

NUNAVUT WATER BOARD

AMENDMENT TO THE HAMLET OF RANKIN INLET TYPE "A"
WATER LICENCE

PUBLIC HEARING

VOLUME 1

RANKIN INLET, NUNAVUT
RANKIN INLET COMMUNITY HALL
SEPTEMBER 25, 2014

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1 September 25, 2014

2

3 NUNAVUT WATER BOARD

4 T. Kabloona Chair of Hearing

5 R. Mrazek Member

6 D. Aglukark Sr. Member

7

8 NUNAVUT WATER BOARD STAFF

9 D. Côté Executive Director

10 C. Boyer Legal Counsel

11 D. Hohnstein Director of Technical Services

12 K. Kharatyan Technical Services Advisor

13 C. Ene Technical Services Advisor

14 B. MacCarl Technical Services Advisor

15 B. Kogvik Secretary to the Board.

16 R. Ikkutisluk Licence Administrative

17 Assistant

18

19 APPLICANT

20 M. Lustey GN-CGS

21 J. Acorn Stantec

22

23 INTERVENERS

24 J. Dahl Department of Fisheries and

25 Oceans

26

1 K. Costello Aboriginal Affairs Northern
2 Development Canada

3 I. Parsons Aboriginal Affairs Northern
4 Development Canada

5

6 J. Merritt SAO, Hamlet of Rankin Inlet

7

8 INTERPRETERS/TRANSLATORS

9 Mary Rose Angoshadluk Inuktitut

10

11 Christy Longacre, CSR(A) Official Court Reporter

12

13 R. Dempster Sound Technician

14

15 (PROCEEDINGS COMMENCED AT 9:04 AM)

16 THE CHAIR: Good morning. Can you hear me

17 clear? Good morning. My name is Thomas Kabloona, and

18 I'm the chair of the Nunavut Water Board. Before we

19 proceed with the hearing, let us begin with a prayer.

20 And I would like to ask David Aglukark to do the

21 opening prayer. Stand up.

22 Opening Prayer

23 Opening Remarks by the Chair

24 THE CHAIR: Thank you, David.

25 Just before we begin, I'd like to ask for you to

26 try to take -- turn off your cell phone. Thank you.

1 On behalf of the Nunavut Water Board, I welcome
2 you to Rankin Inlet. Now, to give you a background to
3 this hearing, the Nunavut Water Board, which I will
4 refer to as "the Board" or "the NWB", is an institution
5 of public government created under Article 13 of the
6 Nunavut Land Claims Agreement, and is responsible for
7 the use, management, and regulation of fresh water in
8 Nunavut settlement area. The purpose of this public
9 hearing is to review the application filed by Stantec
10 Architecture Limited, who I will refer to as "Stantec",
11 on behalf of the Government of Nunavut Community and
12 Government Services, who I will refer to as "GN-CGS",
13 for the amendment to the Type "A" Water Licence in
14 accordance with the Nunavut Waters -- Nunavut Waters
15 Surface Rights Tribunal Act.

16 The Type "A" Water Licence that GN-CGS is seeking
17 to amend was originally granted by the NWB on GN -- to
18 GN-CGS and authorized the use of water and operation of
19 the water supply facilities Utilidor and sewage
20 treatment facility for municipal undertaking of the
21 hamlet of Rankin Inlet.

22 After the Board recommended the regional licence
23 be granted on June 9, 2010, the minister of Western
24 Indian Northern Affairs Canada approved the original
25 licence on July 28, 2010. Pursuant to Section 13.3.6
26 of the Nunavut Land Claims Agreement and Section 29 of

1 the Nunavut Waters and Nunavut Surface Rights Tribunal
2 Act, the Board has to delegate its power to dispose
3 (sic) all matters relating to the Type "A" Licence
4 amendment application, Licence Number 3AM-GRA1015 for
5 the hamlet of Rankin Inlet, including the conduct of
6 this public hearing to a panel of the Board. This
7 panel is now here in front of you.

