



MACKENZIE VALLEY ENVIRONMENTAL

IMPACT AND REVIEW BOARD

PUBLIC HEARING

SNAP LAKE DIAMOND MINE AMENDMENT PROJECT

EA1314-02

Mackenzie Valley Review Panel:

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HELD AT:

Explorer Hotel

Yellowknife, NT

June 6, 2014

Day 2 of 2

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1 --- Upon commencing at 9:02 a.m.

2

3 THE CHAIRPERSON: Good morning,
4 everyone. If we could ask everyone to go back to their
5 seats so we could start today's hearings.

6

7 (BRIEF PAUSE)

8

9 THE CHAIRPERSON: We'll reconvene this
10 morning's meeting, and this morning we'll start with a
11 presentation.

12 And the Government of the Northwest
13 Territories, if you could start your presentation,
14 please.

15

16 PRESENTATION BY GNWT:

17 MR. ROBERT JENKINS: Good morning,
18 Madam Chair. My name is Robert Jenkins. I'm the
19 director of Water Resources with the Government of the
20 Northwest Territories, the Department of Environment
21 and Natural Resources. With me on the panel today I
22 have to my left Mr. Paul Green. He's a regulatory and
23 science advisor with the Water Resources Division. To
24 my right I have Mr. Sean Whitaker. He is a mining
25 specialist with the Environment Division.

1 At the table behind me we've got some --
2 some people who will help us later field any questions
3 that might come up. We've got Mr. Don MacDonald and
4 Mr. Jesse Sinclair from -- from MacDonald Environmental
5 Services Limited. We've got Mr. Rick Walbourne. He's
6 also a regulatory and science advisor with the Water
7 Resources Division of ENR. Today we're here to present
8 the Government of the Northwest Territories's technical
9 report and recommendations for this EA associated with
10 the Snap Lake Diamond Project.

11 Before I begin, it's important to note
12 for the Board that this is the first public hearing
13 associated with an environmental assessment since
14 Aboriginal Affairs and Northern Development Canada
15 transferred its responsibilities for land water
16 management to the Government of the Northwest
17 Territories. And -- and I think that most of, if not
18 all, of us would know that that happened on April 1st
19 of this year.

20 The Minister of Lands is now responsible
21 for the approval of reports of environmental assessment
22 associated with activities such as the Snap Lake
23 Project that are located on lands that have been
24 transferred through the devolution final agreement.

25 So, Madam Chair, just a first -- first

1 I'll just do a brief presentation overview. The GNWT's
2 intervention focussed on the following areas: water
3 management in the NWT and the importance of water
4 quality to the people of the Northwest Territories;
5 historical and current conditions in Snap Lake;
6 potential future conditions in Snap Lake; site-specific
7 water quality objectives, I'll talk -- I'll reference
8 them as SSWQOs today and their -- their derivation for
9 Snap Lake and the Lockhart system; and the importance
10 of protecting traditional use in the Snap -- Lockhart
11 system

12 So today we'll present the Board the
13 results of our review and any recommendations that we -
14 - that we feel in our opinion should be applied to the
15 Snap Lake project as it -- as it proceeds.

16 The scope of this environmental
17 assessment is narrow and deals with water quality
18 issues related to increases in total dissolved solids,
19 or TDS, and its constituents in Snap Lake. The
20 evidence and the recommendations presented today by
21 Environment and Natural Resources are made on behalf of
22 the Government of Northwest Territories as a whole.

23 Madam Chair, water management and the
24 protection of water quality have been identified as
25 significant concerns by the people of the Northwest

1 Territories. These concerns are captured in the goals
2 of the Northwest Territories water storage strategy.
3 As noted by Minister Miltenberger in his recent
4 statements before the legislative assembly:

5 "The principles and visions of the
6 NWT water storage strategy continue
7 to guide the GNWT's actions post-
8 devolution to ensure conservation of
9 this valuable resource."

10 One (1) of the goals of the water
11 strategy is that waters that flow into, within, or
12 through the NWT are substantially unaltered in water
13 quality, quantity, and rates of flow. This speaks to
14 the principles of non-degradation, or put another way,
15 keeping clean water clean.

16 This principle is consistent with
17 guidance provided by the Canadian Council of Ministers
18 of the environment which states, and I quote:

19 "For waters of superior quality or
20 that support valuable biological
21 resources, the CCME non-degradation
22 policy states that the degradation of
23 the existing water quality should
24 always be avoided."

25 Further statements by industry, such as

1 those on the De Beers group website, note that:

2 "While mining has an impact on the
3 environment, through careful planning
4 and consultation with all of our
5 stakeholders we aim to minimize any
6 environmental disturbance by our
7 exploration and mining activities."

8 What all these statements mean to -- to
9 the GNWT is that society places a value on minimizing
10 changes and, therefore, impacts to the environment,
11 including to water quality and the aquatic environment.

12 This brings us to the focus of the
13 current environmental assessment. De Beers has
14 encountered higher than anticipated inflows of connate
15 groundwater, which means that concentrations of TDS in
16 Snap Lake are predicted to exceed levels set during the
17 original EA. Therefore, the Board is in the unusual
18 situation of reopening a previous decision to further
19 assessment and considering the effects of change in the
20 context of an already altered condition.

21 The level of change being contemplated
22 in this assessment is higher than that at other
23 development projects in the NWT. This EA and the
24 decisions made within it are specific to Snap Lake, and
25 the GNWT does not feel that decisions made within the

1 context of this environmental assessment should be
2 generically applied across projects in the NWT.

3 That leads to our first recommendation.
4 And that is that the Review Board include a specific
5 statement in the report of environmental assessment
6 that the conclusions and measures that result from this
7 environmental assessment are specific to Snap Lake Mine
8 and Snap Lake.

9 Madam Chair, for the purposes of
10 evaluating impacts, it is important to understand the
11 conditions that existed in Snap Lake prior to the
12 development. Baseline data collected for the original
13 environmental assessment characterized Snap Lake as a
14 relatively clear, soft water lake, with a neutral to
15 slightly acidic pH. Nutrient concentrations in Snap
16 Lake were moderately low. And based on total
17 phosphorous conditions, the trophic status of Snap Lake
18 was considered to be in the upper oligotrophic to lower
19 mesotrophic, so low to moderate nutrient inputs range.

20 The water quality was good. The TDS at
21 around 10 to 15 milligrams per litre, chloride less
22 than 1 milligram per litre, and nitrates at around .04
23 milligrams per litre. An important point to note in
24 light of the current discussion is that the ionic
25 composition was dominated by carbonate and sulphate.

1 GNWT knows that the ionic composition in Snap Lake is
2 now dominated by calcium and chloride.

3 The original EA for the Snap Lake
4 diamond project accepted that some level of change
5 would occur as a result of the mine. A key point of
6 disagreement was the prediction regarding the volume of
7 inflow to the mine underground. Several Intervenor
8 stated concerns that the volume of connate groundwater
9 flowing into the underground would be higher than
10 predicted, which would result in higher TDS
11 concentrations. De Beers stood by their predictions
12 regarding inflow volumes and the resulting impacts to
13 Snap Lake. The Review Board noted this area of
14 disagreement, and responded by including a measure
15 limiting the TDS concentration in Snap Lake to 350
16 milligrams per litre as a whole lake average.

17 Madam Chair, in summary, the predicted
18 concentrations in Snap Lake for TDS and chloride
19 provided during the previous EA were as follows. For
20 TDS, a whole lake average of 330 milligrams per litre.
21 The Review Board limit of 350 milligrams per litre
22 provided some allowance for under prediction. A peak
23 TDS concentration of 450 milligrams per litre would
24 occur, but this peak would be limited to an area within
25 250 metres of the diffuser, so within the initial

1 mixing zone, 1 percent to Snap Lake.

2 The maximum whole lake average chloride
3 concentration would reach 137 milligrams per litre.

4 Current TDS concentrations in Snap Lake, using data
5 from 2012 and '13 Aquatic Effects Monitoring Program,
6 is 212 milligrams per litre whole lake average.

7 The ionic composition in Snap Lake has
8 become calcium and chloride dominated. Effluent has
9 been detected at a point 11 kilometres downstream of
10 Snap Lake, 5 kilometres into Lac Capot Blanc, and an
11 increasing TDS trend has been identified in King Lake,
12 which is 25 kilometres downstream of Snap Lake.

13 Moving now to the potential future
14 condition in Snap Lake, which is the topic of this
15 assessment. Some uncertainty remains in the model
16 provided by De Beers and the expected mine water inflow
17 is expected to range between 66,000 and 90,000 cubic
18 metres per day. In simi -- and I guess I just want to
19 explain that the 1 cubic metre per day equals a
20 thousand litres.

21 To illustrate the worst-case scenario,
22 the GNWT has used the 90,000 cubic metre per day case
23 in our assessment. Based on estimates, effluent TDS
24 concentrations could reach approximately 1,700
25 milligrams per litre. Snap Lake's similar capacity

1 would be almost entirely consumed. And Snap Lake was -
2 - consists of approximately nine (9) parts effluent to
3 one (1) part natural water. The relative ionic
4 composition would remain chloride and calcium
5 dominated, chloride making up approximately 47 percent,
6 and calcium making up approximately 28 percent.

7 So these pie charts show the difference
8 in the ionic composition of Snap Lake water from pre-
9 mining to present, and also future conditions. It's
10 important to note De Beers has indicated that the
11 relative proportions of ions in the groundwater inflows
12 are expected to remain relatively stable through time.
13 Therefore, the future ionic composition of Snap Lake
14 will be much the same as present, however, the actual
15 concentrations of the constituents will increase with
16 time.

17 In our technical report, the GNWT also
18 conducted an assessment of verse -- reversibility of
19 the change, how long it will take before con --
20 concentrations in Snap Lake return to pre-mining
21 conditions. In our assessment, we used a water
22 replacement or retention time of thirteen (13) years,
23 which was the value used during the original EA and
24 confirmed by De Beers in their response to
25 interventions.

1 Using this value, along with the
2 assumption that the concentration of TDS would be cut
3 in half every thirteen (13) years, GNWT estimates it
4 would take approximately ninety (90) years for Snap
5 Lake to return to pre-mining levels of TDS from a high
6 of 1,700 milligrams per litre.

7 In their response to interventions, De
8 Beers provided an alternate evaluation, which provides
9 a shorter estimate of reversibility. Between the GNWT
10 and De Beers's models, the differences in the time
11 predictions are more pronounced in the earlier years,
12 and the time predicted to return to background
13 concentrations from 1,700 milligrams per litre are
14 similar for both methods. At any rate, at that level
15 it will take several generations before concentrations
16 in Snap Lake return to background levels.

17 With regards to the spatial extent of
18 the effects, predictions for the unmitigated case
19 suggest that measurable changes in TDS will occur to a
20 distance of at least 65 kilometres downstream of Snap
21 Lake. Predictions also indicate that water in -- in
22 Lac Capot Blanc, located 11 kilometres downstream of La
23 -- Snap Lake, will exceed the drinking water aesthetic
24 objectives for TDS and chloride.

25 It is important to note that although

1 these objectives are aesthetic, or related to taste
2 rather than health guidelines, poor taste of the water
3 could potentially affect traditional use, as indicated
4 by some of the other parties to this EA.

5 While De Beers has referenced taste
6 ratings for TDS in water such as good for less than 600
7 milligrams per litre TDS and excellent for water less
8 than 300 milligrams per litre TDS, it's important to
9 keep in mind the composition of the waters that were
10 used to generate these ratings. The test waters did --
11 did not use mixtures dominated by chlorides, so the
12 applicability of the ratings is not clear. Further, it
13 should be -- also be noted that there is a separate
14 taste threshold for chloride which also needs to be
15 considered.

16 Madam Chair, this slide simply serves to
17 place the location of Snap Lake compared to the
18 immediate downstream lakes, including Lac Capot Blanc.
19 As mentioned previously, predictions under the
20 unmitigated case suggest that measurable changes in TDS
21 will occur to a distance of at least 65 kilometres
22 downstream of Snap Lake. Predictions also indicate
23 that water in Lac Capot Blanc, located 11 kilometres
24 downstream of Snap Lake, will exceed the drinking water
25 aesthetic objectives for TDS and chloride.

1 Madam Chair, the GNWT notes that De
2 Beers has discussed mitigations that would limit the
3 TDS concentration in Snap Lake, but has yet to provide
4 a clear mitigation strategy. De Beers maintains that
5 in order to maintain a TDS concentration of 684
6 milligrams per litre and to not reach 1,700 milligrams
7 per litre, mitigation must be imposed. The GNWT
8 believes that the absence of mitigations at Snap Lake
9 Mine would represent a worst-case scenario for this
10 impact assessment.

11 Additionally, the GNWT also has concern
12 with the use of hardness to increase the limits of
13 other contaminants in the effluent stream. The effects
14 of elevated hardness and an accelerated shift from soft
15 to hard water conditions on the aquatic ecosystem as a
16 whole is not well understood. Further, the GNWT is
17 concerned that the buffering effect of hardness could
18 be reduced as hardness concentrations drop during the
19 recovery of Snap Lake post-closure.

20 The reduction of hardness is uncertain.
21 If it is not proportionate to reduce -- reductions in
22 metal and nutrient concentrations over time, it could
23 result in adverse conditions within the lake many years
24 after the mine closes. For this reason, specific
25 attention should be given to the reduction of hardness

1 and other contaminants, such as metals and nutrients,
2 when deciding on the potential significance of the
3 proposed effluent concentration increases.

4 Madam Chair, this brings us to a set of
5 recommendations. GNWT recommends that the Review Board
6 consider an unmitigated worst-case scenario for the
7 Snap La -- Snap Lake Mine as a significant deviation
8 from the original impacts authorized in the report of
9 environmental assessment 2003.

10 We recommend that the Review Board
11 include a measure requiring that De Beers conduct a
12 robust study on the anticipated reduction time of
13 hardness during the recovery of Snap Lake post-
14 operation and how this reduction will compare to metals
15 and nutrients over time. Specific attention should be
16 given to impacts that would result from the utilization
17 of any hardness-adjusted SSWQOs.

18 GNWT recommends that the Review Board
19 consider uncertainties related to varied -- varied
20 concentration reductions over time for various
21 hardness-adjusted parameters and that these
22 uncertainties be taken into account when assessing
23 significance of proposed increases in TDS and its
24 constituents.

25 GNWT recommends that the Review Board

1 consider that an unmitigated worst-case scenario at
2 Snap Lake Mine has the potential to lead to a
3 significant adverse impact on traditional uses of Snap
4 Lake and its downstream aquatic environment.

5 GNWT recommends the Review Board include
6 a measure requiring De Beers to minimize the degree or
7 extent project-related impacts of Snap Lake and the
8 downstream aquatic environment. We recommend that the
9 Review Board include a measure requiring De Beers to
10 take necessary steps during operation and closure to
11 return Snap Lake to pre-mining conditions as soon as
12 possible post-closure.

13 Moving on, Madam Chair, next I'll talk
14 about site-specific water quality objectives. The De
15 Beers proposal will result in large increases in the
16 concentration of TDS and chloride in Snap Lake. TDS is
17 a general measure of the mineral content of water, and
18 most Northern waters have a naturally low TDS.

19 As the GNWT has noted previously, it is
20 important to consider the proportion of the
21 constituents of TDS, as well as the overall
22 concentration. Naturally saline lakes are typically
23 dominated by sulphate and carbonate ions, and rarely by
24 chloride ions -- ions. This makes the Snap Lake
25 situation unique.

1 As noted on the previous slide, most
2 Northern waters have a naturally low TDS concentration.
3 Snap Lake pre-mining had a TDS in the range of 10 to 15
4 milligrams per litre. It's generally accepted that
5 water with greater than 1,000 milligrams per litre TDS
6 is considered brackish, and water with less than a
7 thousand is considered fresh water.

8 However, according to the CCME there is
9 a range as identified in the quote on this slide, and I
10 quote:

11 "Salinity is a measure of the total
12 salt composition of water, with
13 freshwater lakes being dominated by
14 the cations, calcium, magnesium,
15 potassium, sodium, the anions
16 bicarbonate, carbonate, sulphate,
17 chloride. Water is classified
18 according to salinity. Freshwater
19 lakes are those with less than 500
20 milligrams of salinity. Salinity in
21 water is generally the expression of
22 the concentration of TDS."

23 In fact, clear water salt content can be
24 determined by evaporating water sample measuring the
25 dry salt left behind.

1 The above quote, salinity is in the
2 range of the TDS concentrations being contemplated
3 within this EA. In order to quantify the impact of the
4 proposed TDS increase, De Beers has proposed site-
5 specific water quality objectives, SSWQOs, for TDS and
6 its constituents which De Beers believes will
7 adequately protect Snap Lake ecosystem.

8 GNWT notes that the CCME provides
9 guidance for driving SSWQOs, and the guidance specifies
10 minimum test species requirements and different
11 calculation methods, depending on how much toxicity
12 data is available. Type A guidelines are developed
13 when there's enough data available to fit a species
14 sensitivity dis -- distribution, or SSD. Type B
15 guidelines are developed when there's not enough
16 toxicity data to develop an SSD curve and include the
17 application of a safety factor.

18 Madam Chair, the GNWT has concerns with
19 the protocols used by De Beers to generate their
20 SSWQOs. For a Type A and Type B1 process, CCME
21 specifies the following minimum requirement: three (3)
22 aquatic invertebrate species, including at a least one
23 (1) planktonic crustacean, three (3) fish species
24 including at least one (1) non-salmonid, and plant
25 species are desirable.

1 Protocol followed by De Beers did not
2 include a non-salmonid fish species. De Beers
3 indicated that insufficient toxicological data were
4 available to generate a Type A guideline, so a Type B
5 approach was followed. When generating a Type B
6 guideline, a safety factor is applied in -- in order
7 to, and I quote from the -- from the CCME:

8 "Account for differences in
9 sensitivity to a chemical variable
10 due to differences in species,
11 exposure conditions, and test
12 endpoints, as well as a paucity of
13 toxicological data, cumulative
14 exposures, and policy requirements;
15 in particular, extrapolating from a
16 low level toxicological threshold to
17 a protective environmental management
18 benchmark."

19 CCME further notes that, and I quote
20 again:

21 "While this safety factor may be
22 considered as arbitrary, fixed, and
23 too conservative for many
24 substances..."

25 And that came from Chapman et al, 1998:

1 "...the Type B1 guideline derivation
2 approach is used for substances where
3 only a limited amount of
4 toxicological information is
5 available."

6 Safety factor is typically on the order
7 of two (2) to ten (10), but De Beers has applied a
8 safety factor of one (1). GNWT notes that applying a
9 safety factor of one (1) is not specifically identified
10 within the CCME guidance when -- when deriving a Type
11 B1 guideline.

12 As stated previously and as outlined in
13 our technical report, the GNWT also remains concerned
14 with the use of anthropogenically increased hardness
15 when applying toxicity-modifying factors, especially
16 when it is used as a primary basis for substantially
17 increasing SSWQOs.

18 Madam Chair, overall, if the CCME
19 protocols were strictly followed, it is likely that a
20 lower SSWQO for Snap Lake would have been derived.

21 Madam Chair, in addition to GNWT's
22 concerns regarding how De Beers has used the CCME
23 protocols to derive their proposed SSWQOs, GNWT is also
24 concerned with potential impacts to traditional use of
25 Snap Lake and the Lockhart system.

1 The perspectives of the landowners must
2 be considered when assessing the extent and magnitude
3 of changes and assessing the potential for significant
4 adverse effects from a development project. The GNWT
5 heard evidence from Aboriginal groups during the
6 technical sessions regarding the cultural significance
7 of the Lockhart system, and particularly Lady of the
8 Falls.

9 GNWT understands that any detectable
10 change due to the project at the Lady of the Falls site
11 would constitute a significantly adverse cultural
12 impact. In addition, traditional use of Snap Lake and
13 the immediate downstream must also be preserved and the
14 perception of risk, avoidance, and loss -- loss of use
15 must be -- must also be considered.

16 For this reason, the GNWT believes that
17 at a minimum, water in Snap Lake and the immediate
18 downstream must be of sufficient quality. Users of the
19 water would not hesitate to consider using this water
20 body for traditional purposes.

21 Madam Chair, this brings us to GNWT's
22 recommendations regarding protecting traditional use of
23 Snap Lake and the Lockhart system. GNWT recommends
24 that the Review Board include a measure to require De
25 Beers to prevent measurable changes to water quality at

1 the Lady of the Falls. And we recommend that the
2 Review Board include a measure to require De Beers to
3 ensure protection of the traditional use of water in
4 Snap Lake and downstream.

5 In summary, Madam Chair, GNWT believes
6 that the potential magnitude of the impacts under an
7 unmitigated scenario will likely be significant to the
8 receiving aquatic environment. In addition, loss of
9 traditional use in the area under worst-case conditions
10 should be considered as a potential significant
11 cultural impact.

