metis Alliance...?

3 MR. MATT HOOVER: Matt Hoover, for the
4 North Slave Metis Alliance. We don't have any
5 questions. Thank you.

6 THE CHAIRPERSON: Okay. Thank you.
7 Any registered speakers? There's nobody on our
8 teleconference line. Anyone from the general public?
9 So we will go to Board staff, technical advisors, and
10 legal.

11

12 (BRIEF PAUSE)

13

14 THE CHAIRPERSON: Go to the Board
15 members. Joseph...?

16 MR. JOE MACKENZIE: Joe MacKenzie. No
17 questions.

18 MR. FLOYD ADLEM: Floyd Adlem. No
19 questions.

20 MR. FRANK MCKAY: Frank McKay. No
21 questions.

22 THE CHAIRPERSON: Well, with that,
23 Todd, thank you.

24 MR. TODD SLACK: Thank you.

25

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: Sorry. Next up to
4 make a Intervenor presentation is North Slave Metis
5 Alliance.

6

7 PRESENTATION BY NORTH SLAVE METIS ALLIANCE:

8 MR. MATT HOOVER: Thank you, Mr. Chair.

9 My name is Matt Hoover, with the North Slave Metis
10 Alliance, Environment and Lands Department. Thank you
11 on behalf of the NSMA, first of all, for having us here
12 today to voice our concerns. Today's presentation will
13 discuss the following in respect to the review and
14 consideration of the Class A water licence and Class A
15 land use permit for De Beers's proposed Gahcho Kue
16 mine. Background, aquatic environment, wildlife
17 management, environmental monitoring, and closure and
18 reclamation.

19 So to begin with, the NSMA represents
20 the Abor -- Aboriginal rights-bearing Metis of the
21 North Slave area. The NSMA's mandate includes ensuring
22 that the public and private sector organizations
23 respect its members' Section 35 Aboriginal rights when
24 developments are contemplated and/or operating on their
25 traditional lands.

1 The NSMA is vitally concerned with the
2 protection, preservation, and sustainable use of its
3 traditional lands and resources to the benefit of its
4 members and their children for generations to come.

5 So in regards to Gahcho Kue's location,
6 the NSMA has been involved in De Beers's Gahcho Kue
7 mine since the project entered the regulatory process.
8 This project is of significant concern and interest to
9 NSMA members because the land in and around the mine
10 claim block area is going to be substantially impacted.

11 With that in mind, we're going to talk
12 about several different points today. And some of
13 these may be on the periphery of what the Board is
14 considering, but we believe that they're of interest
15 and that the Board can provide, as well as De Beers can
16 provide, a level of clarity in this permitting stage
17 with terms and conditions that could be developed to
18 mitigate potential harm to the aquatic environment
19 specifically, as well as wildlife in the area.

20 In that respect, the NSMA members'
21 traditional land use of the area is well documented in
22 the traditional knowledge and land use study that the
23 NSMA undertook with funding for De Beers for this
24 project -- from De Beers for this project. The study
25 is entitled, 'Traditional Knowledge and Land Use Report

1 2012/2013: A Study for De Beers Canada Inc. Proposed
2 Gahcho Kue Project'.

3 This report is a product of research
4 material and a community on-the-land camp that was held
5 at Kirk Lake in the vicinity of Gahcho Kue. And that
6 was -- that took place this past summer. And there's a
7 photo of the camp which is not very visible on that
8 screen. But that on-the-land camp, coupled with
9 community interviews and research from historical
10 documents, was the basis for the report.

11 Now we'll touch on aquatic values. At
12 the environmental impact review, the EIR hearings in
13 December 2012, the NSMA voiced its concerns about the
14 water quality challenges that De Beers is having at its
15 Snap Lake mine.

16 In that respect, De Beers does not
17 appear to be able to maintain the water quality
18 standards at Snap Lake as required under their Class A
19 water licence. This situation is still ongoing, and
20 understandably NSMA members are concerned about the
21 possibility of a similar situation occurring as there
22 was -- due to the Gahcho Kue Project operations.

23 The NSMA is concerned about the
24 Proponent's recently disclosed plans to discharge water
25 during the winter season. This isn't something that's

1 been discussed yet in yesterday or today's discussions,
2 but I believe it's important. It's still unknown what
3 effects such a discharge may have on the water when
4 paired with seasonal variability and spring freshet.

5 Essentially, our concern is that if
6 water is discharged in the winter, it could have a
7 number of different effects. And we don't believe that
8 these effects or potential impacts to the aquatic
9 environment have been fully discussed. One (1) example
10 would be that winter discharge can change the retention
11 capacity of downstream environments. And as we've seen
12 at Giant mine and Baker Creek, often spring freshet and
13 melt rates can have significant impacts on the
14 surrounding landscape, depending on what happens in
15 seasonal variability.

16 The NSMA believes that winter discharge
17 could negatively impact fish and traditional harvesting
18 downstream. It's the NSMA's understanding that De
19 Beers has been directed by the Mackenzie Valley Land
20 and Water Board to produce information respecting the
21 Proponent's winter discharge plans to address these
22 concerns as per -- as per Information Request 1, but
23 has thus far been unable to provide this information as
24 of the writing of this submission.

25 Given the time lines for the dewatering

1 and fish-out of Kennady Lake, there's little time left
2 to review and consider the Proponent's proposed winter
3 dewatering plan. The Proponent stated during the
4 technical sessions there -- that there will not be a
5 problem with winter discharge because of mitigation and
6 monitoring being applied.

7 The NSMA is not comfortable with De
8 Beers's wish to dewater Kennady Lake during the winter
9 season without having first undertaken research into
10 and explaining the possible effects of the following:
11 how far downstream De Beers will monitor the effects of
12 winter discharges for potential of the following:
13 overtopping of banks; increase in erosion of banks,
14 stream beds, et cetera; changes in retention of
15 downstream environments; ice build up; spring ice melt;
16 spring rainfall; increased snow pack melt; and changes
17 in stream temperatures; as well, an analysis of how
18 winter discharge could impact fish and fish habitat
19 compared to discharging in other seasons; and finally,
20 a description of the monitoring that will be required
21 and how far downstream this monitoring will occur to
22 determine if and when discharge should be stopped and
23 the action levels and thresholds that will need to be
24 developed in order to successfully mitigate effects
25 when issues occur.

1 It can be noted that recognizing
2 potential effects and stopping winter discharge before
3 those effects are significant could be extremely
4 difficult to determine in a winter season.

5 Since each phase of the project is so
6 unique, the NSMA had requested that separate water
7 management plans were to be -- would be developed for
8 each of these phases; for example, dewatering,
9 operations, and refilling, closure. The NSMA is
10 satisfied and happy to hear that De Beers intends to
11 produce these separate plans, as mentioned yesterday.

12 In light of the challenges De Beers was
13 having at Snap Lake mine, the NSMA had requested that
14 De Beers install a water treatment facility at its
15 Gahcho Kue mine. As of yesterday, we believe that
16 these issues have been discussed appropriately and we
17 feel that De Beers has committed to installing a plant
18 if necessary to meet their water quality/effluent
19 quality criteria that have been set for the Gahcho Kue
20 project.