8 Introductions of Nunavut Water Board and Staff

9 THE CHAIR: I will be chairing with this
10 panel, and with me today are members of the panel --
11 are Board members Ross Mrazek to my right and David
12 Aglukark Sr. to my left.

13 Several staff members who have contributed to the
14 NWB's administration and technical review of the
15 application are present, along with the NWB legal
16 counsel. I will introduce the individuals attending
17 today: Damien Côté, executive director; David
18 Hohnstein, director of corporate (sic) services; Karén
19 Kharatyan, technical advisor; Robin Ikkutisluk,
20 licencing administrator; Craig Boyer, with Shores
21 Jardine LLP, legal counsel for the Board. We also have
22 with us today two new technical advisors who recently
23 joined the board: Cynthia Ene, technical advisor; and
24 Brady MacCarl, technical advisor.

25 In addition, we have two interpreters available
26 for simultaneous translation: Ben Kogvik, secretary to

1 the Board, and local interpreter Mary Rose Angoshadluk.
2 To ensure an accurate record of the proceeding, we have
3 with us a court reporter, Christy Longacre. To assist
4 Christy, I will ask all parties please state their name
5 prior to speaking. Last but not least, we also have
6 Ryan Dempster from PIDO, our sound technician for this
7 public hearing.

8 And we can now move on to the introduction of
9 applicant interveners. We have the applicant.
10 Introduce yourself.

11 Introductions of Parties

12 MR. ACORN: Thank you, Mr. Chair. My is
13 Joe Acorn. I'm with Stantec Consulting out of
14 Yellowknife, and I will be representing CGS.

15 MS. LUSTEY: Hi. My name is Megan Lustey,
16 and I'm with CGS.

17 THE CHAIR: Thank you.

18 AANDC?

19 MS. COSTELLO: Good morning. My name is
20 Karen Costello. I'm with Aboriginal Affairs Northern
21 Development Canada. My -- the spelling of my name,
22 K-A-R-E-N, C-O-S-T-E-L-L-O. And I'm joined by Ian
23 Parsons. Do you require him to come up to the mic as
24 well? He is our regional coordinator, and he will also
25 be part of the presentations. Correct spelling of his
26 name, I-A-N, P-A-R-S-O-N-S. Thanks.

1 THE CHAIR: Thank you.

2 DFO?

3 MS. DAHL: Good morning. My name is
4 Julie Dahl. I'm with -- I'm the regional manager for
5 Fisheries Protection Program of the Department of
6 Fisheries and Oceans.

7 THE CHAIR: Thank you.

8 GN?

9 MS. LUSTEY: I'm the representative from
10 CGS-GN.

11 THE CHAIR: Thank you.

12 Identification of Any Motions or Objections

13 THE CHAIR: Any preliminary matters or
14 objections to this proceeding?

15 MR. BOYER: Mr. Chair, I suggest that you
16 have the parties and the interveners just advise if
17 they have any objections, as you've asked, at this
18 point in time.

19 THE CHAIR: Any objections?

20 MR. ACORN: Joe Acorn. No objections.

21 MS. COSTELLO: Karen Costello on behalf of
22 Aboriginal Affairs Northern Development Canada. We
23 have no objections. Thank you.

24 THE CHAIR: DFO?

25 MS. DAHL: Julie Dahl, DFO. We have no
26 objections.

1 THE CHAIR: Thank you.

2 In the past, parties in other proceedings have
3 approached the media prior to the release of the
4 Board's decision, suggesting comments about what the
5 Board was going to do, either procedurally or items in
6 the final result. Since the Board cannot comment on
7 pending matters either by confirming or denying to the
8 media the accuracy of the statements of others, the
9 Board would appreciate if all parties would refrain
10 from any such comments that may imply a certain action
11 or decision by the Board. Board members will not
12 discuss the hearing or the matters before the Board
13 with the intervening parties or the media. If you have
14 a question about the Board and its practice or
15 procedure, please speak to the executive director
16 directly, and he will assist you.