12 GNWT notes that the increasing levels of
13 TDS in Snap Lake have been recognized as an issue for
14 some time. During the 2011 water licence process,
15 Mackenzie Valley Land and Water Board noted that
16 effluent quality criteria could not be set to meet the
17 desired SSWQO for Snap Lake since the chloride
18 concentration has already exceeded the proposed levels.
19 As a result, higher interim effluent quality criteria
20 were set to provide De Beers sufficient time to address
21 the issue.

22 Madam Chair, with this in mind, and
23 recognizing that all parties agree mitigation is
24 required, GNWT's last recommendation for this
25 proceeding relates to mitigation. GNWT recommends that

1 the Review Board include a measure requiring De Beers
2 to implement, no later than eighteen (18) months
3 following the issuance of the water licence, mitigation
4 sufficient to protect the aquatic environment and
5 maintain traditional use of Snap Lake.

6 Madam Chair, before I conclude our
7 presentation, I'd like to make one (1) final point.
8 You may have noticed that we have not presented any
9 recommendations regarding appropriate numerical values
10 for site-specific water quality objectives and
11 corresponding effluent quality criteria. We look
12 forward to using the conclusions of the report of EA in
13 preparing our recommendations for appropriate numerical
14 values for SSWQOs and EQCs. We will present these
15 recommendations during the water licensing phase of
16 this process.

17 With that, Madam Chair, this concludes
18 our presentation. We'd like to thank the Review Board
19 for providing the opportunity to present our technical
20 intervention and our associated recommendations. And
21 we are open for questions. Thank you.

22

23 QUESTION PERIOD:

24 THE CHAIRPERSON: Thank you. The first
25 set of questions, we'll ask Environment Canada if they

1 have any questions.

2 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey
3 McMillan, with Environment Canada. We have no
4 questions.

5 THE CHAIRPERSON: Yellowknives Dene
6 First Nation, do you have any questions?

7 MR. TODD SLACK: Todd -- excuse me.
8 Todd Slack, on behalf of the Yellowknives. I have just
9 a couple of questions, and they're clarification in
10 terms of some of the things we heard yesterday.

11 The water staff has been involved with
12 reviewing AEMP and the other sampling that's been
13 ongoing at this site over the years. Is that -- that's
14 fair to say?

15 MR. ROBERT JENKINS: Robert Jenkins.
16 Yes. It's important to note that -- that many of those
17 staff, over the past several years, they were federal
18 employees previously, but they -- they remain on the
19 file post-devolution, so, yes, a fair statement.

20 MR. TODD SLACK: Thank you, Madam
21 Chair. And, yeah, I had originally written, "AANDC,"
22 but put "GNWT," in there. I didn't want to be
23 confusing.

24 And so the question is are you -- are
25 the water staff aware of the TDS issue arising prior to

1 2011, as we heard yesterday?

2

3 (BRIEF PAUSE)

4

5 MR. ROBERT JENKINS: Thank you, Madam
6 Chair. It's Robert Jenkins, with the GNWT.

7 We did, back in 2000 -- I'm informed by
8 my staff that back in 2010, we did -- did highlight
9 that -- that TDS concentrations were increasing and
10 that they could, over the long term, exceed the
11 predictions in the environmental assessment report.
12 That was based on a review of information, the 2009 --
13 the 2009 annual report for the AEMP.

14 MR. TODD SLACK: Todd Slack, on behalf
15 of my -- of the Yellowknives. Thanks for that.

16 My last question. Just wondering here.
17 Did the GWNT undertake or are they aware of any efforts
18 on -- on behalf of the project to consider what the
19 impacts of creating a very salt rich water body would
20 be with regards to wildlife?

21 And I apologize, because I know you're a
22 waters, and this is a -- really a wildlife question,
23 but if you could offer any ideas? And my line of
24 thought here is, certainly in Ontario, we're aware of
25 salt licks and road salt being a -- an attractant, so

1 any ideas of information would be helpful.

2

3 (BRIEF PAUSE)

4

5 MR. ROBERT JENKINS: Thank you, Madam
6 Chair, for the time to have a little huddle on that
7 question. It's Robert Jenkins, with the GNWT.

8 Thank you, Mr. Slack, for that wildlife
9 question. As you know, I am not a wildlife expert, and
10 that's why the expansive huddle on this -- on this. We
11 did make a statement in our -- in our intervention. It
12 was in Appendix 3.

13 The Wildlife Division did look at -- at
14 this, and -- and they did not foresee that there would
15 be any -- any significant adverse impacts to wildlife.
16 So I would point you to the statement that we had at --
17 yeah, it was Appendix 3 in our intervention, and it --
18 it's comments from the Wildlife Division.

19 MR. TODD SLACK: Todd Slack, on behalf
20 of the Yellowknives. No further questions. Thanks
21 very much.

22 THE CHAIRPERSON: Next set of questions
23 from Lutsel K'e Dene First Nations?

24 MR. MIKE TOLLIS: Mike Tollis, from
25 Lutsel K'e Dene First Nation. Just one (1) question.

1 I'm not sure what the further downstream
2 past MacKay Lake monitoring stations are, but are those
3 GNWT monitoring stations?

4 MR. ROBERT JENKINS: Thank you, Madam
5 Chair. It's Robert Jenkins, with the GNWT.

6 There are a number of monitoring
7 stations downstream, and those are stations that were
8 formerly -- monitoring was conducted by the federal
9 government, so the Department of Aboriginal Affairs and
10 Northern Development Canada. Those stations are being
11 maintained now by the GNWT through -- through
12 devolution.

13 I do have -- so some of the -- some of
14 the sites that we do -- do monitor, King Lake, MacKay
15 Lake. We understand that Lockhart, at the mouth, is
16 monitored by Environment Canada. And we also monitor
17 Lake of the Enemy.

18 MR. MIKE TOLLIS: Thank you, Madam
19 Chair. Mike Tollis, from Lutsel K'e Dene First Nation.
20 That's all my questions. Thanks.

21 THE CHAIRPERSON: Questions from North
22 Slave Metis Alliance?

23 MR. MATT HOOVER: Thank you, Madam
24 Chair. Matt Hoover, North Slave Metis Alliance. We
25 have no questions. Thank you.

1 THE CHAIRPERSON: Questions from Deninu
2 K'ue First Nations?

3 MR. MARC D'ENTREMONT: Thank you, Madam
4 Chair. It's Marc d'Entremont, for the DKFN. I would
5 like to thank the GNWT for the presentation, and we
6 have no questions.

7 THE CHAIRPERSON: Questions from De
8 Beers?

9 DR. PETER CHAPMAN: Peter Chapman. I
10 have one (1) questions, and Erica has a few questions.
11 Robert, could you turn to slide 18? It's the one with
12 the CCME quote.

13 MR. SEAN WHITAKER: Just let me know
14 when I get there.

15 DR. PETER CHAPMAN: Thank you. We're
16 just laughing because I couldn't pull the microphones
17 towards me because I had my foot on the cord. Early in
18 the morning, late at night.

19 When I read that quote it talks -- and
20 it's from CCME -- it talks about freshwater lakes being
21 dominated by cations, which are positive charges, and
22 anions, including chloride. So it seems to me from
23 that quote that having fresh waters dominated by the
24 chloride ion is not that uncommon.

25 Would you agree?

1 MR. DON MACDONALD: This is Don
2 MacDonald, on behalf of GNWT.

3 No, I don't think that's common at all
4 for chloride to be a dominant ion in freshwater lakes.
5 It's certainly present in freshwater lakes, but as a
6 dominant feature of the ionic composition of freshwater
7 lakes, no, that's not common at all.

8 DR. PETER CHAPMAN: Peter Chapman.
9 That's not what this quote seems to say to me, but
10 thanks for the answer.

11 MS. ERICA BONHOMME: Erica Bonhomme.
12 Just a couple of questions. I just wonder, Mr.
13 Jenkins, if you could just give me a plain language
14 summary of what a water quality -- a site-specific
15 water quality objective is? MR. ROBERT JENKINS:

16 Thank you, Madam Chair. It's Robert Jenkins, with the
17 -- with the Government of the Northwest Territories.

18 Essentially, is -- a site-specific water
19 quality objective is a value that's to be met at some
20 point following discharge, so that point is -- is met.
21 It's downstream. It could be at the end of a mixing
22 zone, or at some other place which is determined.

23 You would use that value to back
24 calculate to -- to your -- to your effluent quality
25 criteria, and your effluent quality criteria then are

1 set at a point that they would -- you would need to
2 meet your site-specific water quality objective.

3 That's from a sort of a calculation point of view.

4 What does a site-specific -- if you were
5 to talk a bit, I guess a bit of the philosophy about a
6 site-specific water quality objective, site-specific
7 water quality objective is the point at which the water
8 quality is -- is what is needed to protect the use
9 downstream, and so there's many inputs that go into
10 that.

11 Obviously, we are only one (1) party to
12 this, and we can only present our -- our opinions on
13 what needs to be protected within a site-specific water
14 quality objective. Obviously, as I mentioned in my
15 presentation, one (1) of those things is traditional
16 use. Obviously, there's many groups here to this party
17 -- or to this -- that are parties to this EA, which can
18 -- can describe much better than I can what the
19 traditional use and the traditional use values, and
20 what needs to be protected by those objectives.

21 And I guess a -- a bit of a -- maybe as
22 a heads up to some of the First Nations and Aboriginal
23 groups party to this EA is that I'm going to be asking
24 them that question after their presentations so that
25 they can get that on the record. Probably a bit longer

1 winded than -- than needed, but I -- I hope that
2 answers your question.

3 MS. ERICA BONHOMME: Thank you. Yeah,
4 I -- Erica Bonhomme, sorry.

5 Yeah, I -- I think that's a good -- good
6 one. I'm -- I'm reading through the effluent quality
7 policy, and I wonder if the objectives in the MacKenzie
8 Valley Land and Water Board's water and effluent
9 quality management policy align with the -- the
10 principle you've laid out in the water stewardship --
11 stewardship strategy on one (1) of your first slides?

12

13 (BRIEF PAUSE)

14

15 MR. ROBERT JENKINS: Thank you, Madam
16 Chair. Thank you for the question. I'm just wondering
17 if you could maybe -- I mean, there's a number of
18 principles in both. There's a number of goals in both.
19 Obviously, they're both policy documents. I think both
20 of them have sort of the premise that water quality is
21 to be protected to a high standard, and -- and that,
22 you know, any change that doesn't need to be undertaken
23 shouldn't be undertaken.

24 I guess if you could maybe a little more
25 explicitly identify the goals or the principles that

1 you're -- you're referencing, it would be appreciated.

2 MS. ERICA BONHOMME: Erica Bonhomme.

3 Yeah, I -- I just -- I'll -- I'll read a -- a point
4 from there, I'll continue with my questions. So the
5 primary objective in this policy is protection of water
6 quality in the receiving environment, and that level of
7 protection will be defined by water quality standards
8 that have been set site-specifically for the receiving
9 environment in question.

10 And I -- so I want -- my question is
11 whose responsibility is to -- is it to establish those
12 levels of protection for the receiving environment?

13 MR. ROBERT JENKINS: Thank you, Madam
14 Chair. It's Robert Jenkins, with the Government of the
15 Northwest Territories. Thank you for your
16 clarification.

17 I think that it's quite clear that the -
18 - the numerical values that -- that are set in water
19 licences -- right now, in the absence of -- of water
20 quality standards in legislation, there is -- there is
21 -- in the legislation, there is -- it does talk about -
22 - that regulations could be developed on -- on water
23 quality standards, but I guess at the -- at the moment,
24 there -- no regulations exist.

25 So -- so barring that, the -- and that

1 direction and specificity, the Board -- the onus is on
2 the Board, and then when I say, "Board," I mean Land
3 and Water Board, to set numerical values. And as
4 mentioned in my -- in my last slide, that we will be
5 presenting recommendations on numerical values to that
6 Board.

7 However, with anything, as -- as a
8 process and review on goes, especially when an
9 environmental assessment's undertaken, the Board that
10 we're sitting before today has the authority and the --
11 and the responsibility to determine whether there are
12 significant adverse impacts, and to provide any
13 direction and any measures that need to be put in place
14 to ensure that those adverse impacts are mitigated.

15 Within the law, as I'm -- as I'm sure
16 people are aware, that when those measures are placed
17 within a report of environmental assessment, they are
18 legally binding moving forward. And -- and, I mean,
19 this is a part of the reason why we're here today,
20 because there was a numerical value placed within a
21 measure of the EA, so they are -- they are linked.

22 And this Board today must -- must sort
23 of set direction for the Land and Water Board in terms
24 of the level of protection that needs to be -- needs to
25 be provided and afforded. And why is that important?

1 Because that's the level of protection that needs to be
2 -- needs to be met when the Land and Water Board
3 establishes numerical values for site-specific water
4 quality objectives.

5 MS. ERICA BONHOMME: Erica Bonhomme.

6 Thank you, Mr. Je -- Jenkins. That's a -- a very
7 helpful answer. So I -- I wonder -- yeah, you
8 mentioned that, you know, De Beers has proposed a
9 numeric value for a site-specific water quality
10 objective. In -- in light of that, can you -- can you
11 confirm whether that -- whether the development
12 proposal that has been put forward is a -- a site --
13 is, in fact, a proposal for a site-specific water
14 quality objective?

15

16 (BRIEF PAUSE)

17

18 MR. ROBERT JENKINS: Thank you, Madam
19 Chair. It's Robert Jenkins, with the GNWT.

20 I'm not entirely sure I'm clear on the
21 question, but -- but I'll take what I -- what I thought
22 I heard, or maybe what I wanted to hear, and -- and
23 give an answer, anyway.

24 There's been -- you know, it is clear
25 that -- that De Beers has put forward a value of -- of

1 six hundred and eighty-four (684). As I mentioned, we
2 will -- we will provide an assessment of that, and a
3 recommendation on a numerical value for the Mackenzie
4 Valley Land and Water Board, and there's much
5 discussion that will be held in between that.

6 I guess I -- I didn't envision that --
7 that there would be another -- you know, the current
8 numerical value in the measure of the original, you
9 know, report of EA. I didn't -- I'm not of the
10 understanding that De Beers is suggesting that -- that
11 the -- the measure -- the value be replaced in the
12 measure, but rather that, yes, you are putting forward
13 the value that you would envision would be included in
14 a term and condition of the water licence at some point
15 in the future.

16 MS. ERICA BONHOMME: Thank you. Erica
17 Bonhomme. So the -- the unmitigated scenario that
18 we've presented and you've spoke to here, is that De
19 Beers's proposal?

20

21 (BRIEF PAUSE)

22

23 MR. ROBERT JENKINS: Thank you, Madam
24 Chair. It's Robert Jenkins, with the Government of
25 Northwest Territories.

1 I think De Beers has been quite clear
2 that they're going to implement mitigation. I don't
3 think there's anybody in the room that doubts that
4 you've made that commitment, although I don't think
5 there's anybody, at least sitting within our group,
6 that has a clear understanding of what it is that
7 you're going to do.

8 And so in the absence of that
9 definition, we have to default to that -- an
10 unmitigated scenario. We cannot and have not been able
11 to assess any of the -- any of the -- you know, there's
12 been generic discussions on mitigations. No specifics
13 have been provided to a level that would -- would allow
14 us to -- to make any sort of assessment on the
15 viability of those options. And so in the absence of
16 that definition, quite frankly, we cannot assess
17 whether a value less than seventeen hundred (1,700),
18 which is the unmitigated case, will occur.

19 MS. ERICA BONHOMME: Erica Bonhomme.
20 But my question was: Is that De Beers's proposal?

21 MR. ROBERT JENKINS: Thank you, Madam
22 Chair. I don't often have the liberty for speaking for
23 -- it's Robert Jenkins.

24 I don't have the liberty often to speak
25 for another Intervenor or party in the EA. I don't

1 know if you'd like me to speak for De Beers and confirm
2 what their proposal is. I guess that, you know, that -
3 - that might be best coming from them.

4 You know, my understanding is that
5 you're going to do mitigation. So -- so I don't know
6 exactly what it is you're going to do. And maybe if --
7 if, you know, at some point during this hearing that --
8 those confirmations could be made, I would appreciate
9 that.

10 MS. ERICA BONHOMME: Erica Bonhomme.
11 So for De Beers I'll confirm that our proposal is to
12 discharge water of a different effluent quality
13 criteria than 350 milligrams per litre. And we've
14 proposed that a site-specific water quality objective
15 of six hundred and eighty-four (684) or higher will be
16 protective of the environment and that as a -- and as a
17 result, there will be no significant impacts to the
18 environment. We have committed to mitigation. We've
19 committed to providing results of BATEA-type studies to
20 the Mackenzie Valley Land and Water Board during their
21 proceeding. And I just have one (1) final question, if
22 I may.

23 Is mitigation a requirement of
24 developing a site-specific water quality objective?

25

1 (BRIEF PAUSE)

2

3 MR. ROBERT JENKINS: Thank you, Madam
4 Chair. It's Robert Jenkins with the Government of the
5 Northwest Territories.

6 I think -- I guess I just want to
7 explain a little bit on the premise of -- of why we
8 have a site-specific water quality objective in the fir
9 pla -- first place.

10 And just to get back to my point that I
11 spoke about previously, which is that the -- the reason
12 why you have a site-specific water quality objective at
13 all is because you need to have some sort of level of
14 protection at a certain point which -- which ultimately
15 is what's needed to protect uses downstream of that
16 point. And those uses, like I said, are defined by the
17 users and defined, and -- and ultimately decisions are
18 made by regulatory bodies.

19 So, you know, if -- if nothing needs to
20 be done to -- to have a -- you know, to meet a site-
21 specific water quality objective that protects
22 everything downstream, then everybody's happy. But if
23 mitigation needs to be implemented, then you need to
24 look at mitigations and you need to look at what type
25 of mitigations you need to meet the number that you

1 need to meet. So they come hand-in-hand.

2 So I guess it's very -- it's -- it's
3 very specific to the development. It's -- it's
4 different in different cases. Site-specific water
5 quality objectives, I mean, they are just that.
6 They're site specific. If mitigation is needed, it has
7 to be implemented.

8 But I guess the key is that what you
9 need to look at first is what is the level of
10 protection you need to meet. And then you -- then you
11 start talking and looking at the mitigation that you
12 need to implement, if you need to implement mitigation,
13 to meet that number. But the primary is to make sure
14 that the objective is met.

15 MS. ERICA BONHOMME: Erica Bonhomme.
16 I'll -- I'll take that as a -- as a no, and that in
17 fact the development of site-specific water quality
18 objective precedes mitigation, if I could paraphrase,
19 hopefully correctly, what I've -- what I've just said.
20 But maybe you can correct me that I've -- I've
21 paraphrased that correctly.

22

23 (BRIEF PAUSE)

24

25 MR. ROBERT JENKINS: Thank you, Madam

1 Chair. It's Robert Jenkins, with the Government of
2 Northwest Territories.

3 I guess, again, the objective is the
4 primary focus that needs to be met to protect use
5 downstream. And then you look at how you need to get
6 there, so.

7 MS. ERICA BONHOMME: Thank you, Madam
8 Chair. I have no further questions.

9 THE CHAIRPERSON: Questions from Board
10 staff?

11 MR. ALAN ERLICH: Thank you, Madam
12 Chair. It's Alan Erlich, Board staff. I have a
13 question for the Government of the Northwest
14 Territories.

15 In your presentation, you've identified
16 what in your opinion are certain uncertainties. A bad
17 choice of wording. You've identified modelling
18 uncertainty and an uncertainty regarding hardness in
19 your presentation when you were analyzing -- or
20 describing your opinion of De Beers's prediction of
21 what kind of impacts would occur with their proposal.

22 Are there any other uncertainties in the
23 opinion of the GNWT that the impacts of this proposed
24 project depend on?

25

1 (BRIEF PAUSE)

2

3 MR. DON MACDONALD: Thank you, Madam
4 Chair. Don MacDonald, on behalf of GNWT.

5 Yes, in the presentation -- in the
6 presentation, there were a number of uncertainties that
7 were explicitly identified, but those certainly don't
8 include all of the uncertainties that we have relative
9 to understanding the potential effects of this project
10 in the future.

11 Part of -- and when we think about
12 effects, we need to start at, you know, what is the
13 source and what is the fate and effect. So there's
14 some uncertainty potentially about what mine water may
15 look like in the future and how much of that can be
16 captured or not captured as part of mitigation
17 strategies that could be implemented at the mine.

18 There's always uncertainties associated
19 with the modelling of water quality and how that mixing
20 may occur within the lake and then in downstream areas.
21 I think there's still considerable uncertainty
22 associated with how long it will take Snap Lake to
23 recover from the discharges of effluent over time.