21

22 (BRIEF PAUSE)

23

24 MR. MATT HOOVER: Now, to touch on
25 wildlife-based concerns. The NSMA is concerned about

1 the health of wildlife in the zone of influence of the
2 project. Of particular concern to the NSMA is the
3 health and well-being of the Bathurst caribou herd.
4 The Bathurst caribou face increased pressure from the
5 Gahcho Kue mine, as its impacts will be felt on the
6 herd's migration route.

7 Consequently, all measures, especially
8 Measure 1, should be implemented by De Beers in order
9 to mitigate cumulative effects associated with the
10 Gahcho Kue mine site. A link between the Wildlife
11 Effects Monitoring Program, the WEMP, and the Wildlife
12 and Wildlife Habitat Protection Plan, WWHPP, as it had
13 been mentioned in prior discussion at these public
14 hearings, will be a valuable monitoring and mitigation
15 tool.

16 The NSMA does not feel that this link
17 was adequately addressed during the technical sessions
18 other than to initiate further studies on caribou. We
19 are pleased to hear that De Beers is willing to have
20 further conversations in this light with the NSMA and
21 other Aboriginal parties, as well as funding
22 appropriately these discussions. And what this means
23 exactly has yet to be determined. The NSMA looks
24 forward to further involvement in this respect.

25 In regards to environmental monitoring

1 based concerns, in December 2012 at the EIR the NSMA
2 voiced support for the establishment of an organization
3 to monitor the mine. The NSMA is pleased that Ni Hadi
4 Yati is near ratification, although it is again unclear
5 exactly what this mandate means and what funding will
6 be attached to this at this time. But we are hopeful
7 that it will provide a successful model for other
8 projects. NSMA is working towards becoming a member of
9 this organization at this time.

10 And now in regards to closure and
11 reclamation-based concerns, it was stated by the
12 Proponent during the technical sessions that
13 traditional knowledge reports would be used to inform
14 the closure objectives. The NSMA submitted a
15 traditional knowledge report that was referenced
16 earlier in this presentation. The NSMA encourages the
17 Proponent to continue to work with Aboriginal parties
18 to consider the viewpoints and values of the NSMA.

19 The NSMA believes that the water licence
20 and land use permit are important components of
21 ensuring that post-closure the environment at site and
22 the surrounding lands are once again usable for
23 traditional pra -- practices, including harvesting.

24 The water licence and land use permit
25 should ensure that by post-closure the environment of

1 the mine site and its surrounding area is once again
2 usable for traditional practices, including harvesting,
3 and that all technological means are available to be
4 used to achieve this state in a proactive manner.

5 The NSMA believes the Proponent needs to
6 clarify some aspects of its closure plans and commit to
7 establishing an organization to oversee the mine's
8 closure. This has been discussed yesterday and again
9 today. We're pleased to be on track to create an
10 organization working group of this kind and we believe
11 that it should be made and implemented as soon as
12 possible so we can take any opportunity we have along
13 the way as this project is developed to successfully
14 remediate the site and to leave it in a state that is
15 usable for members as soon as possible.

16 We had several recommendations that were
17 more broad, high level recommendations, but we believe
18 it's still important to mention them. First of all,
19 the NSMA wants the waters in and around Kennady Lake to
20 remain clean and potable, as it's an important life
21 force for the environment.

22 Second, the NSMA recommends that De
23 Beers be required to install a water treatment plant.
24 And I'll edit this statement to say that, when
25 necessary, should effluent quality criteria fail to be

1 met at its proposed Gahcho Kue mine site.

2 Third, the NSMA wants proper waste
3 incineration to be implemented at the Gahcho Kue mine
4 site, whether this means further discussion and further
5 research into the effects of sewage incineration or
6 discussions of that kind. We're pleased by De Beers's
7 response already to this -- to this request and their
8 desire to implement the best waste incineration
9 available.

10 4. The NSMA wants all steps available
11 to be taken to ensure that the low number of Bathurst
12 caribou does not experience additional impacts further
13 prolonging harvest restrictions. These restrictions
14 have impacted the NSMA, and any other impacts to the
15 Bathurst caribou that could occur as the result of
16 Gahcho Kue mine would greatly impact the cultural
17 values and personal values of the NSMA members. As
18 traditional harvesters of caribou in the region, the
19 NSMA members are concerned about the well-being of
20 these caribou that migrate through and around the
21 project area.

22 Fifth, and finally, the NSMA wants De
23 Beers to undertake the construction and operation of
24 its proposed Gahcho Kue Mine in a sustainable way.

25 The above recommendations summarize what

1 the NSMA wishes to see the Mackenzie Valley Land and
2 Water Board require of De Beers, respecting the
3 latter's proposed Gahcho Kue diamond mine. It is, in
4 addition, NSMA's wish that De Beers operates the Gahcho
5 Kue Mine in a sustainable way and achieves a good
6 return on its investment, while preserving the health
7 of the land and water and the species that depend on
8 it. Thank you.

9

10 QUESTION PERIOD:

11 THE CHAIRPERSON: Okay. And thank you
12 to the MSMA for a very -- or NSMA for a very to the
13 point, informative presentation. Thank you for that.
14 So the order of questioning then for NSMA will be De
15 Beers Canada.

16 MS. VERONICA CHISHOLM: Thank you, Mr.
17 Chair. Veronica Chisholm, with De Beers. I just have
18 a couple of questions, but first I'd like to say thank
19 you for your presentation.

20 With -- with regard to the winter
21 discharge, I'm wondering if -- if North Slave Metis
22 have had an opportunity to review the response to IR
23 Number 1, submitted onto to the registry on February
24 24th, that provided detailed information around winter
25 discharge, including baseline information on potential

1 effects and how that monitoring would be undertaken?

2 And -- and the mitigations that prescribed in this

3 eight (8) or ten (10) page Information Request.

4 MR. MATT HOOVER: Matt Hoover, North
5 Slave Metis Alliance. We haven't -- we're not familiar
6 with that response. We had, since that time, spoken
7 with some folks who had voiced these similar concerns
8 at the technical sessions that occurred prior to that,
9 I believe. And they felt that many of these concerns
10 were still unanswered.

11 So that was where we had based some of
12 our concerns, as well as internal discussions. So
13 perhaps that's something we can discuss with De Beers
14 further just to clarify winter discharge and what it
15 means and what it could potentially mean as far, as
16 being more complicated than discharging in other
17 seasons. Thank you.

18 THE CHAIRPERSON: Thank you. Further
19 from De Beers?

20 MS. VERONICA CHISHOLM: Veronica
21 Chisholm, with De Beers. Thanks. We'd be happy to
22 provide you with this Information Request and see if
23 there's any additional outstanding concerns. I'm also
24 wondering if you're familiar with the commitment we
25 made during the technical sessions to go out and do

1 some additional data collection this winter to look at
2 the downstream that would help to enhance the -- the
3 monitoring and mitigation plans that we are -- we -- we
4 are suggesting for -- for winter discharge.