17 Prior to identifying the parties in attendance
18 today, I will provide a brief history of the
19 application before the Board.

20 On June 9, 2010, the NWB issued Licence Number
21 3AM-GRA1015, a Type "A" Municipal Licence for GN-CGS to
22 authorize the use of water and operation of water
23 supply facilities, Utilidor, and sewage treatment
24 facility for municipal undertaking at the hamlet of
25 Rankin Inlet. The ministers have subsequently approved
26 the issuance of the licence on July 28, 2010.

1 The licence authorized the use of 850,000 cubic
2 metres of water annually for municipal purposes. Water
3 is withdrawn from Nipissar Lake year round. The annual
4 water usage was reported by applicant as being 603,234
5 cubic metres for 2013, while the Nipissar Lake natural
6 replenishment is reported to be 311,789 cubic metres.
7 A shortfall of water at Nipissar Lake in 2013 would be
8 approximately 291,445 cubic metres.

9 On August 12th, 2012, the NWB received an
10 amendment application from Stantec on behalf of GN-CGS
11 to obtain the Board's authorization for additional
12 water to be withdrawn each summer from Char River,
13 exiting Lower Lake Landing Lake, which will be pumped
14 to the hamlet water supply, Nipissar Lake. Additional
15 supporting information was submitted to the Board on
16 October 6th, 2012, and August 12th, 2013.

17 The following documents were included within the
18 amendment application: August 14, 2012, submissions;
19 cover letter; amendment application; summation in
20 Inuktitut; completed application form for a Water
21 Licence amendment compliance; C1 pipeline site plan; C8
22 pipeline and screen details; C9 intake pump details
23 revised; C10 intake site plan; and C11 project
24 specification; Stantec authorization letter from GN-CGS
25 and design of pipeline system to augment natural
26 replenishment of Nipissar Lake, Rankin Inlet, Canada,

1 prepared by FSC Architects & Engineers on -- on
2 December 15th, 2010; October 6th, 2012, submissions;
3 Stantec additional information letter to NWB, and water
4 supply capacity consumption and conservation study,
5 Rankin Inlet, Nunavut, prepared by RMSI and FSC on
6 April 20, 2010. Appendix A, specification for leak
7 reduction equipment; Appendix B, AWWA/IWA water audit
8 and water balance report; Appendix C, cost and water
9 saving model; Appendix D, individual program
10 descriptions; and Appendix E, Nipissar Lake volume
11 study and environmental variable study, August 12th,
12 2013, submissions; Stantec additional information
13 letter to NWB with C101 area map.

14 The application was prepared and submitted with
15 the consulting support of Stantec FSC Architecture &
16 Engineers, who I will refer to as "FSC", provided the
17 engineering services for the design of a new intake and
18 pipeline. Copies of the above-mentioned submissions
19 were available on the NWB FST -- FTP site. Also, Robin
20 Ikkutisluk, our licencing administrator, has made
21 available for public viewing of this hearing a hard
22 copy of submission on the -- this file that has been
23 received to date. If you are interested in reviewing
24 any of this documentation, please see Robin.

25 On August 23, 2013, the NWB acknowledged receipt
26 of the application and asked interested parties to

1 review the scope and completeness of the information
2 provided, as well as to identify deficiencies through
3 information requests, IRs, to be submitted to the Board
4 by September 13, 2013. This deadline was extended to
5 September 20, 2013, as requested by Aboriginal Affairs
6 and Northern Development Canada, who I will refer to as
7 "AANDC".

8 On September 13, 2013, to September 20, 2013, the
9 Board received comments on the completeness of the
10 application from Fisheries and Oceans Canada, who I
11 will refer to as "DFO", and AANDC respectively. The
12 Board did not receive indication that the application
13 should not proceed through the regulatory process.