24 When we start thinking about the effects
25 side of the equation, we always have certain levels of

1 uncertainty also associated with extrapolating between
2 low effects levels and no effects levels from the
3 toxicological data that are generated in the -- in the
4 laboratory, and then we take that laboratory data, and
5 we need to extrapolate that also to the field.

6 And we have uncertainties about that
7 related to whether the sensitivit -- there's -- there's
8 hundreds of species that inhabit Snap Lake and those
9 areas downstream. We've tested some subset of those in
10 the lab, but there's uncertainties about -- well,
11 there's -- the sensitivity of those other -- what the
12 sensitivity of those other species might be, and then
13 how the ecosystems can react once you've had effects on
14 certain -- certain species in the lake.

15 You might suggest that -- that if we
16 affect only a small proportion of the species, that --
17 that we -- we would have a small impact on the ecology
18 of the lake. That's -- that's a hypothesis, and a
19 hypothesis only, because we often see in ecosystems
20 surprising responses to seemingly -- seemingly small
21 changes in water quality conditions.

22 We still have some residual
23 uncertainties about what is the toxicity of various
24 constituents, and how is that affected by hardness,
25 particularly at very high hardnesses, whereby one could

1 assume that you still get that mitigation of toxicity
2 across elevated hardnesses.

3 But what we actually see in some of the
4 data is that toxicity tends to increase as we get into
5 higher hardness levels, and so we don't have the -- the
6 information we need to fully understand that. There's
7 uncertainties associated with the mine plan, what that
8 mitigation will -- will be or could be, and what the
9 efficacy of that mitigation might be.

10 When -- when I think about the actual
11 process of evaluating and measuring effects, we're also
12 faced with some uncertainties in that whole process.
13 Although we have some commitments to establish
14 additional water quality monitoring stations at
15 downstream sites, when we look at the baseline data
16 that we've got right now, it's very limited in many of
17 those areas, and so it makes it very difficult to
18 define what baseline conditions are, and when you can't
19 define baseline conditions very accurately, it's hard
20 to detect differences.

21 And so that requires A) a -- a
22 development of a very robust baseline, as from here as
23 we move forward and then implementation of a very
24 robust monitoring program to make sure that we can
25 generate the data we need to evaluate effects. I --

1 I'm not entirely -- things like interactive effects of
2 -- of multiple contaminants is -- is another
3 uncertainty.

4 So -- and -- and I'm -- I'm not saying
5 that this is a comprehensive list, but this is -- is a
6 -- at least a -- a subset of some of the uncertainties
7 that remain as we move forward.

8

9 (BRIEF PAUSE)

10

11 MR. ALAN EHRLICH: Okay. Thank you for
12 that. The next question from Review Board staff, with
13 your permission, Madam Chair, is coming from
14 Environmental Assessment Officer Sachi DeSouza.

15 MS. SACHI DESOUZA: Sachi DeSouza, from
16 the Review Board. You mentioned in your presentation
17 that the taste guidelines are based on a TDS
18 composition that's not dominated by chloride.

19 How would you suggest, considering the
20 effects of chloride on taste, and also is there -- do
21 you know if there's a difference between the chloride
22 that's predicted to be in Snap Lake and the chloride
23 that's generally in drinking water?

24

25 (BRIEF PAUSE)

1 MR. ROBERT JENKINS: Thank you, Madam
2 Chair. It's Robert Jenkins, with the GNWT.

3 So there are some -- there is some
4 guidance out there from Health Canada on aesthetic, so
5 again, taste, not -- not human health. My
6 understanding is the -- the aesthetic guideline for TDS
7 is five hundred (500). Chloride is two fifty (250).

8 But you -- you mentioned about sort of -
9 - talking about how you would determine, and, I mean,
10 you do need to recognize that the literature does also
11 reference ranges, so there are ranges out there, and --
12 and as we all know, obviously taste is -- is sometimes
13 an individual-type thing.

14 So -- so how could you sort of gauge,
15 you know, what the -- you know, in other areas, there's
16 been things -- you know, for fish, there's been
17 palatability studies that have been done regionally so
18 that -- you know, people are brought in, and they've,
19 you know, either eaten fish out of lakes. I mean, in
20 this case, if you were to do a palatability study, they
21 would drink water at different concentrations, and --
22 and the you could get a bit of a reference on how --
23 how -- you know, from a -- from a regional sense or --
24 or, you know, from a specific area, how -- how those
25 things may differ from some of those -- some of those,

1 you know, more the Health Canada sort of across country
2 guidance documents.

3 MS. SACHI DESOUZA: Thank you. And
4 just a clarification question. You -- my name's Sasha
5 DeSouza, from the Review Board.

6 You mentioned the time and dur -- with
7 respect to the duration of the effects of TDS, the time
8 it would take to return to pre-mining conditions.

9 What does the GNWT consider to be pre-
10 mining conditions in this context?

11

12 (BRIEF PAUSE)

13

14 MR. SEAN WHITAKER: Thank you, Madam
15 Chair. Sean Whitaker, with Environment and Natural
16 Resources.

17 So what the GNWT has considered as
18 baseline is the pre-mining levels, so 10 to 15
19 milligrams per litre, but it's important to note that
20 the ionic composition will be different of that pre-le
21 -- mining level.

22 There is a level of uncertainty, but the
23 mechanisms to get back to the original
24 carbonate/sulphate dominated species of TDS in Snap
25 Lake at ten (10) to fifteen (15), you will have to have

1 significant weathering of rock and a carbonate insu --
2 carbonate/sulphate sources, which are done by natural
3 weathering of rock.

4 So it's important to note we've
5 considered pre-mining levels as a TDS number, but that
6 ionic composition may -- it will be a long time.

7 MS. SACHI DESOUZA: Thank you. Sachi
8 DeSouza, from the Review Board.

9 My last question is you mentioned there
10 could be possible effects from an accelerated shift
11 from soft water to hard water. Do you think there's
12 been an accelerated shift from soft to hard, and what
13 do you think those possible effects could be?

14

15 (BRIEF PAUSE)

16

17 MR. ROBERT JENKINS: Thank you, Madam
18 Chair. It's Robert Jenkins, with the Government of the
19 Northwest Territories.

20 So what I -- what I mentioned in my
21 presentation is that there are -- there are
22 uncertainties with a -- an accelerated shift, you know,
23 from a soft to a hard water condition. I guess we
24 don't fully understand what that -- what that could
25 result in.

1 We do -- we do know, though, that the
2 mine has been in operation since, I believe, 2008, and
3 there has been a shift, and we are now six (6) years
4 later. So in my mind, I would say that there has been
5 an accelerated shift from a soft water condition, which
6 is pre-mining, to -- to now a hard water condition.

7 MS. SACHI DESOUZA: Sachi DeSouza.
8 Thank you, and I will pass it to Kathy.

9 DR. KATHY RACHER: Kathy Racher, for
10 the Board.

11 So I have a -- a few questions just
12 mostly to clarify some of the evidence in your
13 intervention. On page 28, you don't necessarily have
14 to go there, but it -- you're talking about the
15 conservative parameters and the concern that at post-
16 closure, when hardness levels decrease, that it won't
17 decrease at the same rate as some of the constituents
18 for which there are hardness -- has an ameliorating
19 effect on toxicity. And you say this may be -- be of
20 con -- particular concern for parameters that are
21 accumulating in sediments and which will continue to
22 cycle once effluent discharge ceases.

23 And I just wondered if you had any
24 particular evidence of what those parameters would be,
25 and if you could give me that evidence?

1 MR. SEAN WHITAKER: Sean Whitaker,
2 Environment and Natural Resources.

3 This was well defined in the NW -- NWT
4 diamond project, the Ekati diamond mine for near oxide
5 surface metal accumulation in sediment. I -- we would
6 be happy to provide that information in our closing
7 arguments.

8 But there's also for the nitrate from
9 yesterday. Nitrate has the potential to accumulate a
10 biomass, and as that accumulates in the sediment
11 levels, there's a potential for degradation (sic) over
12 time. That won't explicitly leave the system at the
13 same rate.

14 So if hardness decreases at a rate that
15 we don't know, and the nitrate and the metals remain,
16 and the sediment turns over -- which also is on page 28
17 -- is the mechanisms and accumulation of
18 bioaccumulation in the system, but also the flushing of
19 sediment due to upset events, there is a potential in
20 the post-closure period for those to be recycled back
21 into the system. And we'd be happy to provide the NWT
22 diamond reference in our closing arguments.

23 DR. KATHY RACHER: Kathy Racher, for
24 the Board. Yes, that would be -- be helpful to have
25 that specific evidence. Thank you.

1 Let's see, on page 35 in your
2 intervention, you talk about -- it says:

3 "As outlined in the protocol for the
4 derivation of water quality
5 guidelines for the protection of
6 aquatic life, CCME 2007, a specific
7 standard of SSWQO derivation is
8 expected by the CCME."

9 And I guess when I read the -- that
10 guideline document that's been referenced, I -- I don't
11 see it saying that this -- I see it saying that a water
12 quality -- a national water quality guideline has these
13 expectations, but I don't see it saying that a site-
14 specific water quality objective is meant to meet the
15 same standard.

16 And I wondered if you could explain
17 that?

18 MR. DON MACDONALD: Don MacDonald, on
19 behalf of GNWT.

20 The protocols -- the 2007 protocol for
21 the development of national water quality guidelines
22 references the references the development of water
23 quality objectives. What you need to do is in -- in
24 the references cited for that document, you'll see a
25 2003 document prepared by the CCME that describes the

1 procedures for deriving site-specific water quality
2 objectives. Within that document, there are specific
3 procedures that are identified that include -- four (4)
4 of them in total.

5 One (1) is direct adoption of Canadian
6 Water Quality Guidelines. That's typically the
7 preferred approach because it's the easiest, least cost
8 effective, and has the greatest level of certainty
9 associated with it. There's two (2) additional
10 approaches described in that document.

11 One (1) is the water effect ratio
12 approach that involves some site-specific toxicity
13 testing to try to understand if there are factors
14 within the receiving water body of interest that can
15 alter potentially the biobility -- bioavailability or
16 toxicity of certain substances that -- of concern for -
17 - that are being contemplated for objectives
18 development.

19 There's also a procedure called the
20 recalculation procedure, which allows for recalculating
21 a objective number from the same data set that was used
22 to derive the national guideline, but excluding those
23 species -- excluding representatives of taxonomic
24 groups that are not present within the receiving water
25 body of interest. And for implementing that particular

1 procedure, you still need to meet the minimum data
2 requirements for deriving water -- National Water
3 Quality Guidelines. So the -- that document is very
4 specific about that.

5 And then the fourth procedure is called
6 the resident species procedure. What that involves is
7 developing -- using laboratory toxicity testing a data
8 set on the sensitivity of the organisms -- selected
9 organisms within the receiving water body of interest
10 to those contaminants for which you're trying to
11 develop the objectives.

12 And again, in the application of that
13 particular procedure you must meet the minimum data
14 requirements for deriving the water quality guidelines.
15 So within -- this is -- that was a long-winded way of
16 saying within the 2003 document that describes the
17 procedures for developing site-specific water quality
18 objectives, it's clear that the minimum data
19 requirement for developing a national guideline must
20 also be met for developing a site-specific objective.

21 DR. KATHY RACHER: Kathy Racher, for
22 the Board.

23 Yeah, I guess my problem is that a 2003
24 document can't reference a 2007 document. So the --
25 the 2003 document that you've just spoke of can't

1 possibly reference a 2007 protocol. And I just -- I
2 don't think we need further explanation at this stage,
3 but could you, in your closing argument, just sort of
4 make sure that that -- that what you're presenting here
5 is -- is accurate?

6 So if -- more explanation, I think, is -
7 - is needed, because it just didn't -- when I read the
8 -- the 2007 document, it doesn't say, This is what you
9 must do for site-specific water quality objectives. So
10 that -- I just find that statement to be confusing. If
11 you could explain that further in your closing
12 arguments, I think that'll be fine.

13 Okay. The next question has to do with
14 your recommendations about chloride, page 37. It says
15 here that:

16 "It is the GNWT's position that De
17 Beers has not provided any additional
18 rationale for the utilization of this
19 modifying factor."

20 'This modifying factor' being hardness.
21 And I -- I just wondered what additional rationale
22 would look like, like how -- how would they be
23 successful in giving additional rationale for the
24 utilization of hardness as a modifying factor for
25 chloride?

1 (BRIEF PAUSE)

2

3 MR. SEAN WHITAKER: Thank you, Madam
4 Chair. Sean Whitaker, with Environment and Natural
5 Resources.

6 So additional information. So ideally,
7 as we stated earlier, we would have preferred a Type A
8 SSD approach to -- and that would have been for the low
9 effect/no effect levels. However, the -- the
10 information provided doesn't build upon the Elphick
11 study, which was tested over a narrow range, and we had
12 concerns beyond the narrow range tests in the Elphick
13 study.

14 I think we went into it in greater
15 detail in our questioning of De Beers, but if you
16 require additional information just, please let us
17 know.

18

19 (BRIEF PAUSE)

20

21 DR. KATHY RACHER: Kathy Racher, for
22 the Board. Okay. I'm going to leave that one. On
23 page 40 you make a statement saying:

24 "Based on the information compiled on
25 water quality guidelines for

1 chloride, drinking water is the most
2 sensitive water used during short-
3 term exposure, while aquatic life is
4 the most sensitive water use during -
5 - under long-term exposure."

6 And I -- I just wanted to request some
7 further explanation of that sentence. I'm not sure
8 what it -- what it means.

9 MR. SEAN WHITAKER: Madam Chair, Sean
10 Whitaker, Environment Natural Resources.

11 Can you point me to where that is in the
12 paragraph? I'm just trying to find it.

13 DR. KATHY RACHER: Kathy Racher, for
14 the Board.

15 It's page 40. It's the second big
16 paragraph on that page, middle sentence. It starts,
17 "Based on the information compiled."

18

19 (BRIEF PAUSE)

20

21 MR. DON MACDONALD: Madam Chair, Don
22 MacDonald, on behalf of GNWT.

23 So where -- the explanation for this is
24 that we've comp -- we've compiled Canadian water
25 quality guidelines for a number of uses relative to

1 chloride. For freshwater aquatic life, the maximum
2 water quality guideline is 640 milligrams per litre.
3 For an average concentration, the concentration is 120
4 milligrams per litre. For drinking water, the water
5 quality guideline is two hundred and fifty (250).

6 And so when we look at those numbers
7 together, for a long-term average water quality
8 guideline, the lowest number is one twenty (120) for
9 the protection of aquatic life, and then the drinking
10 water quality guideline would be one that could be
11 applied -- if you apply -- looked at it for either
12 maximum or average it would be the same, and so it
13 would be the lowest water quality guideline for a
14 maximum concentration in that case.

15 DR. KATHY RACHER: Kathy Racher, for
16 the Board. Okay, thank you for that.

17 Also on page 40 in Section 4.3.2 you
18 talk about water quality objectives for chloride. And
19 you conclude that although you -- Robert has tried hard
20 to be adamant that he didn't want to talk about
21 numbers, you have concluded that:

22 "Based on the guidance provided in
23 CCME, the water quality guidelines
24 for use in Canada should be adopted
25 as the water quality aject --

1 objective for Snap."

2 And that you assumed that no matter what
3 you do, whatever methods you use, if you follow CCME
4 protocols, then the resultant water quality objectives
5 are going to be the same as the guideline. And -- and
6 the guideline has already been exceeded in Snap Lake.

7 And I guess I'm wondering why you
8 haven't got a recommendation to treat the lake water
9 already. I'm -- I'm just not sure how you're
10 recommending something that has been exceeded, and
11 there's no sort of explanation of -- of why that's okay
12 somehow, or if it's not okay.

13 And I wonder if you could -- you could
14 explain what seems to be an inconsistency?

15

16 (BRIEF PAUSE)

17

18 MR. ROBERT JENKINS: Thank you, Madam
19 Chair. It's Robert Jenkins, with Government of
20 Northwest Territories.

21 I think, you know -- I guess I want to
22 make it clear just right up front that we -- we are not
23 recommending numerical values, you know, in our
24 intervention technical report that was submitted to
25 MVEIRB.

1 We do make a comment there about the
2 application of the guideline -- straight up application
3 of the guideline, but I do want to say that we are open
4 to the development of site-specific water quality
5 objectives for Snap Lake and down the stream. We do
6 recognize there is a current altered condition, and we
7 look forward to having those discussions moving forward
8 through the water licensing phase.

9 MR. MARK CLIFFE-PHILLIPS: Madam Chair,
10 I have a couple of quick questions for GNWT. So the
11 first one is a bit of a clarify -- it's Mark Cliffe-
12 Phillips, with the -- the Review Board. A -- a point
13 of clarification.

14 In -- in GNWT's opinion, does the
15 unmitigated scenario result in any significant adverse
16 impacts?

17 MR. ROBERT JENKINS: Thank you, Madam
18 Chair. It's Robert Jenkins, with the GNWT.

19 I would say that we were pretty clear,
20 yes, that in our -- in our intervention that the
21 unmitigated scenario would result in significant
22 adverse impacts.

23 MR. MARK CLIFFE-PHILLIPS: Thanks,
24 Madam Chair. Thank you for that -- the answer, Robert.

25 Secondly, there's been some

1 recommendations where you talk about the downstream
2 environment quite a bit and the -- the recommendations.

3 But does GNWT believe that the
4 development as proposed have any significant adverse
5 impacts to Snap Lake itself?

6

7 (BRIEF PAUSE)

8

9 MR. ROBERT JENKINS: Thank you, Madam
10 Chair. It's Robert Jenkins, with the GNWT.

11 As I mentioned in my previous answer, in
12 an unmitigated scenario, we would feel that significant
13 adverse effects would occur. In a mitigated scenario,
14 again, we don't know what's achievable. We don't know
15 the efficacy of those -- of the mitigations that we put
16 in place.

17 And so we -- we're unable to assess, you
18 know, in a fulsome manner whether there would be -- at
19 what point the value will be upon which no significant
20 adverse effects would occur. It's important to
21 recognize that yes, there are commitments that have
22 been made in regards to mitigation. But again, it's
23 still not clear on the -- on what can be achieved.

24 Also, a very important aspect of this is
25 the use that needs to be protected. We've made some

1 comments on use that needs to be protected, but I would
2 want to make it clear that -- that, you know, the GNWT,
3 you know, has some opinions on this and what needs to
4 be protected. Really, you need to get that information
5 clearly from -- from the Aboriginal groups and the
6 First Nations that are party to this environmental
7 assessment.

8 MR. MARK CLIFFE-PHILLIPS: Thank you,
9 Madam Chair. I -- I have no further questions. I
10 believe our legal counsel has one (1) quick question.

11 THE CHAIRPERSON: Legal counsel,
12 questions?

13 MR. JOHN DONIHEE: Thank you, Madam
14 Chair. It's -- it's John Donihee.

15 I -- I wonder if you'd just go back to
16 slide number 6. I'm -- I'm -- have one (1) question
17 about your first recommendation. You know, the -- the
18 end result of this proceeding, of course, will -- will
19 be a report of EA by the Mackenzie Valley Environmental
20 Impact Review Board, addressing the proposal dealing
21 with Snap Lake Mine, which has been advanced by De
22 Beers, and so I'm just curious about the
23 recommendation.

24 Are you telling us that you'd like to
25 see something more than that, or something different

1 than that? I -- I don't, frankly, understand the
2 recommendation. I wonder if you could help out.

3 MR. ROBERT JENKINS: Thank you, Madam
4 Chair. It's Robert Jenkins, with the GNWT.

5 So if you read this, we're not stating
6 that this is as specific to be a measure, obviously.
7 What we were -- what we were referring to is that there
8 be a statement in the report that basically, this is
9 specific. And I guess it's kind of inherent. I do
10 agree with -- with Board counsel that, you know, these
11 -- each environmental assessment is unique to the
12 project.

13 I guess what -- you know, what we would
14 -- what we would -- what would be useful for us, I
15 guess, in future hearings -- you know, in this hearing,
16 we heard a lot about default. So, you know, there was
17 talks about, Well, this -- this was the value that was
18 placed in the licence for another mine, and so, you
19 know, we're around that default. And -- and so, you
20 know, it's not a default value.

21 It's -- it's a value that was -- that
22 was placed specific to Ekati Mine, and specific Lac de
23 Gras. And so decisions -- previous decisions by Boards
24 are being -- being utilized as -- as an argument moving
25 forward, and I guess although I think I agree with you

1 that inherently, you know, each -- each assessment and
2 each water licence process is specific to the details
3 before it, I guess we would just -- just like it clear
4 to all that that is the case, and that's why we've
5 asked simply for some sort of reference in the report.

6 MR. JOHN DONIHEE: It's John Donihee
7 again. Thank you, Mr. Jenkins and Madam Chair. That -
8 - that was the only question.