5 MR. MATT HOOVER: I'm partially
6 familiar with -- sorry, Matt Hoover, North Slave Metis
7 Alliance. I'm partially familiar with those, and we
8 look forward to more information being provided, as
9 long as the information's provided far enough in
10 advance that it's able to be appropriately reviewed,
11 and then plans can be modified as necessary to ensure
12 that the environment's protected. Thank you.

13 MS. VERONICA CHISHOLM: Veronica
14 Chisholm, with De Beers. Just one (1) last comment.
15 So on that information, we're planning on providing
16 another technical memo by the end of May that will
17 fully describe that. Thank you.

18 MR. MATT HOOVER: Matt Hoover, North
19 Slave Metis Alliance. Thanks, Veronica.

20 THE CHAIRPERSON: Okay. Thank you for
21 your questions, and now we'll go to ENR-GNWT.

22 MR. ROBERT JENKINS: Thank you, Mr.
23 Chair. It's Robert Jenkins, with ENR. I'd just like
24 to thank the NSMA for its good presentation today, and
25 for voicing its concerns. We have no questions at this

1 time.

2 THE CHAIRPERSON: Okay. Thank you.

3 I'll go to Environment Canada.

4 MS. SARAH-LACEY MCMILLAN: It's Sarah-
5 Lacey McMillan, with Environment Canada. We have no
6 questions.

7 THE CHAIRPERSON: The next order of
8 questioning would be DKFN.

9 MR. MARC D'ENTREMONT: Thank you, Mr.
10 Chair. Marc d'Entremont, for the DKFN. We have no
11 questions for the North Slave Metis Alliance.

12 THE CHAIRPERSON: Thank you. YKDFN...?

13 MR. TODD SLACK: Todd Slack, with the
14 Yellowknives. We don't have any questions.

15 THE CHAIRPERSON: Thanks for that. I
16 don't believe we have any registered speakers. I'll
17 hear from the general public. No one on our
18 teleconference line, and I'll go to the Board staff.

19 MS. REBECCA CHOUINARD: Thank you, Mr.
20 Chair. It's Rebecca Chouinard, with Board staff. Just
21 one (1) question. Interested if you have any thoughts
22 on the water licence term and rationale?

23 MR. MATT HOOVER: Matt Hoover, North
24 Slave Metis Alliance. Thank you. I kind of forgot
25 about that. But I -- I agree what was -- with what was

1 suggested earlier by the DKFN, and Marc, in that it
2 would be -- although we don't know exactly how many
3 years specifically, we believe that it would be nice to
4 have it set in a way that it allows for review in a --
5 in a structured way related to the mine phases.

6 So whether that means slightly before
7 closure activities begin, we're far enough in advance
8 of closure activities that reviews could occur, and
9 adjustments could occur if necessary. I think that's a
10 reasonable timeline. Thank you.

11 DR. NEIL HUTCHINSON: Neil Hutchinson,
12 for the Board. Thank you for your presentation, and
13 you've raised some -- some interesting questions. Your
14 request that the -- the -- for additional research to
15 be conducted to demonstrate with certainty what effects
16 winter dis -- discharge may have downstream, I
17 understand you haven't seen the February 24th IR number
18 1, but in it, De Beers proposes to start the winter
19 pumping in November of this year.

20 Now, we can appreciate that this winter
21 is finally over, so there's very little opportunity to
22 do research between now and then. So I was wondering
23 if your intent when you made that statement was that De
24 Beers should do this research before any winter
25 pumping, or you could see it being done as part of the

1 Aquatic Effects Monitoring Program and the Adaptive
2 Management Program?

3 MR. MATT HOOVER: Matt Hoover, North
4 Slave Metis Alliance. Thank you. I think it's obvious
5 that any research should be done prior to potential
6 harm occurring. It seems extremely unlikely that this
7 is possible.

8 Ideally, De Beers would be able to
9 somehow gather information and prove that this is a
10 plan -- a discharge dewatering plan that would be able
11 to be implemented and monitored in a -- and to develop
12 a monitoring plan in advance of actually doing the
13 dewatering, and that's up to you -- you more technical
14 folks to determine the timelines and the research that
15 would be necessary to make that happen, I think. Thank
16 you.

17 THE CHAIRPERSON: Thank you. Further
18 from staff?

19 DR. NEIL HUTCHINSON: Again, Neil
20 Hutchinson, for the Board. No, thank you very much.
21 In -- in De Beers's IR number 1, they also talk about
22 developing indicator thresholds and where they would --
23 if -- if certain things happened, they would cease
24 pumping in the wintertime.

25 Do you think that these thresholds

1 should be developed and approved before any winter
2 pumping is approved, or -- or do we have to discuss
3 them at the time they occur?

4 MR. MATT HOOVER: Matt Hoover, North
5 Slave Metis Alliance. I think all thresholds of that
6 type should be developed before they could potentially
7 occur. Thank you.

8 DR. NEIL HUTCHINSON: Thank you.
9 That's all my questions.

10 THE CHAIRPERSON: Okay, thanks, Neil.
11 Any further questions from staff, legal? Then I will
12 go to the Board Members. Joseph...?

13 MR. JOE MACKENZIE: No question.
14 Joseph.

15 MR. FLOYD ADLEM: Floyd Adlem. No
16 questions.

17 MR. FRANK MCKAY: Frank McKay. I have
18 no questions.

19 THE CHAIRPERSON: So that wraps up the
20 question then for NSMA, and we -- we thank you for your
21 participation. We're coming down here to the end. For
22 the record, we'll ask if there's any -- anything to --
23 final words from registered speakers? Anybody on our
24 teleconference line that wishes to speak? Anyone from
25 the general public?

1 And with that, we will -- there's a
2 section here, Final questions for clarification from
3 the Board staff, technical advisors, or legal counsel
4 who can ask any of the parties that presented and
5 intervened, so we'll give them a five (5) minute break
6 to get their questions, so a fast coffee.

7

8 --- Upon recessing at 1:44 p.m.

9 --- Upon resuming at 1:52 p.m.

10

11 THE CHAIRPERSON: Okay. Thank you,
12 everyone, for your patience. Now we have some final
13 questions for clarification from the Board staff
14 technical and/or legal advisors.

15 DR. NEIL HUTCHINSON: Thank you, Mr.
16 Chair. Neil Hutchinson, for the Board. This is just a
17 follow-up to some information I had requested yesterday
18 of De Beers on -- if there's any data on bacterial
19 levels at Area 8 and Lake N11 from the baseline
20 studies.

21 MR. JOHN FAITHFUL: Mr. Chair, it's
22 John Faithful, Golder Associates. Dr. Hutchinson, in -
23 - as often as E. coli are often hard to find in the
24 environment, we're -- we're just trying to track down
25 the -- the sources of information that we have in our

1 database as well as the data that -- that De Beers have
2 in their database set for their rural -- rural drinking
3 water supply.