14 On October 11, 2013, Stantec provided additional
15 information on -- on behalf of CGN-CGS (sic). On
16 November 19, 2013, based on the comments received from
17 interested parties, the NWB determined that the
18 application could proceed to the next steps in the
19 NWB's regulatory process, and in accordance with
20 Section 35(1) of the Nunavut Waters and Nunavut Surface
21 Rights Tribunal Act, invited interested parties to
22 complete a full technical assessment of the application
23 making representation to the NWB by September 19, 2013.

24 On December 18, 2013, the NWB was in receipt of
25 written representation from AANDC. AANDC stated also
26 that they had received concerns from community members

1 from Rankin Inlet about the quality of their drinking
2 water. It may be in the best interest of the hamlet to
3 have an in-person public hearing.

4 On December 20, 2013, the Board Rankin Inlet panel
5 directed the NWB staff to hold a technical meeting,
6 "TM", and prehearing conference, "PHC", in Rankin Inlet
7 on January 14, 15, 2014, providing copies with a
8 proposed agenda.

9 On January 9, 2014, AANDC confirmed their
10 attendance at the TM and PHC. In response to the
11 Board's September 13 request for a conformity
12 determination regarding the amendment application from
13 the Nunavut Planning Commission, who I will refer to as
14 "NPC", the Board received on December 11, 2013, NPC's
15 conformity -- possible conformity determination
16 regional planned use for this project proposal.

17 On the morning of January 14, 2014, the NWB held
18 the informal technical meeting, TM, in Rankin Inlet, in
19 which the applicant, interveners, community members
20 were invited to participate to discuss a safe
21 resolution of issues raised during the technical review
22 of the application.

23 During the TM, the NWB staff compiled a list of
24 commitments made by the various parties that was
25 carried forward to the discussions in the prehearing
26 conference, PHC, held the next day. On the evening of

1 September -- January 14, 2014, community session was
2 held at the same venue.

3 The following morning, January 15, 2014, the PHC
4 was held, in which applicant, community members, and
5 interveners also participated. The PHC addressed
6 several matters related to the public hearing,
7 including establishing: (A), timetable for the
8 exchange of information; (B), the list of issues to be
9 dealt with at the hearing; (C), identification of
10 interested parties; (D), desirability of amending an
11 application for the purpose of clarification; and (E),
12 procedures to be followed in the hearing. And on
13 January 28, 2014, the NWB issued a prehearing
14 conference decision in which it set a deadline no later
15 than February 21, 2014, with a receipt of applicant's
16 response to the commitments made in the TM, PHC in its
17 decision.

18 The Board stated that the NWB, who was currently
19 awaiting the completion of the required environmental
20 assessment of the project by the Nunavut Impact Review
21 Board, who I will refer to as "NIRB", and was unable to
22 set a date for the public hearing prior to the issuance
23 of NIRB's screening decision. The PHC decision also
24 stated that, given the nature of the application, the
25 most affected community is the hamlet of Rankin Inlet,
26 and the public hearing should be held in that

1 community. Previous indications to the Board from
2 parties suggested that an in-person public hearing
3 should be held.

4 The following additional information related to TM
5 commitment lists was provided to the Board on February
6 7, 2014, and May 9, 2014, as per February 21, 2014,
7 extension request to the commitment list deadline:
8 (A), information letter from GN-CGS to NWB, commitments
9 by GN-CGS regarding 3AM-GRA1015 Type "A" Licence
10 amendment dated February 7, 2014; information letter
11 from Stantec to NWB Type "A" Water Licence 3AM-GRA1015
12 amendment application dated May 9, 2014, with updated
13 spill contingency plan; addendum to the operations and
14 main list plan; environmental screening document to
15 satisfy NIRB Part 2 form; project-specific information
16 requirements.