9 THE CHAIRPERSON: Thank you. Questions
10 from Board -- Board members? Okay.

11 MR. JOHN CURRAN: Thank you, Madam
12 Chair. John Curran, with the Review Board.

13 Mr. Jenkins, I've heard a lot of this
14 term 'minimum data requirements' were not met. I don't
15 want to go too far down that road. What critters are
16 there that they didn't test that you'd like to see them
17 test?

18

19 (BRIEF PAUSE)

20

21 MR. ROBERT JENKINS: Thank you, Madam
22 Chair. And thank you, Board member Curran, for that
23 question. It's an excellent question.

24 And -- and I -- before I pass it over to
25 Don MacDonald, I guess I would just say that, you know,

1 we've got some -- some opinions on things that should
2 be done, but when you're talking about, you know,
3 species and things that should be tested important,
4 there are other parties to this EA who might have some
5 -- some thoughts on that as well. So I encourage that
6 -- that potentially you ask some of the other groups as
7 well, and things that they might -- might envision that
8 should be tested.

9 But with that, I'll pass it over to --
10 to Don MacDonald to pass along our thoughts on the
11 matter.

12

13 (BRIEF PAUSE)

14

15 MR. DON MACDONALD: Don Mac -- Madam
16 Chair, Don MacDonald, on behalf of GNWT.

17 I agree, that was a great question, and
18 from our perspective, there is a -- a couple of things
19 that are missing right now from the toxicological data
20 set.

21 One is a long-term test with a non-
22 salmonid species. There are a number of non-salmonid
23 species that occur in Snap Lake and in downstream
24 areas, and we need to make sure that the resultant
25 water quality objectives are protective of those

1 species as well, which can be, in some cases, more
2 sensitive than salmonids, and so something like a
3 thirty (30) day toxicity test with fathead minnows
4 would be appropriate.

5 In addition, De Beers reported toxicity
6 test data for rotifers. The -- they had challenges
7 with the control conditions there, and had difficulty
8 identifying low effect and no effect levels from that
9 test, so that would be appropriate to repeat that test
10 as well.

11

12

13 (BRIEF PAUSE)

14

15 MR. JOHN CURRAN: Thank you, Madam
16 Chair. John Curran, the Review Board.

17 I'll change gears here just a little
18 bit. Robert, at one (1) point in a response to a
19 question from the Proponent, you mentioned that at some
20 point, you need to have -- well, you need to have
21 protection at a certain point. That was what you'd
22 mentioned.

23 When I look through what you've put
24 forward here, worst-case unmitigated scenario, you're
25 talking about seeing downstream effects 65 kilometres,

1 and then after that, it says, "Or up to 155 kilometres
2 away." I'm not sure why there's variation there, but
3 that's fine, let's leave that.

4 Your recommendation number 8 says you'd
5 like to see protection for Lady of the Falls. How
6 helpful do you really think that is for us? If -- if
7 you're saying utmost 165 kilometres away, and Lady of
8 the Falls is over 400 kilometres away, if they go up to
9 399 kilometres away, you're fine with that, or should
10 we be looking somewhere else?

11 MR. ROBERT JENKINS: Thank you, Madam
12 Chair. It's Robert Jenkins, with the GNWT. So thank
13 you for that.

14 Yes, I mean, there are some predictions
15 and -- and the predictions, like I said, there -- there
16 is some -- some variability in that. You know,
17 although -- although based on our predictions, we're
18 not anticipating that there will be a measurable change
19 at the Lady of the Falls, we've heard lots of concern
20 from Aboriginal groups, and, you know, predictions are
21 just that, but measures are something that then will
22 institute that that protection must be achieved.

23 And so that's how we're looking at this.
24 Although right at this time -- and I -- I think, you
25 know, De Beers would agree, I mean, we're not

1 predicting we will see measurable change there, but it
2 is a very -- it is an area that is of very high
3 importance. I don't think there's any question or any
4 doubt in anybody's minds here in the room the
5 importance of this site to First Nations and Aboriginal
6 groups, so a measure will ensure that that protection
7 is upheld.

8 MR. JOHN CURRAN: Do you think that a -
9 - sorry, John Curran, Review Board.

10 Do you think that the 44 kilometres that
11 has been referenced in some of the other presentations
12 might be more appropriate, just because it would be so
13 much closer to Snap?

14

15 (BRIEF PAUSE)

16

17 MR. ROBERT JENKINS: Thank you, Madam
18 Chair. It's Robert Jenkins, with the GNWT.

19 I think, you know, we're -- we're
20 confident that there'll be a non-detectable change at
21 Lady of the Falls. I think there is some variability
22 in some of the predictions, and I'd be -- I'd be very
23 hesitant in placing a -- a spacial extent, you know, at
24 this time, you know, limiting, you know, to 44
25 kilometres, when -- when ultimately, it may be -- you

1 know, it could be a little bit higher than that under a
2 mitigated scenario. It could be larger than that under
3 the non-mitigated scenario as we referenced in ours.

4 But again, I think -- you know, we're
5 confident that it'd be a non-measurable change at Lady
6 of the Falls, so the -- so the -- the measure seems
7 appropriate to us. Although I agree with you that --
8 that, you know, placing a, you know, closer to the site
9 is -- very much aligns with the principles of pollution
10 prevention, and -- and keeping the extent spatially as
11 -- as localized, you know, as you can. So I do agree
12 with the -- the concepts there.

13 I guess I -- I'm hesitant to -- to say
14 that, you know, a measure would include a -- a
15 numerical spatial extent right this time based on the
16 predictions, and so I -- I hope that answers your
17 question. MR. JOHN CURRAN: Yeah, no further
18 questions at this time, Madam Chairman. Thank you.

19 THE CHAIRPERSON: Okay. Thank you,
20 GNWT, for your presentation. We will now call a ten
21 (10) minute break.

22

23 --- Upon recessing at 10:45 a.m.

24 --- Upon resuming at 11:04 a.m.

25

1 THE CHAIRPERSON: Are we ready to start
2 the presentation from the Yellowknives Dene First
3 Nation? Okay.

4

5 PRESENTATION BY YKDFN:

6 MR. TODD SLACK: Thank you, Madam
7 Chair. My name is Todd Slack. I'll be speaking on
8 behalf of the Yellowknives today. Thank you for the
9 opportunity to present to the Board.

10 In our presentation, we've submitted a
11 number of recommendations, which you've given us
12 guidance not to speak about today, so I'm just going to
13 advance to this slide and leave it there for now.

14 The Dene people have a basic creed for
15 land management: Take care of the land, and it will
16 take care of you. Golders and -- Golder and De Beers
17 have -- have a different philosophy: Over-protection
18 is not useful. The differences in these world views
19 shouldn't be that surprising. When it comes to
20 surviving in a harsh environment versus ensuring that
21 development projects can proceed, it's only natural
22 that the core values of each of these groups will be
23 expressed differently. This is the Chief Drygeese
24 Territory, where the views of the people of Denedeh
25 have been evolving for thousands of years.

1 The consequence of a weak doctrine was
2 not economic. It was survival. If the Dene view on
3 utilizing our Northern environment wasn't successful,
4 it never would have been passed on. So while the YKDFN
5 can understand the Proponent's view and the economic
6 motivations driving their application, their view
7 simply isn't acceptable based on everything that the
8 people have learned over generations.

9 The Yellowknives do not want to use up
10 every resource. They don't want to remove the
11 environmental resilience or the flexibility that were
12 contained within the Board-issued measures because we
13 simply don't know what's going to happen. We don't
14 know what's going to happen in the future, and we need
15 to ensure that the land and water can support our
16 people.

17 Approaching resource con -- consumption
18 from a conservative viewpoint is far smarter, in our
19 opinion. Use only what you need. This guiding
20 principle is enshrined within the Dene laws. Share all
21 the big game you kill; take only what you need. The
22 Creator has given you a great gift, Mother Earth. Take
23 care of her, and she will always give you food and
24 shelter.

25 But this also occurs within the Land and

1 Water Board effluent quality guidelines:

2 "Waters flowing into, through, or
3 within the NWT shall maintain their
4 quality."

5 It's also reflected in the NWT water

6 strategy: "Water in the receiving environment
7 is maintained at a level that allows
8 for future -- current and future
9 water uses, and the amount of waste
10 to be deposited to the receiving
11 environment is minimized."

12 It is also reflected in the MVRMA, where
13 it is a guiding principle and it is a recurring theme.
14 Section 15(1)(c) recognizes the importance of
15 conservation to the well-being and way of life of
16 Aboriginal peoples, and Section 114 ensures that the
17 concerns of Aboriginal peoples, such as the
18 Yellowknives Dene, are taken in -- into account in your
19 decision.

20 Other sections within the MVR -- MVRMA
21 make numerous mentions of conservation: Section 1 --
22 Section 41(1), Section 58, Section 60.1, Section
23 101.11, 101.2, point -- .1, Section 3, 131, 137. In
24 all of these references, conservation occurs prior to
25 the mention of development, which is an important

1 distinction. This is true in the NWT Water Act as
2 well.

3 The point here is that this -- it's
4 clear that the core value, conservation, has been
5 tested over time and it is threaded throughout the
6 documents that form the basis of -- of our
7 environmental management system. The approach being
8 proposed by the Company and its consultants represents
9 a radical deviation from this shared value in which the
10 process exists to justify the amount of contamination
11 that the receiving environment can absorb.

12 The Company view is inverted. It is a
13 perversion of our system and the foundational elements
14 that guide these processes. We, as a society, are here
15 today to consider a licence that will permit the
16 Proponent to deposit waste in a public resource: our
17 water.

18 The question is how much waste they need
19 to deposit and what -- and -- which in this case has
20 nothing to do with the amount of waste that Snap Lake
21 can absorb. When the Company makes statements such as,
22 "Unnecessary overprotection is not useful," it ignores
23 the principles of First Nations and the people of the
24 NWT. It is an affront to the relationship that the
25 Dene have evolved with the land and water and it's an

1 egregious approach to environmental stewardship.

2 The approach is short-sighted,
3 particularly when you consider that the Dene view is --
4 the Dene view -- if you take care of the land and it
5 will take care of you -- that's an outward looking
6 approach and it's concerned about others. The Company
7 approach is concerned with their needs, not the needs
8 of others. These views haven't been reconciled. And
9 because there was no real consultation towards this
10 end, that would have been a real opportunity to work
11 towards that.

12 Madam Chair, the Yellowknives don't want
13 to see this mine closed. We would have much preferred
14 that the Company's environmental management had been
15 more effective and that their consultants had been more
16 willing to listen back in 2003. It would have resulted
17 in a better mine plan and a lower impact to our
18 environment.

19 In our technical submit -- submission,
20 you'll note that the Yellowknives have compromised on
21 what they believe the permitted level of waste can be.
22 We have sought to find a way -- a way forward for this
23 site to continue operations. But as was off-handedly
24 said in the technical sessions, not at any cost. In
25 that case, it was the Company talking about the cost of

1 treatment, whereas we are talking about the cost of the
2 environment which the people depend on.

3 The Company response to the Yellowknives
4 was to ask for an interim lim -- limit that is even
5 higher, another 25 percent increase beyond the doubling
6 that they've already asked for, moving the goalpost
7 even further from the Board's previous decision. They
8 continue to say that it's safe and it's protective of
9 the environment. But it begs the question: If this
10 project was as safe as they say and the Company
11 provided the benefits that they -- they promised, would
12 the residents who stood to gain be so concerned with
13 the proposal?

14 It seems that many of the parties who
15 live in this territory are concerned with the Company
16 approach and perspective. And it seems to me that
17 these diverse parties are all resistant to the proposal
18 for two (2) reasons. The first, because there's a real
19 concern that the limit is not protective, considering
20 their environmental and world view. And the second is
21 because the Company cannot be relied on to exercise
22 effective environmental stewardship.

23 They've had plenty of opportunity to
24 adaptive -- adaptively manage their many environmental
25 issues but have chosen to wait until the matters become

1 crises before acting. Whether it's the north pile
2 that's full, the creation of paste that was supposed to
3 be happening since day 1, or the water management
4 issues. It seems like it's always last minute with
5 this Company.

6 Now, if we undertook that the Comp -- or
7 if we accept that the Company undertook the preparation
8 of treatment options in 2008 because of some unclear
9 connection to the world economy and they don't actually
10 -- they didn't actually know that they had a problem in
11 2011, then this Company failed to implement the
12 decision of your Board.

13 And I will call the previous decision
14 where, in numerous recommendations, they are required
15 to do annual monitoring of TDS loadings and compare
16 that to their predictions. So if they didn't know in -
17 - until 2011, those first three (3) years they weren't
18 doing what you told them to do.

19 On the other hand, if we think that the
20 Company was aware of the TDS issues as -- and this
21 morning, I went and I -- I did a quick Google. I found
22 a SLEMA document dated April 9th, 2009, to the Company,
23 which indicated that they had concerns with the rising
24 level of TDS within the lake. And that was based on
25 the 2007 water licence report.

1 That quick Googling also noted a -- a
2 Company document entitled, "2009 Report to Societies,"
3 and this is available on the De Beers website, where on
4 page 26, it notes that:

5 "The rising level of TDS is a major
6 iss -- a major risk to Snap Lake."

7 So if that's the case, then the Company
8 failed to implement the mitigations that -- that they
9 were required to do again in that Board decision, that
10 previous Board decision. And in -- in particular, this
11 is recommendations 3, 5, and 10 in the previous
12 decision.

13 Now, nowhere should the precautionary
14 principle have been applied more than in this
15 particular case. Despite the many years of data
16 collection prior to the EA, the Company badly erred.
17 And while that's one (1) problem, the -- the Company
18 compounded it by not adaptively managing the site as
19 they were committed to. They knew years ago that the
20 predictions and models weren't valid. The lack of
21 complete information was reason enough to start to act.
22 There was a disturbing trend there, and action should
23 have been taken.

24 In the first EA, as we've heard already,
25 there was considerable debate on the validity of the

1 Company's predictions. They couldn't understand why
2 everyone was concerned, and I'm concerned that we're
3 seeing this same view being reflected in this process.
4 And when I hear conclusive statements, I -- I like to
5 think about the one (1) -- one (1) of the ones that
6 occurred in the first environmental assessment. And
7 this is fro -- from Golder, a quote regarding the TDS
8 predictions:

9 "I have a really hard time thinking
10 about or even discussing anything
11 higher than that, because as I
12 explained in my talk, we get beyond
13 the description of what is a
14 reasonable worst-case that can happen
15 and we are in the territory of having
16 to combine things that don't make
17 sense scientifically."

18 In that process, as in this one (1), the
19 Company thought they were right and that everyone else
20 was wrong. They acted as though they had a foresight
21 that the rest of us seemed to lack. Unfortunately for
22 all of us, we're here today, which means that they were
23 wrong.

24 This Board did have the foresight. They
25 put in place a number of measures, and these

1 constrained the project and were -- included the
2 uncertainty that was part of that process. That was
3 done in case we were going to find ourselves in this
4 very position where the predictions turned out to be
5 wrong. The Board accepted the -- the project's
6 position, but if it was found to be incorrect, there
7 was a hard limit on the level of effluent that could be
8 released, and it required mitigation to occur.

9 It seems -- excuse me. It seems that
10 the monitoring part of the Board decision was
11 eventually implemented. We're here now. We know that
12 there's a disturbing trend. We know that this limit is
13 going to be exceeded. But why did we wait until 2011,
14 until we started to see a management response, when the
15 Board -- the Board decision required it to occur as
16 soon as it was detected?

17 Madam Chair, the Yellowknives feel that
18 the inclusion of a hard limit and the number of
19 measures that relate to TDS was intentional. The Board
20 wanted it that way, and they wanted it that way for a
21 good reason. They were concerned that the project was
22 wrong on key issues, and as it turns out, they were
23 right to be concerned.

24 We heard today that the -- the pro --
25 the project's operational monitoring showed deviations

1 from the predictions used, and this is where we all
2 failed. We as a collective group did not hold the
3 Company to account. We allowed them, as a group, to
4 not implement the mitigations. We should have been
5 doing more. However, that does not excuse the inaction
6 of the Company.

7 During the last licensing phase, we did
8 start to see a management response, but the cornerstone
9 of that response seems to be that they have already
10 decided the road forward was to move the goalpost and
11 change the limit. Now, this is generally the go-to
12 response from industry. When they encounter a licence
13 limit, the first thing they seek to do is to have that
14 limit changed.

15 And the Yellowknives find that
16 perspective troubling. Instead of standing up and
17 living -- standing up and living up to the commitments
18 that they -- they have made, particularly in this case,
19 where it was based on their -- their information and
20 their view, the Company -- companies generally just --
21 they do the work and seek to have that limit changed.

22 And what is the consequence that comes
23 with that? Where exactly are -- are we seeing the --
24 the acceptance of responsibility for the past? They
25 failed to deliver the benefits that were promised, and

1 they're going to have a larger impact. The original
2 assessment that was done back in 2003 doesn't -- isn't
3 reflective of what we're faced with today.

4 This is poor stewardship and weak
5 accountability, and it doesn't correspond to the
6 guidelines that exist in our territory. Both the MVLB
7 (sic) and the GNWT water strategy documents highlight
8 minimizing the amount of degradation to our water where
9 it isn't necessary.

10 Now, the project has made it clear that
11 they cannot effectively treat their effluent to the lic
12 -- current licence requirement of 350 milligrams a
13 litre. It's expensive. We acknowledge that, but this
14 shouldn't be confused with it's not technically
15 feasible. They could have implemented treatment for
16 two (2) reasons, one (1), to slow down the loadings
17 that are happening to Snap Lake, and to buy time for a
18 more thorough and complete environmental assessment to
19 be done. We're on a very compressed timeline.
20 Additional time would have allowed us to have a better
21 idea as to what mitigations are possible.

22 From the Company point of view, it seems
23 that the initial water quality of Snap Lake, that
24 superior water quality that we heard talked about
25 earlier, that's not a driving concern of the Company.

1 Their concerns are twofold, one (1), the cost, and two
2 (2), what is the licence requirement? And these two
3 (2) facts culminate in the Company and the approach
4 that the Company is using. There isn't any
5 conservation within their proposal.

6 The Company sees -- is seeing Snap Lake
7 effectively as a water treatment pond, not as a viable
8 lake. They will put the maximum concentrations into it
9 that they can. We need to be clear that whatever
10 licence limit this Company arrives at, it's going to
11 treat it a pollute-up-to limit, and they won't act
12 until absolutely necessary.

13 And we can tell what they have in mind.
14 We've already seen the project agitating to see that
15 six eighty-four (684) limit raised to even higher
16 values.

17 So if we think about the 10 milligrams
18 per litre that Snap Lake originally was, superior
19 water, we're not talking about a 4,900 percent increase
20 as the Yellowknives's compromise proposal entails.
21 We're talking about something closer to 10,000 percent.

22

23 Fundamentally, the Yellowknives believe
24 that this pollute-up-to approach is dangerous. To
25 adopt an approach where you develop a limit that

1 provides no safety factor and compromises the
2 environmental resilience left in the system, it's not
3 acceptable. It represents an unresolved significant
4 public concern.

5 And just for -- for a minute, let's
6 think of this in terms of an analogy. If you were a --
7 an engineer and you were designing a building, you
8 don't design it to the -- like, so that the maximum
9 load is just at the edge of its stress strength. You
10 design it for safety and unintended uses, accidents and
11 malfunctions, for things that you don't know about.

12 And that's the issue with this pollute-
13 up-to approach. It nece -- necessitates a complete
14 understanding of the system, to know everything with no
15 safety factor, and operational history shows us that
16 this site lacks the complete knowledge of the
17 environment. They didn't know the land and water a --
18 a decade ago, and it's -- and while it's clear that we
19 should have learned from that, the lesson from that
20 failure isn't to give them a new limit with no safety
21 factor, it's to impose similar measures as in the past.

22 The lesson should be humility and an
23 acceptance that we don't have a complete understanding,
24 that we don't know everything. And we should proceed
25 from that point, not the opposite. And this means that

1 conservation needs to be built into consider -- into
2 the consideration, and this will preserve the
3 environmental resilience for those events or those
4 matters that we can't -- we don't know about now.

5 Thus, the Yellowknives believe the Board
6 should reject the Proponent's approach and set a
7 determined limit of 500 milligrams per -- per litre for
8 this project, and that's the acceptable limit that
9 we've -- we've arrived at. Beyond this, we start to
10 see impacts to the land and water that make it unusable
11 for our membership and our land users. When water
12 tastes bad, people will view the area with suspicion.
13 When you view an area with suspicion, it is no longer
14 part of the viable and useful land base.

15 Now, generally pollutants aren't
16 detectable by our active senses. We -- you know, wat -
17 - contamination within the water isn't visible. It's
18 rarely a function of taste. We certainly can't hear
19 it. And so in this case, when people are out on the
20 land, when they take water out of that lake, they're
21 going to taste it, and that represents a different type
22 of thing than many of the contaminant issues that we've
23 talked about in other venues and other hearings.