4 I did mention yesterday that E. coli in
5 itself is not -- is -- we don't typically sample it in
6 -- as -- on the baseline studies in the more -- more
7 recent programs, so we're having to -- to go back into
8 some of our earlier databases, and we'll -- we would
9 like to take that as an undertaking to provide that
10 information, Mr. Chair, and we will -- we can deliver a
11 response.

12 So I think that's Undertaking number 8.

13 THE CHAIRPERSON: John, did you want to
14 respond?

15 MR. JOHN FAITHFUL: Thank you.

16 MR. JOHN DONIHEE: Yes. Thank you, Mr.
17 Chairman. It's John Donihee, and that's Undertaking
18 number 8, and that'll be to provide the data that's
19 available to De Beers on E. coli.

20

21 --- UNDERTAKING NO. 8: De Beers Canada Inc. to
22 provide to the MVLWB any
23 available data that is
24 related to E. coli from
25 existing baseline studies

1 for Lake N11 and Area 8 by
2 May 15, 2014
3

4 THE CHAIRPERSON: Okay. Thank you for
5 that. And further from Board staff?

6 MS. LINDSEY CYMBALISTY: Lindsey
7 Cymbalisty, for Board staff. So what I've just been
8 kind of thinking about is, in the updated EQC report,
9 it seemed pretty clear that the assimilative capacity
10 of Area 8 is quite small, so discharge to that area
11 would be limited to year 1. I -- I think I understood
12 that correctly. But following that, that water from
13 Lake N11 could potentially still be drawn for flow
14 mitigation and pumped to Area 8.

15 So what I'm wondering is where is the
16 intake for that water in Lake 11 (sic) relative to the
17 discharge point to Lake 11 (sic) and the mixing zone,
18 if you can sort of see where I'm going here. I'm just
19 wondering if there's been any consideration of the
20 potential for -- for assimilation -- further reduction
21 of the assimilative capacity to -- in Area 8 based on
22 that additional input, albeit of -- of lower
23 concentrations?

24 THE CHAIRPERSON: Okay. Thank you for
25 that, Lindsey. Over to De Beers.

1

2

(BRIEF PAUSE)

3

4

MS. VERONICA CHISHOLM: Veronica

5

Chisholm, from De Beers. We would -- and correct me if

6

this will help or not. We'd be happy to provide you

7

with a map that shows exactly or precisely where we'd

8

be taking water from N11 and where -- which would be

9

outside any potential disturbance, and -- and where

10

exactly we would be taking the water over into Area 8.

11

If that would answer your question, we can provide that

12

map as a -- as an undertaking.

13

MS. LINDSEY CYMBALISTY: Lindsey

14

Cymbalisty, for the Board. So that -- and that would -

15

- that would be great.

16

That would definitely answer the

17

question, and that is -- hasn't been -- there's not

18

another map that shows that clearly that you could

19

reference already?

20

MS. VERONICA CHISHOLM: Veronica

21

Chisholm, from De Beers. There kind of is, but I think

22

we'll provide one (1) with a better scale, Lindsey --

23

Mr. Chair. We'll -- we'll provide one (1) that just

24

has a little bit of a better scale to it that shows

25

where our discharge point is and where we would taking

1 in water to help with the downstream flow mitigation,
2 and where the discharge point would be in Area 8.

3 THE CHAIRPERSON: Okay. Thank you for
4 that from De Beers. And, John, did you want to...

5 MR. JOHN DONIHEE: Yes, John Donihee.
6 Thank you, Mr. Chairman. That will be Undertaking
7 Number 9 to provide a map of appropriate scale to show
8 the discharge points and intake -- intake and discharge
9 points. All right. Thank you.

10

11 --- UNDERTAKING NO. 9: De Beers Canada Inc. to
12 provide to the MVLWB a map,
13 of appropriate scale, that
14 shows where the discharge
15 point and intake point are
16 in Lake N11 by May 15, 2014

17

18 DR. KATHY RACHER: Kathy Racher, for
19 the Board. I have two (2) questions. One (1) when --
20 after ENR presented, I -- I just went back through
21 their -- their intervention and the memo provided by
22 one (1) of their consultants at Stantec, where they
23 went through and -- and came up with a dilution factor
24 of six (6) for -- for Lake N11.

25 And in that memo attached to the ENR

1 intervention, it's very clearly laid out what the
2 assumptions were that the consultant made relative to
3 inflows to Lake N11 and inflows and outflows and
4 residence time, whatever, to come up with sort of a
5 dilution -- a rough dilution factor of six (6).

6 And I -- I realize that in the
7 assimilative model there were the mass balance
8 simulation that you provided in your EQC report in
9 Section 3.1.1. We'd -- I -- I don't have that
10 information of what your -- what your assumptions were
11 for inflows and -- and whatnot and how you came up with
12 those numbers.

13 Because the numbers that you kind of
14 came up with are -- are like a factor of two (2)
15 different than what the AANDC consult -- oh, I did it;
16 I was almost at the end of the hearing and I didn't
17 make the mistake -- of what the ENR consultant came up
18 with. I was so close. Anyway. So -- but I -- I'd
19 like to see that, because those numbers should have
20 been roughly equivalent and they were out by a factor
21 of two (2).

22 So could you provide, basically, more
23 information about how you came up with that -- that
24 graph that's in Figure 3.1-1, which is -- which shows
25 us steady-state concentrations predicted in Lake N11

1 over time?

2 THE CHAIRPERSON: Thank you for that,
3 Dr. Racher. Are you looking a undertaking? Because
4 you're going to smash all your records, you know that,
5 eh, on this one (1).

6 MR. JOHN FAITHFUL: Mr. Chair, it's
7 John Faithful. I'm going to try and not take any more
8 undertakings from Dr. Racher, but we'll -- we'll see
9 how this goes. Okay.

10 The -- the dilution ratio or the -- the
11 -- that Dr. Huebert came up with -- with in -- for
12 ENR's intervention did talk about a -- a six (6) fold
13 dilution, I think, from a steady-state condition in
14 Lake N11.

15 It's -- it's roughly appropriate. The -
16 - the values that -- that ENR provided were based on
17 some information we had provided at the technical
18 session that -- that basically summarized the -- the
19 water management pond discharge to Lake N11 being
20 roughly 4 million cubic metres -- I'm going to call
21 them million cubes, as I speak -- going into Lake N11
22 that roughly has a volume of 20 million cubes.

23 And so that's roughly a five (5) fold
24 dilution when you take into account that -- by -- that
25 -- that's at mass balance. And so that -- that

1 dilution of five (5) or six (6) is -- is relatively
2 appropriate. And -- and that is very similar to the
3 mass balance that we used for Lake N11 in our -- our
4 mass balance assessment that we -- that we considered
5 in the EIS.

6 With respect to the Figure 3.1-1, we --
7 we look at the proportion of effluent or the proportion
8 of the water management pond discharge in the area that
9 we assess for the EQCs and determine over the period of
10 time under the discharge that occurs over the three (3)
11 years of -- of operational discharge how much of that
12 discharge makes up the volume of Lake N11.