24 When the taste of the water changes,
25 when it isn't good water anymore, it's a dangerous sign

1 for land users. That same principle -- when you take
2 care of the land, the land will take care of you --
3 well, obviously something is wrong with this area and
4 it's not going to take care of the users, so they'll
5 avoid the area.

6 And if it was just one (1) small area,
7 that is potentially a tradeoff that could be
8 considered, but this isn't just Snap Lake itself.
9 We're talking about a much larger area than that. The
10 contaminants travel with the water, and so will the
11 perception that the water isn't healthy.

12 This area lies just upstream from one of
13 the principal Yellowknives hunting areas. The Band has
14 a number of cabins and has supported harvesting efforts
15 there every year, including schools, Elders. It's an
16 active cultural site. We can't risk further
17 environmental degradation, because that wasn't part of
18 the original assessment that was made.

19 The Yellowknives have little confidence
20 that the lake will return to its former state in a
21 timely manner. The Company predictions, we acknowledge
22 them. But the fact is the -- this Company has been
23 wrong about predictions, and wrong in a very big way.
24 And being wrong about predictions is natural, but what
25 happen -- the important thing is what happens

1 afterwards.

2 And if this Company had demonstrated a
3 behaviour in which they have built the environmental
4 credibility, this concern wouldn't be at the level that
5 it is. But we believe that if this project is
6 permitted as proposed, we'll see very high TDS area --
7 TDS limits in this area for generations.

8 Madam Chair, to wrap this up, the --
9 from a Yellowknives perspective, it -- it's quite a
10 simple issue. When you look at the evidence, we have
11 an operational history where multiple fundamental
12 components of the original assessed project have failed
13 to come to fruition.

14 The modelling hasn't been effective.
15 The predictions weren't valid. We have a history of
16 broken promises, commitments, and assurances. The
17 measures of this Board were not enacted. Suggestions
18 issued by this Board were not enacted. The benefits
19 promised by the Company weren't delivered.

20 We have a distinct lack of compromise or
21 consensus building. There's dail -- there are regular
22 environmental compliance issues at this site.
23 Recently, the aquatic response framework was triggered
24 for cesium and thulium in the fish, another concern
25 that we didn't know about. We don't understand why

1 it's happening. And most recently, we had the
2 exceedances of chloride, which you heard about last
3 night.

4 If you look at all of these things and
5 you have uncertainty, or if you believe that De Beers
6 doesn't know everything, then common sense suggests
7 that this isn't the mine to trust with complete
8 environmental stewardship. As for the Yellowknives, we
9 don't look at this list of issues and feel compelled to
10 see the project rewarded with less stringent
11 environmental limits. Quite the opposite. Now, during
12 the last two (2) PHP -- last two (2) Ekati hearings,
13 pardon me, the Yellowknives spoke to the -- the
14 Wek'eezhii Land and Water Board for about ten (10)
15 minutes in total. And that's because that operation
16 has shown clear accountability and clear stewardship.

17 And yet in this case, the Yellowknives
18 have still adopted a compromise, something that
19 preserves the water quality and will continue to allow
20 our members to utilize this area. And it was a very
21 difficult deliberation internally. It wasn't easy to
22 arrive at that position.

23 We're seeking a way -- a way forward
24 where the Dene way of life is still part of the
25 consideration. And we want to work with this company,

1 but they continue to forge ahead without engaging in a
2 meaningful way. And this is the -- the kind of
3 attitude that got them in trouble the last time. This
4 company has shown that they don't have a foresight that
5 all of the other -- all the rest of us lack.

6 Madam Chair and Board members -- and
7 there has been a lot of discussion about numbers. And
8 that's not important. We want to bring it back to that
9 critical decision. Does the Board support the move to
10 -- moving the goal post, that pollute-up-to approach
11 that's proposed by the Proponent? Do you trust them to
12 respect the principles of our territory that's found in
13 the policies, the legisla -- the legislation, and the
14 traditions? Because the operational history has shown
15 this to be an out -- unlikely outcome.

16 Again, the Company predictions were
17 wrong. Many aspects of the original proposal were wro
18 -- were -- didn't come to be. When it became clear
19 that the predictions were wrong, the Company chose
20 inaction. When inaction was no longer viable, they are
21 asking for much higher limits so that inaction will be
22 viable again.

23 From the Yellowknives Dene perspective,
24 this Propo -- this -- the Proponent has failed to
25 demonstrate how their proposal, with all of its

1 uncertainty and past failures of credibility, meets the
2 burden of not risking significant effects or does not
3 mitigate the significant public concern that would
4 occur if this proposal is-- proceeds as -- as is
5 proposed. Pardon me.

6 Enough is enough. The Board tried to
7 give the -- the Proponent flexibility last time, and it
8 didn't work. We don't want to see those mistakes
9 repeated. And to that end, we believe that if the
10 Board incorporates all of the YKDFN recommendations,
11 the concerns and the significant public -- or
12 environmental impact will be mitigated in such a way
13 that it could proceed along those lines. This will
14 respect the Dene way. It will protect the lands and
15 the members will still be able to use this area as they
16 have in the past. Thank you very much.

17

18 QUESTION PERIOD:

19 THE CHAIRPERSON: Okay. Thank you, Mr.
20 Slack. We'll now ask questions from the GNWT.

21 MR. ROBERT JENKINS: Thank you, Madam
22 Chair. It's Robert Jenkins, with the GNWT.

23 I gave you a little bit of a head's up
24 on this question, so it might not be that much of a
25 surprise. But, like I said, I want to ask Mr. Slack

1 and the Yellowknives if they could describe the
2 traditional uses that the Yellowknives feel must be
3 protected in Snap Lake and downstream. And -- and also
4 if you have any comments regarding the level of
5 protection for Lady of the Falls, I'd appreciate
6 hearing some comments on that as well. Thank you,
7 Madam Chair.

8 MR. TODD SLACK: Todd Slack, on behalf
9 of the Yellowknives. Excuse me.

10 The -- the Snap Lake area of the MacKay
11 Lake area is a -- an essential part of the Yellowknives
12 land base. The membership actively hunts, they trap,
13 they fish in this area. It's used by schools for on-
14 the-land education. Elders -- the full range of
15 cultural and treaty activities occur in this area.

16 The band has two (2) cabins that -- for
17 the use of the members located on MacKay Lake. And
18 this doesn't even address the -- the day trips and the
19 harvesting opportunities that members go up on their
20 own and practice their traditional rights. And it's
21 not just a rights issue or a cultural issue. The succ
22 -- sort of successful harvesting in this area is
23 essential for the well-being of the people of N'dilo
24 and Dettah. It's a -- literally a food security issue.
25 A great deal -- and I have no idea in terms of the per

1 -- percentage, but it's not minor, of the country food
2 comes from this area.

3 The -- our Chief is in the back making
4 sure that I'm doing a good job here, or hopefully doing
5 a good job. Just as an example, his family was born
6 and raised in this area. It remains in high use today.
7 And so the risk of -- the -- even if this area is only
8 perceived to be contaminated, that is enough. If the
9 land isn't good, people aren't going to go there.
10 They're not going to use it. And the -- the
11 requirements of the First Nation will be compromised,
12 and it will further limit the ability of the First
13 Nation to exercise their rights. It will harm the
14 culture. And it will ultimately harm the health of the
15 First Nation.

16 Thank you.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: Okay. Questions from
21 Environment Canada?

22 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey
23 McMillan, with Environment Canada. We have no
24 questions.

25 THE CHAIRPERSON: Questions from Lutsel

1 K'e Dene First Nations?

2 MR. MIKE TOLLIS: Mike Tollis, from
3 Lutsel K'e. We want to thank the Yellowknives for
4 their presentation, but we have no questions.

5 THE CHAIRPERSON: Questions from North
6 Slave Metis Alliance?

7 MR. MATT HOOVER: Thank you, Madam
8 Chair. Matt Hoover, North Slave Metis Alliance. Thank
9 you to the Yellowknives for their presentation. We
10 have no questions.

11 THE CHAIRPERSON: Questions from Deninu
12 K'ue First Nations?

13 MR. MARC D'ENTREMONT: Thank you, Madam
14 Chair. Marc d'Entremont, for the DKFN. We have no
15 questions.

16 THE CHAIRPERSON: Questions from De
17 Beers?

18 MS. ERICA BONHOMME: Erica Bonhomme.
19 Can you give us a couple minutes, please?

20 THE CHAIRPERSON: A minute and a half.

21

22 (BRIEF PAUSE)

23

24 MS. ERICA BONHOMME: Erica Bonhomme, De
25 Beers. Thank you very much, Mr. Slack, for a very

1 heartfelt presentation. We've heard similar comments
2 from -- concerns raised during our recent community
3 visits.

4 My -- my question is: Has the -- have
5 the Yellowknives Dene made available to us, or -- or to
6 the parties here, to yourselves, the Board, any
7 information that would help us clearly understand the -
8 - the traditional land use in this area, specifically
9 around Snap Lake? And -- and the reason I -- I bring
10 that up is we have met with the communities. We have
11 met with the Chiefs, and we didn't hear those concerns.

12

13 So I'm just wondering if, Mr. Slack, you
14 could provide the parties here with the information
15 that would -- that could be reviewed?

16 MR. TODD SLACK: Todd Slack, on behalf
17 of the Yellowknives.

18 I think that one (1) of the things that
19 happens when companies undertake engagements with First
20 Nations is the -- when they go in and they present
21 their information, if they don't hear anything,
22 generally companies view that as though there isn't a
23 concern, when in reality, the -- the community and the
24 -- the leadership often take that information away and
25 they -- they undertake deliberations themselves. They

1 provide that information to the Land and Environment
2 Department, and we're making our presentation now.

3 So I don't think that the idea that --
4 because you just didn't hear -- potentially hear a
5 particular concern at the time, I don't think that's
6 reason enough to assume that there was no concerns, and
7 this is something that we encounter all the time.

8 In this case, the Yellowknives have been
9 pushing for direct engagement on -- on TDS issues, and
10 the contamination that would result particularly
11 downstream and particularly to the exercise of rights
12 and perception of the land. These were all concerns
13 that we tried to advocate for, and have this moved
14 forward in 2011.

15 At that time, we were -- it's in the --
16 the transcripts of the Land and Water Board process,
17 and I believe it's in our intervention. We were
18 promised that there would be significant engagement and
19 significant consultation. That didn't happen.

20 The Volume I of the application, it's
21 maybe five hundred (500) pages long, there's a single
22 bullet that relates to TDS. Now, in the Company
23 proposal, they -- they talked about that -- or the
24 Company tech -- presentation, pardon me, they talked
25 about how the Yellowknives were suffering from

1 consultation fatigue, which is true, and in the future,
2 they would propose multiple issue engagements, and I
3 think that's a good idea, and part of those engagements
4 will be -- should have been conveying this type of
5 information to them.

6 Now, the question is, do we have a
7 database of where all our harvesters go? Do we have
8 harvesters with GPSs? No, we don't have that. We can
9 tell you there are two (2) cabins on MacKay Lake. I
10 can tell you where they're -- I can provide you with
11 those locations. However, there are other member
12 cabins. We don't inventory them.

13 And what -- the other thing to be warned
14 of is, when someone has a cabin, it's not just they --
15 that's where they harvest. It represents a staging
16 point to use the entire landscape surrounding that.

17 So MacKay Lake is 40 kilometres upstream
18 from -- downstream, pardon me, from Snap Lake. That's
19 an hour's travel. People are in this area. If you're
20 looking for records, our Yellowknives harvesters were
21 in the Snap Lake area and were, unfortunately, charged
22 for exercising their rights this year.

23 So there can be -- in my mind, there is
24 little doubt that this is an active and important area
25 for the Yellowknives Dene.

1

2

(BRIEF PAUSE)

3

4

MS. ERICA BONHOMME: Erica Bonhomme, De

5 Beers.

6

I have no further questions, but I -- I

7

would like to -- I would be very interested in -- in,

8

you know, seeing some kind of evidence put on the

9

record.

10

MR. TODD SLACK: Madam Chair, I -- I've

11

worked for the -- the Yel -- and I'm happy to provide

12

the -- a map that shows our cabin locations, and I -- I

13

think what we're seeing is reflective of the poor

14

engagement that's happened. I've worked for the

15

Yellowknives for eight (8) years on a -- talk to them

16

on a daily basis, Elders, leadership, land users,

17

youth, Eld -- Elders a lot.

18

If the Company was having meaningful

19

engagements with the community, they would have heard

20

all this already, and I think that this is a symptom of

21

the root cause here. And I -- I can give them what I

22

have, but it's surprising to me that they haven't heard

23

this already.

24

THE CHAIRPERSON: Okay. No further

25

questions from De Beers. I would like to ask -- ask

1 Board staff if they have questions.

2 MR. ALAN EHRLICH: Thank you, Madam
3 Chair. It's Alan Ehrlich, with the Review Board.

4 I've got two (2) questions, and I'll
5 likely be asking similar questions to the other
6 Aboriginal groups that are presenting after.

7 Todd, you have talked about the
8 perceptions of the area, and the importance of
9 perception. You're familiar with what is happening in
10 the lake now. You're privy to the evidence that's on
11 the record. My question is this.

12 In your opinion, is it likely that
13 Yellowknives Dene First Nation members will drink from
14 Snap Lake itself while the mine is in operation prior
15 to closure?

16 MR. TODD SLACK: Todd Slack, with the
17 Yellowknives.

18 While the mine is in operation, I think
19 that to be unlikely. However, once the mine is closed,
20 the -- the critical issue with closure is that this
21 land and area is returned to the way that it was. Now,
22 part of the bargain that we all make when we enter into
23 these environmental assessments is there's going to be
24 benefits for tradeoffs, or benefits for impacts.

25 Now, the Yellowknives know this area

1 isn't -- this lake isn't going back to 10 milligrams.
2 It's not going to back to that superior water quality,
3 but it should go back to something that reflects that,
4 and the land should be usable from the -- the members'
5 perspective.

6 MR. ALAN EHRLICH: Thank you. And a
7 follow up to that -- it's Alan Ehrlich, with the Review
8 Board again.

9 How soon do you think the lake should go
10 back to that?

11 MR. TODD SLACK: Todd Slack, for the
12 Yellowknives.

13 The -- the natural answer is as soon as
14 possible, and I would say day one (1) after closure,
15 but I understand that's unrealistic.

16 There -- there hasn't been a -- a good
17 discussion, nor do I think there was in the envir --
18 the original environmental assessment as to how long
19 the tradeoff is. But if it can't be day 1, we sure
20 don't want it to be ninety (90) years. So somewhere in
21 between that, as shortly as possible, because we have
22 to remember, as Snap Lake has occurred, the land has
23 changed, and there's hardship that exists within the
24 First Nation now in terms of the availability of game
25 meat.

1 So having this area return as quickly as
2 possible, and be productive, and the users going back
3 there to access the resources that it will eventually
4 provide, is essential for the well-being of the
5 Yellowknives.

6 MR. ALAN EHRLICH: Thank you, Todd.
7 And my last question, you've talked about traditional
8 use of the area downstream.

9 Can you please describe in some detail
10 what the traditional uses of Snap Lake itself have
11 been?

12 MR. TODD SLACK: Historically, Snap
13 Lake has -- it's been the same part of the land base as
14 always. Is -- is this -- is the Snap Lake area
15 adjacent to where the mine is the best habitat, the
16 best area in the Chief Drygeese Territory? I don't
17 believe so.

18 That doesn't mean it was the worst --
19 the Chief is in the back. His family fished in Snap
20 Lake. They fished all through this area, they trapped
21 all through this area, and they harvested all through
22 this area, and that's just one (1) example from one (1)
23 family.

24 When we expand that to the larger
25 population, historically, this area has been used, and

1 it provided an important area for the survival of the
2 people.

3 MR. ALAN EHRLICH: So just to be clear,
4 in -- Alan Ehrlich, for the Review Board again.

5 If I understand you correctly, you're
6 saying Snap Lake itself has, at times, been
7 traditionally used for, you said, hunting, trapping,
8 fishing.

9 Can I assume that drinking water
10 directly is a part of that?

11 MR. TODD SLACK: Yeah, and rather than
12 looking at it as to what activities occur, people lived
13 here. And in order to live, you have -- there was a
14 subsistence economy, very traditional economy. You had
15 to harvest to survive. It's cold, so you needed furs
16 for your -- and pelts for your own survival. All of
17 those things -- and this includes drinking water, it
18 includes berries, medicinal plants. All of those
19 things form living on the landscape. MR. ALAN EHRLICH:
20 Thank you, Madam Chair. That completes questions from
21 Board staff and counsel.

22 THE CHAIRPERSON: Questions from Board
23 members? Okay. James...?

24 MR. JAMES WAH-SHEE: Thank you, Madam
25 Chair. I just want to make a -- a comment, if I may.

1 I'd like to express my appreciation for your
2 presentation. The -- it's good that we hear the
3 concerns so that we have a -- a better understanding of
4 the issues related to the project, so I'd just like to
5 thank you for the presentation, and also the questions
6 that came from the other parties. Thank you.

7

8 (BRIEF PAUSE)

9

10 MR. JAMES WAH-SHEE: My names is James
11 Wah-Shee. Thank you. Board member.

12 THE CHAIRPERSON: Okay. Thank you, Mr.
13 Slack, for your presentation. At this time, before we
14 move on to the next presentation, the Chair would like
15 to recognize Chief Eddie Sangris from the Yellowknives
16 Dene First Nation. Welcome.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: And the Chair would
21 also like to recognize a past Board member that served
22 on this Board, Rachel Crapeau. Welcome.

23 If we could ask the next presenter,
24 please, Lutsel K'e Dene First Nations, to come up and
25 do their presentation?

1 (BRIEF PAUSE)

2

3 PRESENTATION BY LKDFN:

4 MR. MIKE TOLLIS: Thank you, Madam
5 Chair. It's Mike Tollis, from the Lutsel K'e Dene
6 First Nation.

7 The following presentation will focus on
8 the concerns of the Lutsel K'e Dene First Nation in the
9 areas of downstream water quality, cumulative effects,
10 and impacts to closure, and the perception of the
11 Company that needs to be improved upon.

12 To provide some context to our concerns
13 of downstream impacts, mining and production commenced
14 in 2008, and is predicted to last for twenty (20)
15 years. After five (5) years, SLEMA reported that the
16 effluent plume was already detectable up to 22
17 kilometres downstream from the mine site. This plume
18 is a source of constant worry for the First Nation, as
19 it is a very important watershed. Spiritually, the
20 most important to ensure is protected from
21 contaminants.

22 The plume is slowly creeping downstream
23 and affecting undisturbed lakes along its path, and
24 though rate of water flow and dilution rates are not
25 always con -- consistent, Lutsel K'e Dene First Nation

1 calls into question the prediction that effluent will
2 only be detectable up to 44 kilometres downstream for
3 the life of the mine as stated in De Beers's technical
4 report responses and throughout this hearing.

5 De Beers's report mentioned the Lady of
6 the Falls site being 436 kilometres downstream, and
7 though De Beers's 44 kilometre prediction would have to
8 be severely misguided to reach this site, future
9 developments on the watershed would look more
10 threatening to the sanctity of this sacred watershed,
11 should the plume continue past the prediction of 44
12 kilometres.

13 In regards to water quality, De Beers's
14 predictions for TDS was off. De Beers's predictions
15 for no unplanned releases into Snap Lake was off, and
16 with the repeated failures to comply with water
17 licences, LKDFN requires more certainty than Company
18 estimates in terms of the limits of downstream
19 contamination from the Snap Lake Mine.

20 De Beers has offered another prediction.
21 Just like the original predictions, it looks acceptable
22 to Lutsel K'e Dene First Nation, but we're having a
23 hard time accepting them, as we're not able to support
24 the proposal based on Company predictions again, and we
25 don't think the Board should either.

1 In the technical session in transcripts,
2 De Beers predicts that Snap Lake contaminants would not
3 be detectable beyond the inlet of MacKay Lake. So in
4 response to this prediction, LKDFN offers the following
5 measures. First, with this development and -- and with
6 future proposed developments in the watershed, we will
7 be seeking this measure, that the Lady of the Falls
8 site is completely protected from water quality and
9 quantity changes. No level of change is acceptable at
10 this site regardless of the source. For LKDFN, this is
11 beyond a significant impact. This impact will be
12 completely devastating to the history and culture of
13 the First Nation -- that the First Nation believes and
14 lives off of. We encourage the Board to invoke the
15 strongest means of protection possible for this site.

16 Second, in regards to the prediction for
17 MacKay Lake, we'd request from the Board to have De
18 Beers identify exactly where 44 kilometres downstream
19 is, presumably -- presumably the inlet of MacKay Lake,
20 and create a threshold limit at this point. LKDFN's
21 understanding of threshold limits from Aquatic Effects
22 Monitoring Program response frameworks are that some
23 action is required from the Proponents upon reaching a
24 predefined level of environmental change to ensure that
25 significant impacts never occur.

1 If the 44 kilometres downstream is a
2 reasonable estimate, as mentioned yesterday, then
3 reaching this reasonable estimate would be cause for
4 concern, therefore justifying this level as a high
5 action level. As a high action level, reaching this
6 point should be cause to implement mitigations to
7 reverse the trend and begin to think about
8 environmental remediation as the next activity. To
9 continue using the response framework terminology, 44
10 kilometres downstream would be the significance
11 threshold, as in the point which the economic benefits
12 of the project are outweighed by the potential
13 environmental impacts.

14 As there are no predictions to determine
15 what happens with the water after 44 kilometres, at
16 that point we'll be all waiting, and watching, and
17 hoping the plume doesn't pick up speed, relying on
18 federal and territorial monitoring stations to
19 determine change.

20 Forty-four (44) kilometres would be the
21 limit of acceptable change. And as with the AEMP, it's
22 driven more by social and cultural values than by
23 science. With this limit, that would make a moderate
24 limit somewhere sooner, maybe bet -- maybe 30 -- 30 to
25 35 kilometres downstream, where the Proponent would be

1 required to take action to stop the trend.

2 We've witnessed enough predictions fall
3 short and we do not wish to rely wholesale on the
4 Proponent's projections again, but rather recommend if
5 they do feel confident in their 44 kilometre limit,
6 then they should have no problem agreeing to a measure
7 from the Board that requires their action to reverse or
8 remediate the damage caused if the plume goes beyond
9 that point. Basically, Madam Chair, contaminated water
10 travelling further than 44 kilometres from the mine
11 site is a significant impact that we -- that would be
12 required to be addressed if there is a measure to
13 enforce it.

14 Lastly, on downstream water quality, we
15 recommend that whatever value the Board sets the -- the
16 pot -- the potential new levels at, that they be hard
17 limits not to be exceeded. Public concern already
18 exists for this operation, and the current EA is proof
19 of -- proof for why LKDFN and other parties are
20 concerned about the ability of De Beers to operate an
21 environmentally sound diamond mine.

22 The way De Beers's proposal looks to us
23 is that when predicting the future some of De Beers's
24 scenarios could see discharge limits being exceeded
25 again, above the currently proposed limits. And as

1 we've come to expect, insufficient performance along
2 these lines, it's not hard to imagine another water
3 licence EA in five (5) or ten (10) years to up the
4 limits once more.

5 Lutsel K'e has put time, effort, and
6 resources into this EA and surely a second assessment
7 of the same nature would not receive approval from
8 Lutsel K'e. Also, De Beers predicts that their new
9 proposal -- proposed levels would not impact aquatic
10 health. So whether the Board accepts our lower, more
11 precautionary recommendations for limits or accepts De
12 Beers's pollute-up-to limits, then these limits -- that
13 these limits not be exceeded throughout the life of
14 mine for the protection of aquatic life.

15 I mentioned a couple slides back about
16 the importance of the Lockhart River watershed, that it
17 holds sacred value, that it's not something to be
18 compromised, and that's its quality and quantity must
19 be maintained.

20 Based on De Beers's practices, we could
21 have degraded water quality for potentially for more
22 than forty (40) kilometres of waterways by 2028. And
23 with the second De Beers's operation at Gahcho Kue,
24 potentially many more kilometres, not to mention De
25 Beers's partner Mountain Province and their -- and

1 their potential operation at Kennady Lake to add to the
2 effects.

3 From a community that always has and
4 will continue to look at developments from a cumulative
5 perspective, our sacred watershed is being threatened
6 with a lack of effective mitigation from the Company,
7 and we are worried about what the future holds. We
8 want it to be well understood by the Company and the
9 Boards right now that this watershed is of tremendously
10 high social and cultural value, and the management of
11 it cannot be based on setting the bar low and reaching
12 it, but focussing on the baseline water quality and
13 working diligently to achieve it.

14 Baseline levels for TDS in Snap Lake
15 were 10 milligrams per litre; chloride, 0.2 milligrams
16 per litre; fluoride, 0.04 milligrams per litre.
17 Instead of setting a TDS level sixty-eight (68) times
18 higher than baseline and not invoking any mitigation
19 strategies to improve dis -- discharge water, De Beers
20 should be setting a limit half that high and exhausting
21 mitigation measures to attain it.

22 If De Beers came to the parties before
23 this EA saying, No, we're doing reverse osmosis
24 distillation evaporation, ion exchange coagulation,
25 desalinization, or electrodialysis, then -- and we

1 can't seem to get under the 350 milligrams per litre,
2 we might have more amenable to raising the limits.

3 But it seems De Beers is coming to the
4 table making a halfhearted attempt at grouting and
5 hoping the parties agree to raise discharge limits.
6 It's just far less than we expect for -- for such a
7 valuable watershed. If LKDFN members are going to
8 sacrifice and settle for questionable water quality and
9 potential declines in fish health for an expended
10 period of time, then a suitable compromise would be
11 that De Beers can sacrifice some capital investment and
12 try to limit the discharge -- or the damage caused by
13 their lack of mitigation strategies employed at Snap
14 Lake to date.

15 So in the interest of compromise, LKDFN
16 is willing to accept the Canadian drinking water
17 quality aesthetic guideline of 500 milligrams per litre
18 of TDS, as we believe that De Beers can do better to
19 limit their discharge.

20 Yesterday, Dr. Don Hart, from EcoMetrix,
21 also said that there is room to set lower objectives.
22 The same with fluoride. Two point six -- two point
23 four-six milligrams per litre is sixty (60) times
24 higher than baseline levels and almost 1 milligram per
25 litre higher than the maximal -- maximum allowable

1 concentration for fluoride in drinking water. For
2 protection of the way of life of Aboriginal people of
3 the North, the levels must be set at or below drinking
4 water quality standards.

5 'Environmental stewardship' refers to
6 the responsible use and protection of the natural
7 environment through conservation and sustainable
8 practices. Conservation and sustainable practices both
9 should carry some -- carry more weight in the
10 evaluation of this EA, conservation in terms of the
11 superior water quality that once was Snap Lake, and
12 sustainable practices in terms of doing what is
13 necessary to ensure discharged water is as close to
14 baseline as possible.

15 We encourage action and investment from
16 the company as this is how you gain the trust and
17 appreciation of the parties. When the parties and
18 regulators don't have to consistently dedicate
19 significant portions of the year to closely monitoring
20 Snap Lake's performance, De Beer will be -- De Beers
21 will be on their way to becoming real environmental
22 stewards.

23 At present, LKDFN staff have to spend
24 more time with Snap Lake-related environmental areas
25 than any other operation and territory. So it's long

1 past time that the Company start adhering to higher
2 standards and make the effort to improve their
3 operation.

4 Community members in Lutsel K'e are
5 concerned, and why wouldn't they be. The way this EA
6 looks is that De Beers had discharge limits that they
7 said was not scientifically possible to exceed. Then
8 rarely comply -- they rarely comply with this water
9 licence and are now approaching these limits. And
10 instead of correcting the problem, they are looking to
11 increase discharge limits.

12 Yes, this operation is disconcerting.
13 So what are we going to do, continue relying on Company
14 predictions or force a concerted effort towards
15 prevention and mitigation?

16 LKDFN believes that we're not past the
17 opportunity to apply a precautionary approach. And in
18 this circumstance, precautionary measures will be
19 costly. But for a diamond industry juggernaut to tell
20 our community that it's not economically feasible to
21 limit contamination of water is simply unjustifiable.
22 As far as LKDFN are concerned, there is no price too
23 high to protect the water and no level of protection
24 can be overprotective.

25 For our final recommendations, LKDFN

1 wants the opportunity to review what De Beers deems
2 uneconomical by providing the parties with a cost-
3 benefit analysis and substantially more information
4 than we received to date on the mitigating technologies
5 available. It will be valuable information to
6 understand what's available going forward, as well
7 interesting to see what price the Company puts on our
8 water's quality.

9 Also, if it hasn't been clear already,
10 we recommend that -- that in the Board's decision, in
11 terms of water quality issue, we prefer changing
12 treatment activities and source control over changing
13 limits.

14 Finally, I mentioned earlier in my
15 questioning of De Beers that there are some
16 discrepancies in definitions of certain terms:
17 cumulative effects, protection, drinking water. But we
18 want to recommend -- but we want to recommend and
19 encourage the Board to adopt more community-centric
20 definitions of these terms instead of those provided by
21 the Company.

22 We are not simply reviewing the changes
23 from one (1) discharge level to another. The bigger
24 consideration in the environmental assessment is the
25 approach of the Company in terms of environmental

1 priorities.

2 Surely, the First Nations have high
3 environmental standards. Conversely, De Beers, in our
4 perspective, is on the lower end of that spectrum. And
5 we're hoping that the Environmental Impact Review Board
6 will hold high environmental standards or, at the very
7 least, fall somewhere in the middle.

8 There is an opportunity here for the
9 Board to recommend limits that are proactive,
10 protective, and precautionary. And we put our faith in
11 the Board to make wise decisions for the sake of this
12 sacred watershed.

13 Thank you for the opportunity to present
14 today, and I'll do my best to answer any questions put
15 forth by the parties. Thank you, Madam Chair.

16

17 QUESTION PERIOD:

18 THE CHAIRPERSON: Thank you. Questions
19 from the GNWT?

20 MR. ROBERT JENKINS: Thank you, Madam
21 Chair. It's Robert Jenkins, with the GNWT.

22 So I do have one (1) question which
23 probably won't come as -- as that much of a surprise
24 and, Mr. Tollis, you've been very clear in -- in many
25 of your statements regarding traditional use and the

1 protection that the -- that Lutsel K'e is -- is looking
2 to -- to maintain at Snap Lake and downstream,
3 including Lady of the Falls.

4 I guess I'd just like to give you the --
5 you know, the opportunity. Is there anything else that
6 you'd like to add to that? Anything, just to give you
7 a little bit more time? I'm not sure if you have any
8 more statements you'd like to make in that regard.
9 Thank you.

10 MR. MIKE TOLLIS: Thank you, Madam
11 Chair. Mike Tollis, from Lutsel K'e Dene First Nation.
12

13 Yeah, just -- just a couple things, and
14 maybe I'll address one of -- one of Alan's questions
15 too, but for traditional uses of the area there's the
16 obvious ones, like fishing and drinking the water. But
17 Aboriginal perspectives and science would probably
18 agree that the common factor for all life is water, and
19 all life is a priority of Aboriginal people.

20 So when we talk about traditional use,
21 it's beyond how we use the land and water and wildlife,
22 but how all life relies -- relies on the land, and
23 particularly the water in this area. We want all life
24 to continue unaffected by contamination, and the real
25 conservation of Te'cha'di: the land, water, and all

1 contained on it or in it.

2 In terms of the Lady of the Falls
3 recommendation, it's -- it's precautionary, obviously,
4 and -- and we're going to be seeking that in -- in all
5 future EAs in this area. But as far as we're
6 concerned, probably changing in Artillery Lake would be
7 unacceptable. This is why we suggested the high
8 threshold limit be the Company's predictions of MacKay
9 Lake because if contaminated -- if contaminated water
10 reaches Artillery Lake, it's too late to do anything
11 about it. Yeah, I think that's all I'll add on that.

12 THE CHAIRPERSON: Questions from
13 Environment Canada?

14 MS. SARAH-LACEY MCMILLAN: It's Sarah-
15 Lacey McMillan, with Environment Canada. I'll turn it
16 to Anita Li. If we can just turn the sound on for the
17 telephone line, please?

18 MS. ANITA LI (BY PHONE): Thank you,
19 Madam Chair. I don't really have a question, but I
20 wanted to make a clarification to the response that I
21 gave to the question posed by the Lutsel K'e Dene First
22 Nation, and the question was: What is meant by BATEA,
23 best available technology economically achievable?

24 This morning I contacted my headquarter
25 colleagues to see if the BATEA report mentioned by De

1 Beers had a definition of 'BATEA'. And I was asked by
2 my colleagues to clarify that the BATEA report is not
3 an Environment Canada report. It is a MEND report.
4 'MEND' stands for mine environment neutral drainage,
5 and the final draft of this report is coming out the
6 earliest in late June.

7 And I was also asked to clarify that
8 Environment Canada does not have a standard definition
9 for BATEA. BATEA is not just technology, but it could
10 be techniques, as well. So I just wanted to make that
11 clarification. Anita Li, Environment Canada.

12 MR. MIKE TOLLIS: Mike Tollis, from
13 Lutsel K'e Dene First Nation.

14 Thank you for that clarification and,
15 yeah, we're looking forward to seeing the -- the
16 definition of it. We're just hoping that economically
17 achievable isn't a -- isn't a measure that the -- that
18 the Company is going to be -- going to be able to make
19 the decision on, just based on past experience and the
20 -- the approach of -- of mining in general.

21 Economically achievable, the definition
22 will probably be extremely low, and -- and not really
23 acceptable by the First Nation. So thank you -- thank
24 you to Environment Canada for that clarification.

25

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: Questions from --
4 questions from Yellowknives Dene First Nations?

5 MR. TODD SLACK: Thank you, Madam
6 Chair. I do -- I just have one (1) question. We've
7 just come through a similar process with this Board for
8 the Gahcho Kue Mine. When the parties brought up the
9 concerns over Lady of the Falls, the De Beers response
10 at that -- in that process was to commit that there
11 would be no change in Lady of the Falls.

12 Is that how you recall it?

13 MR. MIKE TOLLIS: Mike Tollis, from
14 Lutsel K'e Dene First Nation.

15 Yes, that's how I recall it, and we
16 wouldn't really accept anything less.

17 MR. TODD SLACK: Thank you, Madam
18 Chair. That's all.

19 THE CHAIRPERSON: Questions from the
20 North Slave Metis Alliance?

21 MR. MATT HOOVER: Thank you, Madam
22 Chair. Matt Hoover, North Slave Metis Alliance.

23 Thank you for -- for the presentation
24 from Mike Tollis, Lutsel K'e Dene First Nation. We
25 have no questions.

1 THE CHAIRPERSON: Questions from Deninu
2 K'ue -- Deninu K'ue First Nations?

3 MR. MARC D'ENTREMONT: Thank you, Madam
4 Chair. It's Marc d'Entremont for the DKFN. We have no
5 questions.

6 THE CHAIRPERSON: Questions from De
7 Beers?

8 MS. ERICA BONHOMME: Erica Bonhomme. I
9 -- I do have one (1) question of -- for clarification,
10 I hope. A little bit of preface. You -- you know,
11 we've put forward a -- a -- this proposal is centred
12 around a site-specific water quality objective which we
13 believe to be a -- an achievable, appropriate, and --
14 and protective level for the aquatic environment in
15 Snap Lake, as well as a level that will ensure that the
16 water is safe to drink and the fish safe to eat.

17 And I have two (2) recommendations that
18 I'm trying to reconcile in my head. I'm just trying to
19 understand. Maybe you could give me a hand. So -- so
20 a rec -- your first recommendation has -- recommends
21 500 milligrams per litre for the protection of the way
22 of life, and then -- oh, sorry. They're not numbered
23 in order.

24 But the -- your -- your recommendation
25 on cumulative effects and closure impacts, and then the

1 recommendation on perception, which requires -- would
2 require us to provide substantial information about
3 mitigation technologies and -- and various combinations
4 of cost benefit.

5 So, you know, we've committed to doing
6 that. You kn -- you heard us yesterday say that we're
7 committed to doing a BATEA type study. So I'm trying
8 to reconcile, you know, the fact that you're
9 recommending a limit, a hard limit, of 500 milligrams
10 per litre, and doing the cost-benefit analysis.

11 On what basis should -- in that
12 situation would we do a cost-benefit analysis?

13 MR. MIKE TOLLIS: Mike Tollis, from the
14 Lutsel K'e Dene First Nation.

15 Basically, what I was looking for from
16 that -- from the recommendation of -- of a cost-benefit
17 analysis is the -- the cost for the mitigation measures
18 that -- that you're looking to -- that you're looking
19 to incorporate.

20 We assume that for 684 milligrams a
21 litre, as De Beers suggested, there will be certain
22 mitigation measures and certain costs associated with
23 them, but we'd like to see it compared to the drinking
24 water quality aesthetic guideline of 500 milligrams per
25 litre, as well. So when we're comparing the costs of

1 the mitigation strategies to take place, how much would
2 it cost for the mitigation for six hundred and eighty-
3 four (684) versus how much would it cost for the
4 mitigation to 500 milligrams per litre?

5 MS. ERICA BONHOMME: Erica Bonhomme.
6 Thank you. That's helpful clarification. Sorry, I --
7 Erica Bonhomme. I have no further questions.

8 THE CHAIRPERSON: Questions from Board
9 staff?

10 MR. ALAN EHRLICH: It's Alan Ehrlich,
11 for the Review Board.

12 I have two (2) questions, but one's a
13 clarification. You used the words 'significant
14 threshold' at one point when you refer to the 44
15 kilometre downstream point, and now, the word
16 'significant's' a funny thing, because it means
17 different things to different people.

18 And a statistician will think that
19 significant means one (1) thing, and there's a lot.
20 But in an environmental impact assessment, there's a
21 very particular test which this Board has to satisfy,
22 Is it likely to be a cause of significant adverse
23 impacts? I want to make sure that your comment is
24 understood in the correct context.

25 When you talk about a -- a significance

1 threshold at 44 kilometres away from the mine, do you
2 mean that you think there could not be potentially
3 significant impacts closer than 44 kilometres
4 downstream? In other words, do you think that
5 potentially significant impacts could happen closer
6 than 44 kilometres downstream to the mine, or do you
7 only care what happens 44 kilometres away and further
8 in terms of potentially significant impacts related to
9 this proposed project?

10 MR. MIKE TOLLIS: Mike Tollis, from
11 Lutsel K'e Dene First Nation.

12 I -- we -- we certainly believe that
13 there can be significant impacts inside of 44
14 kilometres, but as a -- as a threshold limit to be set,
15 if -- if the efflu -- if the effluent were detected
16 beyond 44 kilometres, that's when we're -- that's when
17 we're kind of talking about predictions being wrong,
18 and I -- like the -- the point is to set a limit where
19 it can't go any farther.

20 And we -- we don't want to see the plume
21 continue to -- to be going downstream and us having to
22 rely on other monitoring stations to -- to figure out
23 where that plume is going to stop. I assume that
24 further -- like, it -- it's not going to be -- if it's
25 -- if it's six hundred and eighty-four (684), or if

1 it's 500 milligrams per litre in Snap Lake, that --
2 further downstream from -- from dilution, it'll --
3 it'll end up being less, but we want to set a hard
4 limit on the end of that plume.

5 So yes, significant impacts can -- can
6 occur before -- before that, but if it goes beyond it,
7 even if it's -- you know, even if it's at a low level,
8 then it's significant as far as we're concerned.

9 MR. ALAN EHRLICH: Thank you that --
10 for that clarification. It just -- it helps, because
11 the Board uses this concept of significance threshold
12 in a slightly different way, and your explanation has -
13 - has made it much more clear.

14 The other predicable question that I'm -
15 - I'm going to ask, which I said I was going to ask --
16 it's -- it's Alan Ehrlich, for the Review Board again,
17 is that of the traditional uses you described for the
18 area, do those same traditional uses apply to Snap Lake
19 itself?

20 MR. MIKE TOLLIS: Mile Tollis, from
21 Lutsel K'e Dene First Nation.

22 Those same uses apply across the entire
23 territory for the First Nations.

24 MR. ALAN EHRLICH: Thank you. And
25 finally, in your opinion, how likely is it that Lutsel

1 K'e Dene members will drink from Snap Lake itself while
2 the Snap mine -- Snap Lake mine is in operation?

3 MR. MIKE TOLLIS: Mike Tollis, from
4 Lutsel K'e Dene First Nation.

5 It's -- I think it's pretty unlikely
6 that they'll -- they're -- they'll be drinking out of -
7 - out of Snap Lake during operation, but without the
8 visible blight of a mining operation happening there,
9 so assumably, very -- like, very shortly after closure,
10 that it -- it could be -- it could be very highly
11 possible that people will be drinking out of Snap Lake
12 at that time.

13 MR. ALAN EHRLICH: Madam Chair, that
14 concludes all the questions from Review Board staff and
15 legal counsel.

16 THE CHAIRPERSON: Okay. Questions from
17 Board members? Thank -- thank you, Mr. Tollis, for
18 your presentation.

19 The next presentation, we'd like to call
20 the North Slave Metis Alliance, please.

21

22 (BRIEF PAUSE)

23

24 PRESENTATION BY NSMA:

25 MR. MATT HOOVER: Thank you, Madam

1 Chair. The North Slave Metis Alliance, we thank you
2 for the opportunity to allow us to present here today
3 to make our views heard.