13 And in the figure, it -- it increases
14 with each ensuing period of -- of discharge during open
15 water. During winter, when you have ice development
16 and you have salt exclusion or under -- under the ice
17 you, then get a -- a reconcentration of that discharge
18 in -- in the lake. And it comes up with a -- a
19 proportion that we use in our EQC development.

20 And -- and the -- the piece that I guess
21 when we did a cross-check with -- with ENR's dilution
22 ratio, it was very apparent that they -- they don't
23 particularly match for the information that we've
24 provided in our EQC report compared to their dilution.
25 And the reason is quite simple: The area that we --

1 that we have focussed on, in terms of the EQC report
2 and the attenuation of the water management pond
3 effluent, is really just focussing on the southern
4 basin. And the southern basis dimensions, or
5 characteristics, are a little different to the whole
6 lake.

7 So where I said that the volume of Lake
8 N11 was 20 million cubes, the area that we've proposed
9 for our EQCs is 10 million cubes. So it's -- it's a
10 little bit more than that. It's roughly -- it's
11 roughly 55 percent of the overall volume.

12 The most important thing to also
13 consider is -- is how we can -- what -- how -- what the
14 difference in terms of water yield for those two (2)
15 areas are. And again, the volume of Lake N11 is 22
16 million cubes -- or it might be 18 million cubes. I --
17 I -- yeah, I think it was 18 million cubes. The water
18 yield is 22 million cubes. So that's the amount of
19 water that moves through Lake N11 on a given year. So
20 it roughly has a one (1) year retention time.

21 With respect to the southern basin, I
22 said it had 10 million cubes and it has a water yield
23 of roughly 8 or 9 million cubes. So it's a lot -- it's
24 a lot different. So the EQC deve -- development that
25 we use didn't take into account some of the -- the

1 additional attenuation capacity that the rest of the
2 lake offers.

3 And when we transfer our equations to do
4 that cross-check with -- with ENR's evaluation, the
5 numbers come out almost -- almost the same. There's
6 slight difference in the way it's -- it's derived, and
7 we also used slightly different numbers in terms of --
8 of the equation. But that -- that is where that
9 difference actually originates from. Thank you.

10 THE CHAIRPERSON: Thank you for that.
11 Further from Board staff?

12

13 (BRIEF PAUSE)

14

15 DR. KATHY RACHER: Kathy Racher, for
16 the Board. I just -- I think I need to follow up on --
17 on your explanation, which makes sense. So I'm just
18 wondering, in terms of calculating EQC, using the
19 methods that you used in the EQC report, so that --
20 that proportion of -- of Lake N11 that will -- will be
21 effluent, you're saying is -- is really just the south
22 basin. That proportion was used in the calculations of
23 -- it was 42 percent. And it pretty much drives the
24 EQC values, the -- the forty (40) full dilution that
25 you see from the diffuser itself really is immaterial

1 compared to that -- to the 42 percent in the -- in the
2 equations, as -- as far as I could tell.

3 So I'm just wondering why -- why you
4 used the 42 percent if -- like I'm not sure exactly,
5 are -- are the EQC calculations you did still
6 appropriate, given what we just discussed?

7 MR. JOHN FAITHFUL: John Faithful,
8 Golder Associates. I -- I'd like to just clarify, the
9 -- the forty-two (42) that -- that we saw referenced in
10 the -- in the ENR report doesn't -- it's not an -- an
11 absolute direct relationship to -- to the -- to the
12 overall dilution ratio in Lake N11.

13 What -- what that forty-two (42) --
14 sorry.

15 DR. KATHY RACHER: Sorry. Sorry, Mr.
16 Chair. I just realized it's unfortunate that there's a
17 forty (40) and a forty-two (42) in this conversation
18 and they're different numbers. So when I said 42
19 percent, I meant that maximum proportion in Figure 3.1-
20 1. That's using the equation. The forty (40) full
21 dilution from the diffuser is also using the equation.

22 So just when you're -- when you're
23 giving your answer, just make sure you differentiate.
24 It's unfortunate that they happen to be very close.

25 MR. JOHN FAITHFUL: Mr. Chair, it's

1 John Faithful. So what I'd like Dr. Racher to do,
2 would -- could she go back to her original question so
3 that I don't waste anymore time from -- of the Boards?
4 Thank you.

5 DR. KATHY RACHER: Kathy Racher, for
6 the Board. And -- and then forty-two (42) is also the
7 answer to the universe, which further confuses
8 everything.

9 So my question is, in -- in the
10 equations that you used for EQC there are two (2) --
11 the -- the dilution factor at the diffuser of forty
12 (40) is used. It's -- it's -- and -- and in your
13 equations and the EQC report, it -- it's represented by
14 the term 'DF', dilution factor.

15 The 42 percent, which is the maximum
16 predicted proportion of effluent in Lake N11, I -- I
17 think it's in the winter after year 3 of discharge, is
18 also used in the calculation, but in a different way.
19 It's -- it's used to -- to limit the available dilution
20 volume in Lake N11, which -- which was a conservative
21 thing to do. And so I'm saying that 42 percent, which
22 is the assimilative capacity number, drives the EQC
23 values that you get in those equations. That other
24 dilution factor is pretty immaterial.

25 So I'm just wondering, based on what

1 you've just said about not using the full assimilative
2 capacity of the Lake N11, if your EQC calculations --
3 you -- you stand by them with that -- using that 42
4 percent? That was still the appropriate thing to do?

5 MR. JOHN FAITHFUL: Mr. Chair, it's
6 John Faithful. Thank you for -- for that
7 clarification, Dr. Racher. So the -- you're right, the
8 assimilative capacity of Lake N11 does increase
9 markedly with the -- with the inclusion of all of Lake
10 N11. I think the -- the maximum proportion ends up on
11 -- on a rough estimate of -- of around 20 percent with
12 inclusion of that northern part.

13 I think with -- with respect to -- to
14 the EQC development, although we've been relatively
15 conservative in just applying the -- the south basin to
16 the EQC development, I think that they -- some
17 questions were raised yesterday about the -- the
18 appropriateness of -- of, say, ammonia or nitrate EQCs
19 that were developed, and -- and I think that would --
20 we're still providing a response in terms of the
21 undertaking on that -- on that regard.

22 I think where we -- where we currently
23 stood at that point in time, in submitting the EQC
24 report, we get -- we get very -- we're very close with
25 respect to the AML and DML for nitrate, based on our --

1 our assumptions of the -- the nitrate sourcing in -- in
2 the southern basin, and the -- the additional
3 attenuation in the north with the -- with the whole of
4 Lake N11 would provide some flexibility on -- on that -
5 - on that proposed AML/DML for nitrate. Thank you.