4 So today's presentation, we'll discuss
5 the following in respect to the review and
6 consideration of De Beers's proposed amendments to the
7 Class A Water Licence for Snap Lake diamond mine.

8 We'll start with the background related
9 to the NSMA and Snap Lake, amendment process concerns,
10 which, as I referenced yesterday, we'll try to make
11 concise and to the point, and in the scope of this
12 consideration, inspection and monitoring, additional
13 study, a summary of our recommendations, and a quick
14 conclusion.

15

16 (BRIEF PAUSE)

17

18 MR. MATT HOOVER: Thank you. So the
19 NSMA -- NSMA's mandate includes ensuring the public and
20 private sector organizations respect its members,
21 Section 35, Aboriginal Rights, when developments are
22 contemplated and/or operating on their traditional
23 lands. This submission considers the regulatory
24 process and potential impacts respecting the proposed
25 amendments to the water licence for Snap Lake mine.

1 The NSMA is vitally concerned with the
2 protection, preservation, and sustainable use of its
3 traditional lands and resourcesto the benefit of its
4 members and their children for generations to come.

5 Regarding Snap Lake's location, the NSMA
6 has been involved with the project since the initial
7 water licence approval and subsequent renewal in
8 2012/2013. This water licence and current
9 environmental assessment process under the Mackenzie
10 Valley Review Board is of significant interest --
11 interest to NSMA members at this time due to the
12 obvious ongoing challenge of protecting the health of
13 the aquatic environment.

14 The water in the project area and
15 downstream is being continually impacted, as the
16 Proponent is unable to meet their agreed-upon wal --
17 water quality objectives and effluent quality criteria
18 set for the project. Two (2) years ago, the Mackenzie
19 Valley Land and Water Board believed that the proponent
20 could meet the limits that were set for water quality.
21 Unfortunately, this has not been the case.

22 With this in mind, NSMA members wish for
23 tangible steps to be taken that, to the best extent
24 possible, mitigate against negative impacts the mine
25 may have on this area, their traditional land.

1 Mitigation's been something that's come up several
2 times in the past two (2) days. De Beers has been
3 resistant to discussing specifics for mitigation. I'll
4 get into this a bit later.

5 I think it's worth noting here that the
6 area impacted by the mine operation is of important
7 cultural value to NSMA members, as fish and animals in
8 this area are traditionally harvested by them, and as
9 is the case throughout the land, water is consumed and
10 drank straight from the lakes.

11 NSMA members have -- have visited Snap
12 Lake Mine, participated in fish tasting studies, and
13 consider Snap Lake as particularly important. As a
14 result of negotiations and approval processes, NSMA
15 members have provided De Beers with a social licence to
16 operate. This licence was the result of cooperation
17 and trust built during negotiation processes and
18 ongoing environmental assessment work, as well as
19 monitoring.

20 De Beers's inability to meet their
21 agreed levels for war -- water discharges in the
22 environment has required an amendment to the water
23 licence which will see lower quality water at higher
24 volumes continue to be discharged to the receiving
25 environment. This amendment, in its current form, is

1 harmful to the social licence for the reasons that will
2 be outlined in this report and this presentation.

3 And when discussion occurs regarding
4 meetings that have taken place between De Beers and the
5 NSMA, as well as the tight timelines, this is why I
6 believe it relates to the scope of this project. This
7 leads us to recommendation 1, which is to develop
8 endpoints for future water discharge that are mutually
9 agreed upon and will not harm fish and wildlife of Snap
10 Lake and downstream, most importantly, ensure these
11 endpoints are verified through multiple peer-reviewed
12 scientific studies.

13 I'll touch on the amendment process
14 concerns. And again, I'll try to make this quite
15 concise. The NSMA, from the beginning of this process,
16 has been vocal about the timelines set for the
17 technical review, submission response, and public
18 hearing for this amendment. The organization expended
19 resources during the original EA for this subject, and
20 is once again required to expend limited resources for
21 this review.

22 In recent environmental reviews that
23 have been undertaken for the project, including the
24 Aquatic Effects Monitoring Program in February 2013,
25 the NSMA relied upon review and opinion of the Snap

1 Lake Environmental Monitoring Agency, SLEMA, as well as
2 the GNWT, Environment Canada, and others.

3 Although the environmental assessment is
4 apparently limited in scope, the highly technical
5 subject matter and the overall amount of material, as
6 well as the release of this material, which has often
7 been very close to and just before, and even following
8 specific deadlines of this process, has required in-
9 depth technical review.

10 Technical review of potential for
11 significant adverse impacts should also incorporate
12 ongoing dialogue that takes into account the concerns
13 and viewpoints of Aboriginal people on whose land the
14 potential impacts will be occurring. And I'll speak to
15 this, because I believe it is really critical to this
16 process and interest of the Review Board's desire to
17 incorporate social and cultural values and potential
18 impacts in this process.

19 Although De Beers has met with the NSMA
20 and other Aboriginal organizations, I believe that as
21 more information continues to come to light on this
22 subject, as well as studies that are still ongoing,
23 it's important that communication continue, and it's
24 difficult to make decisions when the process has
25 occurred in this manner.

1 Unfortunately, at this time,
2 specifically for SLEMA, they've stated that it's been
3 beyond their capacity to formally review the proposed
4 amendment to the water licence, and that additional
5 funding requested for this purpose was declined.

6 Additionally, consultation and clear
7 communication with the NSMA specifically on these
8 changes has been limited to date. De Beers did visit
9 the NSMA on May 24th. This was following our technical
10 submission -- I think that's important to note -- to
11 speak with community members. As mentioned, this was
12 the water licence amendment specifically was only a
13 small portion of their visit to the NSMA that day.

14 We do thank them for their visit and
15 appreciate it. However, as mentioned by other
16 Aboriginal parties, we do not believe that silence
17 necessarily implies consent when it comes to whether
18 members have voiced their opinion or not, or whether as
19 mentioned by the YKDFN, they've learned from De Beers
20 and often thought about it and discussed it later.

21 It's worth noting that additional
22 communication regarding the water licence changes could
23 have happened during the Snap Lake Working Group. This
24 was initially planned for April 2014, which would have
25 been well in advance of this process. However, this

1 meeting was pushed back following a -- a request by the
2 proponent until the week of the submission of our
3 technical document, and then it was once again moved to
4 May 28th, 2014.

5 In addition, De Beers has, with short
6 notice, proposed that community visit which occurred on
7 May 28th -- or sorry, May 24th. That date did not
8 allow for issues related to the water licence mendent -
9 - amendment to be addressed in this formal submission
10 that is the basis for this presentation, and as such,
11 the NSMA promotes -- proposes the following
12 recommendations that we will get into in a second here.

13 So it's the opinion of the NSMA that the
14 consultation that has occurred to date on this matter
15 has been insufficient. Although I understand that this
16 is outside of what you had asked me to speak about
17 today, I believe it's important to mention.

18 So recommendation 2, the NSMA requests
19 that it be required that additional consultation and
20 face-to-face meetings occur with each Aboriginal party
21 to further explain the quantity and quality of proposed
22 mine effluent, and how the environment will be
23 protected, and what technology will be installed when,
24 and that's speaking specifically to mitigation through
25 technological means.

1 Recommendation 3 is to require
2 additional water treatment technology be installed by
3 De Beers to reduce total dissolved solids in mine
4 effluent to meet effluent quality criteria, site-
5 specific water quality objectives that are proven to
6 protect the health of the aquatic environment.

7 I'll speak briefly now on inspection and
8 monitoring. In April 2014, Mr. Patrick Kramers left
9 the position of inspector of Snap Lake Mine. The GNWT
10 did not initially notify the parties of this change.
11 We, in fact, found out from SLEMA during a courtesy
12 communication from Mr. Kramers himself.

13 The GNWT has since assured SLEMA that
14 monitors are in place for the project. Although this
15 is the case, this still remains of interest to NSMA
16 members, given existing discharge concerns,
17 noncompliance samples, and the occurrence of increased
18 water availability during spring freshet.
19 Additionally, DFO is not a party to this EA, despite
20 potential for significant impacts to tradition -- to
21 traditional fisheries in Snap Lake and down the stream.

22 Specifically, De Beers's monitoring
23 program is also an area of concern, as I mentioned
24 yesterday during question period. The chloride meter
25 installed in 2013 has not yet been calibrated as of May

1 28th, 2014. This was mentioned by De Beers during the
2 Snap Lake Working Group that recently occurred on May
3 28th.

4 Results of pilot testing of other
5 options to control TDS will not be released until the
6 fall. De Beers has no standard operating procedure for
7 predicting and managing upward trends prior to effluent
8 quality exceedances, and during the May 28th working
9 group, De Beers was resistant to developing such a
10 management sys -- system when this was asked of them.

11 The NSMA is aware that Environment
12 Canada stated that there are still uncertainties with
13 respect to De Beers's plan to discharge greater
14 quantities of water at lower quality. Other
15 uncertainties were voiced through several presentations
16 during this public hearing process. The NSMA believes
17 that De Beers should follow the precau -- precautionary
18 principle as recommended by Environment Canada, as well
19 as the YKDFN, and that this is necessary to maintain
20 social licence.

21 Recommendation 4 from the NSMA is to
22 require a dedicated site inspector be employed by the
23 Government of the Northwest Territories for the life of
24 the project, and most importantly, to ensure that
25 communication with existing independent monitoring body

1 SLEMA be continued, as well as with existing
2 independent monitoring body SLEMA be continued, as well
3 as with Aboriginal parties.

4 Recommendation 5, and this was developed
5 since new information was learned by the NSMA in the
6 recent working group, require that De Beers develop
7 with stakeholders an official management strategy which
8 includes a set of precautionary response steps to
9 predict, identify, and manage for increasing trends in
10 TDS.

11 Additional study. In the review of the
12 proposed amendment, the NSMA has relied on the third-
13 party report produced by EcoMetrix titled 'Snap Lake
14 Amendment Application Assessment of Water Quality
15 Objectives'. This report suggests that, through mine
16 water treatment, using reverse osmosis efficiencies are
17 possible. That, in theory, would achieve the EQCs in
18 the treated mine effluent; specifically, the already
19 agreed upon EQCs. This was requested by the NSMA in
20 recommendation 1 and 3.

21 The EcoMetrix report reviewed in-depth
22 the methodologies and data put forth by De Beers in
23 attempting to justify significantly reducing water
24 quality and increasing the quantity of mine water
25 discharge. The NSMA recognized that several

1 uncertainties were noted yesterday during the EcoMetrix
2 presentation and subsequent question period.

3 The NSMA feels that while this report
4 was thorough, it is only one step in the process of the
5 Government of the Northwest Territories and the Board
6 selecting the revised level for total dissolved solids
7 that will protect the environment from harm. The NSMA
8 strongly believes that to protect the environment, all
9 available data should be considered, and all
10 technological solutions should be considered, along
11 with Aboriginal input. Due to the constrictive timing
12 of this EA and ongoing studies, this has not been the
13 case.

14 Recommendation 6 is to require an
15 additional third-party unbiased scientific study be
16 conducted to review all current and available data and
17 information, and to communicate the findings of this
18 study to related Aboriginal parties. This is
19 referencing the fact that more information has
20 seemingly become available, and will become available
21 in the future.

22 In the essence of time, I won't restate
23 the recommendations, but they are available in the
24 presentation if people would like to see them. So in
25 conclusion, the above recommendations summarize what

1 the NSMA wishes to see the Mackenzie Valley Review
2 Board require De Beers respecting the latter's proposed
3 amendments to the water licence for Snap Lake Mine.

4 It is, in addition, NSMA's wish that De
5 Beers operates the Snap Lake Mine in a sustainable
6 manner that achieves a good return on its -- its
7 investment while preserving the health of the land and
8 water, and the species that depend on it. The NSMA
9 would like to thank the Mackenzie Valley Review Board
10 for the opportunity to submit this intervention for our
11 thoughts and concerns to be heard here today, and we
12 look forward to being involved in the process as it
13 continues. Thank you very much.

14

15 QUESTION PERIOD:

16 THE CHAIRPERSON: Thank you. To the
17 presentation, questions from the GNWT?

18 MR. RICK WALBOURNE: Thank you, Madam
19 Chair. Rick Walbourne, ENR. Thank you, Mr. Hoover,
20 for that presentation. I just have one (1) question.

21 Mr. Hoover, could you describe any
22 traditional uses that NSMA feel must be protected in
23 Snap Lake and the downstream, and also if you have any
24 comments regarding the level of protection for the Lady
25 of the Falls now and into the future? Thank you.

1 MR. MATT HOOVER: Matt Hoover, North
2 Slave Metis Alliance. Thank you, Mr. Jenkins (sic).
3 First of all, the -- Mr. Walbourne. It's kind of odd
4 when you're having questions asked on you.

5 So I -- I think the Lady of the Falls
6 has been spoken on at length already, so I won't touch
7 on that. It's already been said. However, traditional
8 uses for the NSMA, as with the other Aboriginal groups,
9 include harvesting, fishing, trapping, drinking the
10 water, and again this applies over the entire
11 landscape. So Snap Lake is of equal value to the
12 entire landscape of the North Slave region. I hope
13 that answers your question.

14 MR. RICK WALBOURNE: Rick Walbourne,
15 ENR. Yes, it does. Thank you.

16 THE CHAIRPERSON: Questions from
17 Environment Canada?

18 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey
19 McMillan with Environment Canada. No -- we have no
20 questions.

21 THE CHAIRPERSON: Questions from
22 Yellowknives Dene First Nation?

23 MR. TODD SLACK: Thank you, Madam
24 Chair. Todd Slack for the Yellowknives. I have no
25 questions.

1 THE CHAIRPERSON: Questions from Lutsel
2 K'e Dene First Nation?

3 MR. MIKE TOLLIS: Mike Tollis from
4 Lutsel K'e Dene First Nation. I want to thank Matt
5 Hoover for his presentation. We have no questions.

6 THE CHAIRPERSON: Questions from Deninu
7 K'ue First Nations?

8 MR. MARC D'ENTREMONT: Thank you, Madam
9 Chair. It's Mark d'Entremont, for the DKFN. We have
10 no questions.

11 THE CHAIRPERSON: Questions from De
12 Beers?

13 MS. ERICA BONHOMME: Erica Bonhomme.
14 Thank you, Mr. Hoover. I -- I just want to say I -- I
15 very much enjoyed our community visit with the NSMA.
16 It was great discussions, a lot of ex-miners in that
17 group. And they always have some really great ideas
18 about mining in general because, as you mentioned,
19 there was -- it wasn't always -- it wasn't all about
20 TDS, so I just want to mention that.

21 My question: Now, just to preface, we
22 did do a study of the traditional land use of NSMA
23 during the original environmental assessment. Are --
24 are you indicating that somehow that -- that has
25 changed? That what -- what had been clue -- concluded

1 about the traditional land use of NSMA mer -- members
2 in the original environmental assessment has changed?

3 MR. MATT HOOVER: Matt Hoover, North
4 Slave Metis Alliance. I'm not sure what you're
5 referring to, Erica. However, I know from documents
6 I've seen, including a traditional knowledge report
7 that the NSMA produced for the Gahcho Kue Mine, which
8 is probably more recent than that, that we have
9 documented historical information writing -- this is
10 documented writing, historical writing, that
11 demonstrates NSMA members' relatives that travelled
12 throughout and used that land throughout the North
13 Slave area, including the Snap Lake Mine area. So I'm
14 sure we could speak again about this later and clarify
15 traditional uses if you wanted, or speak with the
16 members. That might be quite useful. Thank you.

17 MS. ERICA BONHOMME: Erica Bonhomme.
18 My other question is: You made a very brief reference
19 in there to the fact that you were relying on SLEMA,
20 the Snap Lake Environmental Monitoring Agency, to
21 provide some independent review and that there had been
22 a request made to SLEMA for funding that had been
23 denied.

24 And I'm -- I'm not aware of that. I
25 just wonder where -- if you could point me to, you

1 know, something that would indicate where that request
2 had been made and -- and denied.

3 MR. MATT HOOVER: Matt Hoover, North
4 Slave Metis Alliance. I'm sorry, I think you may be
5 confused. What I was referring to is the fact that
6 SLEMA themselves did apply for additional funding to
7 increase capacity perhaps to inquire consultants, I'm
8 not sure, to help them with their review because of the
9 vast amount of technical material. It wasn't the NSMA
10 requesting funding from SLEMA. Thank you.

11 MS. ERICA BONHOMME: Thank you. I -- I
12 just want to mention we do absolutely encourage the
13 views of SLEMA in this process. I think they're very
14 important. Finally -- actually, Madam Chair, Erica
15 Bonhomme. That concludes my questions.

16 THE CHAIRPERSON: Questions from Board
17 staff?

18 MR. ALAN EHRLICH: Thank you, Madam
19 Chair. I ask the same questions I've asked the -- it's
20 Alan Ehrlich, for the Review Board.

21 I think you've touched on the -- the
22 answer to the traditional use question I was going to
23 ask. The other question you're likely expecting is:
24 Is it likely that NSMA members will drink from Snap
25 Lake itself while the mine is operating?

1 MR. MATT HOOVER: Matt Hoover, North
2 Slave Metis Alliance.

3 I believe that's unlikely. And I
4 believe it's unlikely for the specific reason that -- I
5 think this is important to voice, actually. So when
6 having spoke with members and Elders I kind of noticed
7 a surprising trend, that in their responses they've --
8 they sort of seem to have an increasing sense of
9 helplessness to do anything to counteract what they
10 see. And I believe this correct, that they see an
11 increasing degradation of the aquatic and terrestrial
12 environment, not just from Snap Lake, but from indu --
13 industry in general.

14 I would like the Board to consider the
15 results of the process here and form how proponents
16 view the standards that are set for them and to which
17 they're supposed to be held. As well, it affects the
18 negotiations that occur between Aboriginal parties and
19 the proponents. And it affects the -- the view of the
20 Aboriginal parties when it comes to the actual land or
21 that they can trust it as being clean or something they
22 can continue to use.

23 So I think what it does is it affects
24 their -- it potentially erodes the cultural values and
25 environmental values. So I -- I really do think that

1 plays into whether they would drink the water from Snap
2 Lake. Even if they're being told it is safe, I know
3 that they specifically would be very concerned about
4 that. I do know that they would drink -- probably
5 likely drink the water from downstream, however. I
6 hope that answers your question.

7 MR. ALAN EHRLICH: It does. Thank you,
8 Mr. Hoover. There are no further questions from Board
9 staff or counsel.

10 THE CHAIRPERSON: Okay. Questions from
11 Board members? Thank you very much, Mr. Hoover, for
12 your presentation. We would ask now that the Deninu
13 K'ue First Nations come up and do their presentation.

14

15 (BRIEF PAUSE)

16

17 PRESENTATION BY DKFN:

18 MR. MARC D'ENTREMONT: Thank you, Madam
19 Chair. My name is Marc d'Entremont. I am a technical
20 advisor to the Deninu K'ue First Nation. And again
21 with me today and here throughout the hearings is Mr.
22 Stanley Louine, a councilman and Elder from the Fort
23 Res community and member of the DKFN.

24 So I guess I did have a bit more of a
25 formal presentation prepared, but just in light of the

1 timing and the things that have transpired over the
2 last day and a half and a lot of the information has
3 been discussed, I'll just start by saying DKFN is -- is
4 in agreement with the issues and items and
5 recommendations raised by the other Aboriginal parties.

6 And then I'll go on to say, too, just
7 that as I mentioned in our opening statements, DKFN has
8 always been supportive of this project and -- and
9 others within its traditional territory. It sees the -
10 - the value and benefit both to the Northwest
11 Territories and to its members. So -- but also feels,
12 too that, you know, protection of the environment is --
13 is key.

14 So I guess it's not the best graphics
15 here, but as you can see on the -- the bottom picture
16 that map sort of represents what we kind of call
17 traditional use -- or sorry, socioeconomic use areas.
18 It's based on a compilation of information that was
19 acquired during the preparation of a ethnohistory
20 report that was prepared for the Gahcho Kue project.
21 And this is a -- a piece that was funded by De Beers
22 for that project. So we want to thank them for that.
23 It's very useful information. And if you had a close
24 look at it you could probably see that a -- a big
25 proportion of that area overlaps the Snap Lake Mine

1 area.

2 So my -- my presentation should be
3 pretty brief. I have three (3) real issues and
4 concerns to mention. One (1) of them being
5 consultation which we shouldn't really talk about. But
6 there is one (1) item on there I -- I want to kind of
7 stress, so. As we've heard De Beers has been doing
8 community engagement and members of the DKFN have
9 participated in -- in these initiatives. I guess the -
10 - the most recent one (1) being I believe it was last
11 week with De Beers going to the community and -- and
12 talking to members about this project.