6 DR. KATHY RACHER: Kathy Racher, for
7 the Board. Okay, thank you. I think I -- I think I've
8 got it now.

9 And so I have one final question,
10 because I just want to hold everyone hostage here at
11 the hearing. I -- that's what I feel like. And it was
12 -- it just made me -- the -- the presentation by the
13 NSMA made me think of this question.

14 The -- the representative of the NSMA
15 said they hadn't had a -- a chance to -- to look at IR
16 1 -- IR Response 1 from February 24th regarding winter
17 discharges, so they -- they had some outstanding
18 concerns, but I can see from what you've submitted that
19 you're pretty keen on winter discharge starting in
20 November, according to the schedule in IR 1.

21 And -- and we brought up earlier how
22 there's a lot of plans that need to be approved before
23 you can start, right? It's like in the order of eight
24 (8) or nine (9) plans, it looks like. And so the --
25 the development of thresholds and a monitoring plan, et

1 cetera, we -- we can put that in the licence for the
2 con -- a Construction Water Management Plan, but then
3 getting it approved, and -- and for everyone to see it
4 is another story, and we want, you know, to get that
5 done as soon as possible.

6 My question is, you know, in the time
7 bet -- while we're drafting the licence and then we're
8 sending it to the minister, I mean, you've heard from
9 the parties. Are you, this summer, before your licence
10 is issued, are you going to be out there talking about
11 these plans, and engaging with people on these plans so
12 that there's a chance that they can be approved rapidly
13 after water licence issuance? What's your plan for
14 this summer?

15 MS. VERONICA CHISHOLM: Veronica
16 Chisholm, with De Beers. That's absolutely our plan.
17 We will be developing those plans pretty quickly, and
18 finalizing them. I think that a number of the plans
19 are -- are pretty close. We have some -- a few
20 outstanding items in those plans, but -- and some
21 clarification, but some are -- are -- we're certainly
22 within the 80/85 percent.

23 And that it -- it will be our intention
24 to engage parties on those plans as they get finalized
25 so that we can submit them to the Board. I assume that

1 we can submit them to the Board at any point in time,
2 and I'm not entirely sure when the clock starts to tick
3 in terms of days for approval, if that -- if that can
4 happen when the -- the draft water licence is issued to
5 the minister, if it can happen beforehand, I don't
6 know.

7 But our intention from our point of view
8 would be to engage parties as we develop each of the
9 plans, to circulate those plans, and to -- to seek
10 input and finalize those plans as quickly as possible.

11 THE CHAIRPERSON: Thank you, De Beers.
12 Further from Board staff?

13 MR. ZABEY NEVITT: Thank you. Zabey
14 Nevitt, with the Board. As you may recall, at the
15 technical session we had some discussion on the -- the
16 forward-looking engagement plan that was put forward in
17 the application documents that came in, in November.
18 And there was some comments brought up about the -- at
19 the time, the eight (8) bullet points that were listed
20 there as the go-forward plan.

21 One (1) of the commitments that came out
22 of that was a commitment to update the engagement plan.
23 Not being such an expert undertaker-getter as Dr.
24 Racher, I didn't manage to get the commitment of a date
25 on that, as well. So at this time, we don't have one.

1 All three (3) of the Aboriginal groups
2 that presented today presented the importance of
3 ongoing engagement through the life of the project.
4 And in issuing any permit or licence, the Board needs
5 to be satisfied that not only has engagement happened,
6 that needs to have happened but on a go-forward basis
7 there will be engagement that will car -- be carried
8 out in a meaningful way through the life of the
9 project. To -- to quote a former Chief talking about a
10 mine at some point, he -- he talked about how there was
11 once a time when we were offered lobster, and now we're
12 lucky to get Tim Hortons sandwiches.

13 So you've spoken a lot during this --
14 this hearing about a variety of different forums: the
15 Ni Yati Hadi -- Ni Hadi Yati, the working groups that
16 were being formed for the AEMP and for the closure, and
17 then some other mechanisms as well.

18 I guess what I'm looking for is can De
19 Beers provide for the Board -- and I would probably
20 request this as an undertaking -- a summary which will
21 flesh out in some more detail -- I recognize that an
22 engagement plan is coming forward, so I don't know the
23 current status of that.

24 But can De Beers commit to providing to
25 the Board a summary of the ongoing engagement

1 practices, some of which may have been fleshed out in
2 these terms of reference, and some of the other
3 proposals so the Board can see as they consider the
4 approval of the licence the sort of more full suite of
5 the -- the proposed engagement practices for the
6 ongoing operations during the mine?

7 MS. VERONICA CHISHOLM: Veronica
8 Chisholm, from De Beers. Yeah, we can certainly take
9 that on as an undertaking. And certainly at least we
10 can forecast where we are today, recognizing that --
11 and this is how De Beers has always responded in terms
12 of engagement; as issues arise, we development
13 engagement around those, or as concerns are
14 communicated to us we development engagement -- or
15 specific engagement around those, so some may be
16 difficult to predict.

17 But certainly we can provide a summary
18 as -- as for the commitments that we've made to date
19 regarding engagement and -- and carry that forward. So
20 that's a pretty long undertaking, but I'm sure you can
21 capture that. Thank you.

22 THE CHAIRPERSON: Okay. Thank you for
23 that. John, do you have some -- number 10, some
24 wording?

25 MR. ZABEY NEVITT: Okay, well, what

1 you've written down there. Zabey Nevitt, with the
2 Board. A description of proposed engagement going
3 forward over the course of the -- of the mine project.
4 And just to comment on that, of course, you deal with
5 engagement pra -- as issues come up, but it's always
6 good to have a plan of what you'll do when something
7 comes up. It's -- it's having a process in place so
8 that if something sudden does appear, you know what
9 you'll probably do there.

10 And just for the record, that's my first
11 engage -- undertaking.

12

13 --- UNDERTAKING NO. 10: De Beers Canada Inc. to
14 provide to the MVLWB an
15 update on proposed forward
16 looking Engagement
17 activities, with a
18 description of current and
19 future plans by May 15,
20 2014

21

22 THE CHAIRPERSON: Okay. Thank you,
23 Zabey. Is there further from De Beers?

24 MS. VERONICA CHISHOLM: Veronica
25 Chisholm, from De Beers. No, that's fine. We'll take

1 that on as -- as undertaking.

2 THE CHAIRPERSON: Great. Thank you.

3 So further from Board staff, legal, technical? Okay,
4 well, that brings that final question for -- questions
5 for clarification to an end then. So now we're looking
6 for closing remarks from registered Intervenor, and
7 starting with GNWT-ENR.

8

9 (BRIEF PAUSE)

10

11 CLOSING COMMENTS BY GNWT-ENR:

12 MR. ROBERT JENKINS: Thank you, Mr.
13 Chair. It's Robert Jenkins, with ENR. ENR thanks the
14 Board for the opportunity to present its review and its
15 recommendations on the Gahcho Kue project. Our review
16 and the recommendations we've provided are made to
17 ensure that the project is conducted in an
18 environmentally responsible and sustainable manner.
19 ENR would like to thank all Intervenor for their
20 active participation within this process. We would
21 like to thank De Beers for their continued willingness
22 to work through issues, and to make improvements to the
23 project.

24 Lastly, ENR would like to thank the
25 Chair, Board members, Board staff and counsel, and

1 support staff for conducting a fair and thorough public
2 hearing over the past several days. We look forward to
3 reviewing the final draft of the water licence, and
4 providing our written closing statements to the Board
5 on this application. Thank you, Mr. Chair.

6 THE CHAIRPERSON: And thank you,
7 Robert. So next up is Environment Canada.

8

9 CLOSING COMMENTS BY ENVIRONMENT CANADA:

10 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey
11 McMillan, with Environment Canada. I'll keep it quite
12 simple. Environment Canada would like to thank the
13 Board, staff, Intervenors and De Beers for their
14 valuable participation in this process. We look
15 forward to participating in the next phase of the
16 regulatory review, and we hope that the technical
17 comments and recommendations presented today were
18 useful to the Board in their decision-making process.

19 THE CHAIRPERSON: Okay. Great. Thank
20 you. Next would be DKFN.

21

22 (BRIEF PAUSE)

23

24 CLOSING COMMENTS BY DENINU K'UE FIRST NATION:

25 MR. MARC D'ENTREMONT: Thank you, Mr.

1 Chair. Marc d'Entremont, for the DKFN. So just in
2 closing, we'd like to acknowledge the -- the good work
3 that's been conducted to date on -- to get this project
4 to where it's currently at, to this permitting stage,
5 although we'd also like to acknowledge that we believe
6 there's still much work to be done.

7 And then kind of going forward at the
8 conclusion of this process, I guess De Beers will have
9 its permits and move to the next stages of construction
10 and operation, and we have to believe and trust them
11 that they will be good stewards of the land.

12 And I just want to make a -- a comment
13 that -- kind of one (1) of the -- the words that sticks
14 in my mind that has come up from a number of
15 discussions over the last couple days is 'clarity'. So
16 with that, we're here to ensure that the water licence
17 and land use permit provide the clarity, the guidance,
18 and the conditions that will enable De Beers to -- to
19 comply with the proactive measures so that the
20 environment is not altered beyond unacceptable levels.

21 So again, in closing with that, I'd like
22 to thank the Mackenzie Valley -- Valley Land and Water
23 Board, De Beers, and all the Intervenorors for the
24 discussion, questions, and comments that we've had over
25 the last two (2) days. Thank you.

1 THE CHAIRPERSON: Okay. Thank you for
2 those closing remarks, and now we'll go to the
3 Yellowknives Dene First Nation.

4

5 CLOSING COMMENTS BY YELLOWKNIVES DENE FIRST NATION:

6 MR. TODD SLACK: Thank you, Mr. Chair.
7 Todd Slack, on behalf of the Yellowknives. We'd like
8 to thank the Board, the -- and the staff, and the
9 project for -- for this hearing. It's good to get
10 these concerns on the record and out in the open.

11 And I just want to close by saying, you
12 know, often we're viewed as giving industry a hard
13 time. You know, we want this project to be successful.
14 At this point, there's no turning back. It -- they've
15 got to make money, otherwise we know what happens.
16 We've got -- we can look across the bay, we can look
17 over at Nunavut at the Tahera Project, the -- the
18 Redfern Resources Project in Northern BC.

19 If they don't make money, it's bad for
20 the environment. No one wants to see that happen.
21 However, how they make their money, well, that's the
22 frame that we're setting up right here. That is
23 dependent on regulations. We're -- the Yellowknives
24 are appreciative of the commitments. That counts for
25 something, but in the end, it comes down -- it can come

1 down to a question of profit versus the environment.

2 And we don't -- the Yellowknives don't
3 ever want to see that choice be available to the
4 Company. The highest level of environmental
5 stewardship must be the principle core value here, and
6 for that, regulations are essential.

7 Lastly, the Yellowknives would ask the
8 Board for a number of things -- or a num -- for its
9 help in pursuing a number of matters that may be
10 outside its mandate, and these -- these are the
11 measures that are found within the EIS.

12 Mr. Chair, we didn't go through that
13 years' long process just to see this stuff not happen.
14 These are critical mitigations that are necessary that
15 must be in place to avoid the significant impacts that
16 they saw.

17 Now, we understand that you can't make
18 that happen, but anything you can do to help it happen
19 would be much appreciated. Thanks very much.

20 THE CHAIRPERSON: And thank you to the
21 Yellowknife Dene First Nation, and up next is the -- is
22 NSMA.

23

24 CLOSING COMMENTS BY NORTH SLAVE METIS ALLIANCE:

25 MR. MATT HOOVER: Thank you, Mr. Chair.

1 Matt Hoover, North Slave Metis Alliance. Thank you,
2 Mr. Chair, the Board, and De Beers for allowing the
3 NSMA to voice our concerns in regard to the proposed
4 Gahcho Kue Mine.

5 We, the NSMA, look forward to continuing
6 to participate in this process in order to achieve an
7 end result that is a economically successful and
8 environmentally sustainable mine operation. Thank you
9 again.

10 THE CHAIRPERSON: Thank you for that.
11 So now we'll ask for any registered speakers for the
12 record? Is there any people on our teleconferencing
13 line? Anyone from the general public? If not, then
14 we'll go to any closing remarks from the Board staff,
15 technical, or legal. Thank you, then we will go to De
16 Beers for some closing remarks.

17 MS. VERONICA CHISHOLM: Veronica
18 Chisholm, from De Beers. Glen Koropchuk, our chief
19 operating officer, will provide our closing remarks.

20

21 CLOSING COMMENTS BY DE BEERS CANADA INC.:

22 MR. GLEN KOROPCHUK: Glen Koropchuk, De
23 Beers. Mr. Chairman, we'd like to begin these closing
24 remarks by thanking you, your fellow Board Members, the
25 Board staff, and other people that were involved for

1 running a very fair, efficient, and transparent
2 permitting process. We would also like to thank all
3 the parties who participated in the process for all of
4 their efforts that they made in order for this process
5 to be successful.

6 De Beers acknowledges that through the
7 participation of all the parties, licence and permit
8 conditions will be arrived at that will enhance the
9 sustainability of the Gahcho Kue Project.

10 Mr. Chairman, although we are near the
11 conclusion of this permitting hearing process, we are
12 still in the very early stages of this project. We
13 look forward to working with this Board and all other
14 stakeholders as we advance this project.

15 I can confirm that on or before May 9th,
16 we will file with the Board our enhanced plan for
17 identifying and managing the potentially acid-
18 generating rock in a safe, responsible, and
19 environmentally sound manner. In addition, by May
20 15th, we will file all of our responses to the
21 remaining ten (10) undertakings, I believe, given by De
22 Beers during the course of this hearing. Is that
23 confirmed number?