13 And in its opening statements De Beers
14 mentioned that the summary of that engagement activity
15 will be prepared and submitted to the registry by the
16 23rd, which coincides -- the 23rd of June, which
17 coincides with the closure of the public record.

18 So I -- I guess I'd ask the Board to
19 consider the -- an undertaking. We would like to see
20 that summary probably by the undertaking deadline,
21 which would give us time to review it before the
22 submission of our written closing arguments. So
23 hopefully, we can revisit that near the end of the
24 presentation, here.

25 So I won't get into the whole specifics

1 of total dissolved solids. We've heard lots about it
2 over the last day and a half. I'll just summarize by
3 saying, you know, this is an issue that was originally
4 raised during the first environmental assessment review
5 process. It was raised again during the initial water
6 licence hearings. It was raised again 2011 at the
7 water licence renewal hearings, and here we are again
8 today, talking about the issue.

9 Now, De Beers has also mentioned they
10 will be doing mitigation to keep the levels of the
11 total dissolved solids within acceptable limits, but
12 there is a number of uncertainties around what these
13 mitigations will be, and in that regard, they've also
14 mentioned that they're undertaking a number of
15 different studies to help them with that decision.

16 So in light of that, we'd would
17 recommend that -- or ask the Board for a consideration
18 to withhold a decision on this environmental assessment
19 until we have some of those reports from this work
20 that's happening this year. Oh, I guess you didn't
21 have to go forward.

22 The next point I want to make is on
23 adaptive management with specific regards to the total
24 dissolved solid issue. Again, this was -- and
25 something that -- that came in light -- to light in the

1 -- during the first EA process, and again through the
2 water licence -- subsequent water licence hearings, and
3 I made the comment on my slide about there being little
4 evidence of management actions now. In one of my
5 questions I asked yesterday, De Beers did provide a
6 response in terms of some of the management actions
7 that they are taking.

8 And we've also talked again about the
9 mitigation measures that have occurred, and potentially
10 some of the ones that will occur. So in this point,
11 I'd kind of hope -- see if there's the opportunity to
12 open up one of the undertakings that was raised
13 yesterday with regards to the compilation of -- I
14 believe it was the compilation of current mitigation
15 actions that have happened, and I'd like to see whether
16 we can amend that to include the current management, or
17 -- or operational actions that have occurred to help to
18 reduce -- reduce the levels of TDS.

19 And if those could be placed in the
20 context of the response framework that De Beers has
21 mentioned so that we have a better understanding of,
22 like, you know, exactly when certain things were
23 triggered in terms of management actions and mitigation
24 in the attempts to, like I said yesterday, stay within
25 the compliance limits of the water licence.

1 (BRIEF PAUSE)

2

3 MR. MARC D'ENTREMONT: So this slide
4 here just essentially kind of summarizes the -- the two
5 (2) main points I just made about delaying the decision
6 until we have more information about the effectiveness
7 of what the mitigations measures that are being tested
8 now will -- will be, and again, the additional
9 information on this -- the specific actions that have
10 been carried forth to -- to help to reduce the -- the
11 total dissolved solid limits.

12 And again, I'll just reiterate the --
13 the first request about having the summary of the
14 engagement -- the recent engagement activities prior to
15 us submitting our -- our final written submissions.

16 And with that, I will -- well, I guess
17 that's it. I will close and say thank you again to the
18 Mackenzie Valley Review Board for allowing the DKFN to
19 be here today and be part of these hearings. Thank
20 you.

21

22 QUESTION PERIOD:

23 THE CHAIRPERSON: Thank you. Questions
24 from the GNWT to the presentation?

25 MR. ROBERT JENKINS: Thank you, Madam

1 Chair. It's Robert Jenkins, with the GNWT.

2 The same question that we've asked other
3 -- other Aboriginal groups, First Nations party to this
4 process. If you could describe the traditional uses
5 that the DKFN feel must be protected in Snap Lake and
6 downstream, and -- and if you have any comments that
7 you'd like to make, you know, with respect to the level
8 of protection for Lady of the Falls, we'd appreciate
9 hearing those as well. Thank you, Madam Chair.

10 MR. MARC D'ENTREMONT: Marc
11 d'Entremont, for the DKFN.

12 Thank you, Mr. Jenkins, for that
13 question. I'm just going to roll back here, if I can,
14 to the map there at the bottom of -- of this slide.

15 I'll start with the specific reference
16 to the Lady of the Falls. In discussions with Stanley,
17 I guess my response isn't specific to that particular
18 area, but the -- I think it comes down to kind of
19 partly a perception of change.

20 The DKFN, as you can see, have extensive
21 use of the entire area here, which would include the
22 Lady of the Falls. And in -- like, as I mentioned, in
23 discussions with Stanley, when it comes to a -- a
24 perceived change in any part of the environment,
25 whether that's related to changes in fish, or wildlife,

1 or the taste of water, I think the DKFN members would
2 tend not to -- or tend -- tend to avoid an area if they
3 see a negative change.

4 So it would come down to not getting to
5 the point where that perceived chan -- perception is
6 altered and to a point where it would allow for
7 essentially continued use of an area, so that an area
8 would -- would not be avoided. As I mentioned earlier,
9 an ethno history report was prepared as part to the
10 Gahcho Kue project. It was based on historic records
11 compiled by Linda -- Linda Vandenberg (phonetic) and
12 her associates.

13 The report itself is greater than four
14 hundred (400) pages, and like I say, it doc --
15 documents the -- the historic use based on, you know,
16 things like Hudson Bay records, church records, and
17 various other sources of information, but it also
18 highlights the current use of the areas as well, and
19 that was done through interviews with a number of -- of
20 the DKFN members.

21 And there's one (1) -- I guess, one (1)
22 passage in that report I'd just like to read. It's a -
23 - it's a comment made by Edd -- Eddie Lafferty, who is
24 an Elder of the DKFN and lives in Fort Resolution, and
25 in this particular comment he makes, he's describing

1 the barren lands, and, you know, some of his thoughts
2 and -- and -- towards. So I'm just going to read it
3 verbatim here:

4 "The barren lands, to me, just looks
5 like lots of fresh water at one (1)
6 time, like when the ice melts and all
7 that runs down. It's just like
8 lakes, lakes, lakes, lots of fresh
9 water, really clear. To me, that's
10 where our clean water is coming from,
11 but now all of these mines are there.
12 The main places where trappers trap
13 are on the eskers, where there's
14 still a little bit of trees and a
15 little bit of shelter, a little bit
16 of firewood. That's where some of
17 the animals go that we hunt in the
18 summer. It's lots of rock country,
19 lots of gravel, bottom lakes --
20 sorry] -- lots of gravel, bottom
21 lakes, very shallow. Some of them
22 have fish. I still have a feeling
23 when I go there, it's like I'm back.
24 It's like I'm home. I don't know if
25 it's a spiritual feeling, but I have

1 a connection with the area to the
2 mine. I have it at Snap Lake. I
3 have it at Gahcho Kue. I go that
4 area for that feeling to see where
5 the ancestors were. It's like that
6 feeling that you're finally home. I
7 have a really good feeling when I get
8 in that place."

9 Thank you.

10 MR. ROBERT JENKINS: Thank you. Madam
11 Chair, it's Robert Jenkins, with the Government of
12 Northwest Territories.

13 And thank you for that response. I
14 guess I'm just wondering, has -- has that report been
15 filed on the record for -- or this proceeding, and --
16 and, if not, would you be willing to -- to provide that
17 for the record? Thank you.

18 MR. MARC D'ENTREMONT: It's Marc
19 d'Entremont, for the DKFN. No, I don't believe it's
20 been filed for this particular proceeding. It has been
21 filed to the registry for the Gahcho Kue mine project,
22 so it is on the public record, and I don't see any
23 reason why it shouldn't be placed on for this one, but
24 I -- if that's okay with the Board? Thanks.

25 THE CHAIRPERSON: Legal counsel...?

1 MR. JOHN DONIHEE: Thank you, Madam
2 Chair. Our -- I guess what is being asked, then, is to
3 move that report over from the record on Gahcho Kue to
4 be filed on this record. They're separate. They're
5 different -- diff -- different proceedings, and so I --
6 I think that what we should ask, then, is whether
7 there's any concern from De Beers or -- or any of the
8 other parties, if -- if, in fact, we do that at this
9 late stage.

10 MS. ERICA BONHOMME: Erica Bonhomme.
11 No concerns from De Beers.

12 MR. JOHN DONIHEE: Hearing no
13 objections, Madam Chair, then we can then just wait for
14 staff to -- to move that additional information into
15 the record for -- for this proceeding. Thank you.

16 THE CHAIRPERSON: Questions from
17 Environment Canada?

18 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey,
19 with Environment Canada. We have no questions.

20 THE CHAIRPERSON: Questions from
21 Yellowknives Dene First Nation?

22 MR. TODD SLACK: Todd Slack, on behalf
23 of the Yellowknives. We've got no questions. Thank
24 you.

25 THE CHAIRPERSON: Questions from Lutsel

1 K'e Dene First Nations?

2 MR. MIKE TOLLIS: Mike Tollis, Lutsel
3 K'e Dene First Nation. I want to thank Marc for the
4 presentation. We have no questions.

5 THE CHAIRPERSON: Questions from North
6 Slave Metis Alliance?

7 MR. MATT HOOVER: Matt Hoover, North
8 Slave Metis Alliance. Thank you to Marc from the DKFN.
9 We have no questions.

10 THE CHAIRPERSON: Questions from De
11 Beers?

12 MS. ERICA BONHOMME: Erica Bonhomme.
13 Thank you also for the presentation. We have no
14 questions.

15 THE CHAIRPERSON: Questions from Board
16 staff?

17 MR. ALAN EHRLICH: Thank you. Marc, in
18 one (1) of your earlier comments in this presentation,
19 you said, DKFN supports the project. When you said,
20 The project, were you referring to the Snap Lake
21 diamond project, the diamond mine, or were you
22 referring to the -- it's Alan Ehrlich, Review Board.
23 Were you referring specifically to the raised level of
24 TDS that is the current project that's in environmental
25 assessment?

1 MR. MARC D'ENTREMONT: Marc
2 d'Entremont, for the DKFN. Thanks, Alan. To answer
3 your question, I guess it would be to -- to both. I
4 mean, the DKFN's been supportive of De Beers's
5 activities, the Snap Lake mine project, and I guess
6 we're -- we're supportive of -- if you would define it
7 as this particular project in terms of adjusting
8 condition of the water licence, yes, we'd be supportive
9 of that, but, again, keeping in mind that as long as
10 it's done correctly, and does not cause a significant
11 effect on the environment. Thanks.

12 MR. ALAN EHRLICH: Thank you. Alan
13 Ehrlich, Review Board. Is it likely that DKFN members
14 will drink from Snap Lake itself while the mine's in
15 operation?

16 MR. MARC D'ENTREMONT: Marc
17 d'Entremont, for the DKFN. No, it's -- it's not likely
18 that members would drink from Snap Lake while the mine
19 is in operation, and to quote what Stanley said in --
20 in that regards, You wouldn't risk it, so. Thanks.

21 MR. ALAN EHRLICH: There are no further
22 questions from Board staff or counsel. Alan Ehrlich,
23 Review Board.

24 THE CHAIRPERSON: Questions from Board
25 members?

1 At this time, then, we -- well, thank
2 you very much, Marc. I'm just not sure how to say your
3 last name, but thank you, Marc, for your presentation.

4 At this time, what we would like to do
5 is we'd like to call a quick ten (10) minute break so
6 we could try to wrap up the hearing. Thank you.

7

8 --- Upon recessing at 12:57 p.m.

9 --- Upon resuming at 1:11 p.m.

10

11 THE CHAIRPERSON: Okay. At this time,
12 we would like to have -- before -- actually, before I
13 even start here, I'd like to remind people that they
14 need to sign in by the door. We need to have that for
15 the record. So if you haven't signed in, please sign
16 in. There's a sheet over there by the front door.

17 What we would like to do right now,
18 then, is have closing statements from all parties, so
19 we'll start with closing statements from the Government
20 of the Northwest Territories.

21

22 CLOSING COMMENTS BY GNWT:

23 MR. ROBERT JENKINS: Thank you, Madam
24 Chair. It's Robert Jenkins, with the Government of the
25 Northwest Territories.

1 I don't have expansive closing
2 statements. I recognize that there will be an
3 opportunity for written closing statements upcoming, so
4 we'll provide some -- some detail in that.

5 I just want to thank the Board for
6 hosting this -- this hearing, and -- and for allowing
7 us to provide our recommendations, and we stand by our
8 evidence, and we feel that the recommendations that we
9 put in our report are needed moving forward.

10 I'd like to thank the other Intervenors
11 for -- for their questions and for their presentations,
12 and the comments that they've made is very helpful.

13 We'd like to thank the proponent for
14 continuing to work through issues with us and other
15 Intervenors, and -- and look forward to additional
16 discussions moving forward in advance of the water
17 licence hearing and process for this. So I would like
18 to thank the proponent De Beers for their continued
19 discussions with us, and -- and working through issues.

20 Also, I'd like to thank the -- the
21 translators. I know that everybody speaks very quickly
22 and it's difficult for them to -- to keep up, but they
23 do a great job.

24 And so with that, Madam Chair, I'd like
25 to thank you again for the opportunity to speak, and --

1 and look forward to reviewing the report of EA.

2 THE CHAIRPERSON: Thank you. Closing
3 statements from Yellowknives Dene First Nation?

4

5 CLOSING COMMENTS BY YKDFN:

6 MR. TODD SLACK: Thanks, Madam Chair.
7 It's Todd Slack, with the Yellowknives.

8 And I -- I'm not going to repeat Mr.
9 Jenkins's comments, and I know that we've given you a
10 lot of difficult information to come up -- it's not an
11 easy decision. If it was, we wouldn't be here, and I
12 look forward to the guidance that the Board provides,
13 and we'll be submitting our closing comments, and look
14 forward to the rest of the process. Thanks very much.

15 THE CHAIRPERSON: Thank you. Closing
16 statements, Lutsel K'e Dene First Nations?

17

18 CLOSING COMMENTS BY LKDFN:

19 MR. MIKE TOLLIS: It's Mike Tollis,
20 from the Lutsel K'e Dene First Nation.

21 I want to thank the Board and all the
22 parties for participating. This was our -- for -- for
23 Lutsel K'e, anyway, this was our first time that we
24 actually got to see all the faces and talk to everybody
25 about this -- about this proposal, and -- and hear the

1 -- all the -- all the perspectives and the comments
2 from the parties.

3 I just want to say that there's --
4 there's no amount of -- of mitigation that can mitigate
5 spiritual impacts, and I just want the -- the
6 sacredness of this watershed to be fully understood by
7 -- by the Board in -- when they're making their final
8 decisions, that it's very powerful, and it's very
9 meaningful for -- for the First Nations and the
10 Aboriginal people that survive off the land.

11 So, yeah, I just want to make sure that
12 -- that that is a consideration, but thank you very
13 much for -- for the opportunity to present here, and we
14 hope for a -- for a report on the environmental
15 assessment that is -- that is protective in -- in the
16 way that the communities define the word 'protective'.
17 So thank you again.

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

20

21 CLOSING COMMENTS BY ENVIRONMENT CANADA:

22 MS. SARAH-LACEY MCMILLAN: Thank you.
23 It's Sarah-Lacey McMillan, with Environment Canada.

24 We'd like to thank all those involved
25 for their presentations and questions throughout the

1 proceedings, and Environment Canada plans on
2 participating in the next steps of the process, and
3 submitting a final comment today.

4 THE CHAIRPERSON: Thank you. Closing
5 statements, North Slave Metis Alliance?

6

7 CLOSING COMMENTS BY NSMA:

8 MR. MATT HOOVER: Thank you, Madam
9 Chair. Matt Hoover, North Slave Metis Alliance.

10 I'll also keep this brief and just say
11 thank you very much to yourself and the Board for
12 allowing us to have our views heard today, and we look
13 forward to continue -- continuing to be involved in
14 this process. Thank you very much.

15

16 CLOSING COMMENTS BY DKFN:

17 THE CHAIRPERSON: Thank you. Closing
18 statements, Deninu K'ue First Nations?

19 MR. MARC D'ENTREMONT: Thank you, Madam
20 Chair. It's Marc d'Entremont, for the DKFN. Like --
21 like others, we'd like to thank the Review Board for --
22 for hosting these hearings and allowing us to
23 participate. Personally, I would like to thank Stanley
24 for being here with me. He's not here at the moment.
25 He had to leave early to go pick up some outboard motor

1 parts before he heads back home so that he can get back
2 out there on the land.

3 I just -- for our closing, I just want
4 to go back to a couple points in my presentation where
5 I had asked about a couple undertaking items, and I
6 just want to make sure that we potentially revisit
7 those and -- and the review of the undertakings part
8 here of the agenda.

9 So with that, thanks to the Review Board
10 and De Beers, and -- and all the other parties for
11 being involved here today. Thanks.

12 THE CHAIRPERSON: Thank you. Closing
13 statements from De Beers?

14

15 CLOSING COMMENTS BY DE BEERS:

16 MR. DAVID PUTNAM: Thank you, Madam
17 Chair. It's David Putnam with De Beers. I'd like to
18 start by thanking the Board and all the parties for
19 their comments today and yesterday, and say that the
20 evidence that De Beers has provided demonstrates that
21 the proposed water quality objectives for Snap Lake
22 will not have significant impacts to the environment,
23 which means that the fish will remain safe to eat and
24 the water will be safe to drink, and that -- and that
25 the ecosystem function within Snap Lake will persist

1 into the future.

2 De Beers does undertake robust
3 monitoring under the Aquatic Effects Monitoring
4 Program, and is currently implementing very innovative
5 measures to minimize the impacts to the environment.
6 We are looking forward to the ongoing engagement with
7 the Aboriginal parties, and to the upcoming site visits
8 that we're going to be hosting, which will provide an
9 opportunity to perhaps give a better appreciation for
10 some of the management activities that we're doing
11 around water and water quality at the mine.

12 As Mr. Koropchuk said yesterday, I think
13 anybody that had visited the mine prior to 2011 would -
14 - would see a -- a different -- a different mine then -
15 - then it was -- was today, so lots of improvements to
16 -- to further engage on.

17 We also look forward in continuing the
18 process to set the appropriate site-specific water
19 quality objective with -- through the Mackenzie Valley
20 Land and Water Board process.

21 And finally, I'd like to just indicate
22 yesterday we noted that we were asked to provide a
23 suggestion about what an appropriate narrative measure
24 would be with respect to the TDS limits. De -- De
25 Beers will give that further thought over the next

1 several days, and will address that directly in its
2 final arguments. Masi cho.

3 THE CHAIRPERSON: Thank you. We have
4 reached the end of this public hearing. On behalf of
5 the Review Board, I would like to thank all parties and
6 the developer for participating in this hearing.
7 Thanks also to the independent consultant, Don -- Don
8 Hart with EcoMetrix. The information you have all
9 presented will assist the Board in its preparation of a
10 report of an environmental assessment and reasons for
11 decision.

12 The scope of this EA is unusual, and we
13 realize the timelines have been tight. The Board wants
14 to ensure that the parties and De Beers have the
15 guidance they need to provide effective closing
16 arguments to the Board. We're going to have to adjust
17 the work plan timelines in light of the new schedules -
18 - or studies, pardon me, De Beers will file on June
19 13th. The Board will issue a directive on procedures
20 addressing both timelines and setting out the matters
21 which the Board would like to see addressed in the
22 final agreement.

23 Once the record is closed, the Board
24 will deliberate on all the evidence on the public
25 record, and prepare its report on environmental

1 assessment and reasons for decision. Once the Minister
2 of Lands makes his decision on the Board's report of
3 the EA, the Snap Lake amendment application will
4 proceed to the regulatory phase at the Mackenzie Valley
5 Land and Water Board.

6 Thank you in advance to all parties in
7 meeting for the upcoming deadlines so that the dates of
8 the work plan can be met. Thank you very much to the
9 interpreters, Ann Biscaye, Masi Cho. Celine Football,
10 Masi Cho. The caters here at the Explorer, Pido for
11 their sound, the transcription services, and in
12 particular, I'd like to thank the Board members for
13 their dedication and sitting here and listening.
14 They're all hungry, I know, and also to the members of
15 the staff for your dedication and work that you've
16 done.

17 At time the Board, would like to close
18 with a prayer, and we would ask that you stand and
19 Yvonne Doolittle will lead us in the prayer.

20

21 (CLOSING PRAYER)

22

23 THE CHAIRPERSON: Thank you.

24

25 --- Upon adjourning at 1:24 p.m.

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4 Certified correct,

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9 Bob Keelaghan, Mr.

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