24 MR. JOHN DONIHEE: They weren't all
25 yours, but --

1 MR. GLEN KOROPCHUK: Okay. Thank you.
2 One (1) of these undertaking responses will set out in
3 detail for the Board the critical path that De Beers is
4 pursuing, and when management plans need to be in place
5 to facilitate the development of this project, and
6 ensure value is not eroded. I confirm that we will
7 file -- finalize the development of these plans, and a
8 stakeholder engagement program so that they can be
9 considered timeously and approved efficiently.

10 This will clarify when certain steps
11 must be taken so that De Beers and its partner,
12 Mountain Province Diamonds, can make final investment
13 decisions and proceed with the economic and technically
14 feasible development of the Gahcho Kue Project.

15 The people of the Northwest Territories
16 will derive significant economic benefits as a result
17 of the timely construction and operation of the Gahcho
18 Kue Mine. We know that that is something that people
19 are looking forward to. We've heard some positive
20 comments from various stakeholders, but we are
21 committed to doing it right.

22 De Beers appreciates the efforts that
23 the Board and its staff have made, and are continuing
24 to make, to advance this permitting process. We will
25 continue to work with the Board and all other

1 stakeholders to facilitate the preparation of a land
2 use permit and a water licence that are both protective
3 of the environment and are consistent with operational
4 requirements and an appropriate development schedule.

5 Mr. Chairman, in closing, we again thank
6 the Board, its staff, and all the participants in this
7 process for making it successful, efficient,
8 transparent, and the best process that we can do in
9 this type of an environment. It's very important, and
10 we appreciate it. Thank you.

11 THE CHAIRPERSON: And thank you to De
12 Beers, and thank you all for your closing remarks. On
13 behalf of the Board, I'd like to thank all of you for
14 participating in this Type A water licence hearing.
15 The Board does -- does appreciate all the efforts made
16 by De Beers Canada Inc., the Intervenor, and the
17 participants to prepare the application and all the
18 evidence provided to help us make a water licencing
19 decision.

20 We must remind everyone that there's
21 still a lot of work to be completed before a water
22 licence can go to the Minister of Environment and --
23 and Natural Resources. We ask you all to be diligent
24 in reviewing the record, commenting on the draft
25 licence, and assisting the Board to make a good

1 decision.

2 And for the record, I'll pass it over to
3 legal counsel, John Donihee, for further information on
4 closing comments and a review of the undertakings that
5 have come out of the hearing. This will be for the
6 record.

7

8 (BRIEF PAUSE)

9

10 MR. JOHN DONIHEE: Mr. -- Mr. Chairman,
11 it's John Donihee. The -- with the exception of the
12 one (1) undertaking that was mentioned at the De Beers
13 closing that's due on May the 9th, the rest are all due
14 on the -- the date that's set out in the work plan,
15 which is May the 15th, and so I -- I'm not sure if you
16 -- your -- you would prefer me to read them the into
17 the record. They're -- they're all -- they're all on
18 the transcripts, as well.

19 And what we will do is prepare the list,
20 and we can put the list up on the website for everyone
21 to double check against the actual language of the
22 undertaking so that there's no missed steps. Perhaps
23 that's the most efficient way to approach that, sir.

24 THE CHAIRPERSON: Yeah, I see I -- I
25 have the nod from the ED, so we'll go the efficient

1 way. Okay, then thank you for that, John, and your --
2 and De Beers, would you like to confirm again for the
3 record that you're comfortable with these undertakings
4 and with the May 15th submission date -- May 15th
5 submission date?

6 MS. VERONICA CHISHOLM: Veronica
7 Chisholm, with De Beers. Yes, we're comfortable with
8 the Thursday, May 15, 2014, submission date. Thank
9 you.

10 THE CHAIRPERSON: Okay. Thank you both
11 for that. And as you know, this is an application for
12 a Type A water licence, that the final decision is made
13 by the Minister of ENR-GNWT, and the -- this will
14 actually be the very first actual water licence. I
15 believe the rest of them were -- they were amendments,
16 so that's very -- that's historic for the Northwest
17 Territories, also.

18 Well, I can't say how -- what he's going
19 to do with it, but anyway, the work plan for this
20 proceedings -- the work plan for these proceedings were
21 -- was distributed to all parties and is available on
22 the public registry or from Board staff. The work plan
23 outlines important dates for the remainder of this
24 proceeding.

25 In summary, transcripts and undertakings

1 will be filed, and a draft water licence will be
2 circulated for review, and closing arguments will be
3 submitted to the Board by June 24th, 2014. For the
4 review, the -- the Board will review the rec -- record
5 and will make a decision on the final water licence,
6 and the reasons for decisions will be sent to the
7 minister of ENR for his decision. All parties will be
8 provided with a copy of the draft licence and the
9 Board's reasons at that time.

10 In closing, we'd like to thank all of
11 the presenters and the participants. We'd also like to
12 thank our interpreters, Ann Biscaye and Mary Rose
13 Sundberg, for their patience for people like myself who
14 talk too fast, and they still have to figure what we're
15 saying. And I'm...

16

17 (BRIEF PAUSE)

18

19 THE CHAIRPERSON: We have a backup
20 here. We always have a plan.

21 So let's see, now that you've thrown me
22 off key here, where am I? Yes, the -- yeah, I'd like
23 thank Pido, yeah, for their -- and -- yeah. So -- no,
24 they do a great job, but occasionally -- this is one
25 (1) of the few times. We've used them for years, so

1 no, a couple of complaints, but not many.

2 And so thank you again to Ann Biscaye
3 and Mary Rose Sundberg for their patience and hard work
4 in the translating, and I'm hoping Ann -- Ann Biscaye
5 will do the closing prayer. As you opened, it would be
6 fitting for you to close it, and I would also like to
7 thank our court transcriber, Bob, and the Pido
8 technician, Cory. All your work for the hearing is
9 much appreciated.

10 And of course, as always, thanks to our
11 staff, our technical people, consultants, legal
12 counsel, and all -- and all of you for your respect and
13 courtesy, your -- and respect you have shown for each
14 other. And in particular, I'd like to thank the Board,
15 of course, for their dedication and hard work. That
16 makes everybody's job, and -- and particularly mine,
17 and it's hard to make me look good, and my staff that
18 seem to be able to do that.

19 So thank you all, and we'll adjourn, and
20 if Ann Biscaye could give us a closing prayer, it would
21 be much appreciated.

22 MS. ANN BISCAE: Thank you very much
23 for asking me to do the closing prayer again. We had a
24 -- a good meeting here, understanding each other, and
25 hopefully, we understand each other enough so that we

1 can come to some kind of conclusion that everybody is
2 happy with, with the decisions that they have been
3 making here so far.

4 So with that, I'd like to do the Lord's
5 Prayer in the -- the language, and I'm still a Elder-
6 in-training, so I'm still impatient, so I'm not going
7 to take half an hour like the old timers do. So I --
8 so with that, I'll make it short and simple.

9

10 (CLOSING PRAYER)

11

12 --- Upon adjourning at 2:36 p.m.

13

14

15 Certified correct,

16

17

18 _____

19 Bob Keelaghan, Mr.

20

21

22

23

24

25

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