17 On June 26, 2014, the NIRB issued the screening
18 decision reports stating the proposal may be processed
19 without review under Part 5 or 6 and recommending
20 project-specific terms and conditions.

21 Notice of public hearing was issued officially on
22 July 7, 2014, in local papers and on bulletin boards in
23 affected communities. The Board requested that the
24 written submissions of interested parties, complete
25 with executive summary in Inuktitut be filed by the
26 Board by August 28, 2014 -- '13?

1 Based on the application, written submissions
2 received, the information exchanged at the TM PHC, the
3 NWB staff identified the following areas as issues to
4 be addressed at the public hearing. Char: Number 1,
5 Char River flow daily monitoring, pumping, and annual
6 reporting; 2, Lower Landing Lake, Char River, Nipissar
7 Lake water chemistry sampling at 2014, potential
8 impacts on Nipissar Lake water quality, availability of
9 the study results; 3, adaptive management plan for
10 Nipissar Lake replenishment, including Char River
11 monitoring, mitigation if Char River flow is
12 insufficient for pumping; 4, Nipissar Lake
13 replenishment -- lake's water level or full
14 replenishment; 5, long-term alternative source
15 assessment for Nipissar Lake replenishment; 6, erosion
16 management at the pipeline low-drain point. Written
17 submissions from this hearing have been received from
18 Aboriginal Affairs and Northern Development on August
19 27, 2014.

20 If I have missed written submissions of any
21 interveners, please let me know.

22 MR. BOYER: Mr. Chair, Craig Boyer here.
23 There are no further submissions that any of the
24 parties have indicated they are filing today, after the
25 deadline that had been set by the Board.

26 THE CHAIR: Thank you.

1 Could we take a five-minute break?

2 (ADJOURNMENT)

3 THE CHAIR: Welcome back. It is with
4 regret that I must inform those in attendance at the
5 hearing that Environment Canada will not be in
6 attendance. If there are any other interveners who
7 would like to speak, please identify yourself.

8 It is our tradition to give respect to our Elders;
9 therefore, at any time in the proceedings, an Elder may
10 speak to the application on file.

11 Are there any members of the general public who
12 would like to identify themselves?

13 Are there any representatives from agencies,
14 associations, et cetera, who have not submitted
15 interventions but would like to --

16 MR. BOYER: Mr. Chair, there is a person
17 identifying herself --

18 THE CHAIR: Go ahead.

19 THERESIE TUNGILIK: Can you hear me? My name is
20 Theresie Tungilik. I'm representing the hamlet of
21 Rankin Inlet, as I am a Counsellor, and thanks for
22 coming to Rankin Inlet for -- for this important
23 hearing.

24 THE CHAIR: Thank you. My apologies for
25 not introducing you earlier.

26 Are there any representatives from agencies,

1 associations, et cetera, who have not submitted
2 interventions but would like to speak?

3 Before proceeding, if not done already, I would
4 like to request all parties register and sign in with
5 Robin Ikkutisluk, NWB's licencing administrator at the
6 entrance site table.

7 I would now proceed with the identification of any
8 motions or any objections to the application that is
9 before the Board.

10 We will now proceed with Item 8 of the agenda,
11 presentation by the application -- applicant.

12 MR. BOYER: Mr. Chair, Craig Boyer here.
13 Before the applicant begins, I will affirm them before
14 they give their testimony.

15 MEGAN LUSTEY & JOE ACORN, Affirmed

16 THE CHAIR: Please go ahead with your
17 presentation.

18 Presentation by the Applicant

19 MR. ACORN: Joe Acorn. Thank you,
20 Mr. Chair.

21 Just before I start with our presentation, I just
22 am looking at the Nunavut Water Board's slides, and
23 there's just a -- one, two, three, four, five, six --
24 there's a correction that needs to be made to the
25 Nunavut Water Board Slide Number 6. Near the bottom of
26 the slide, you have water usage in 2013. That should

1 be "2030". The 603,000 cubic metres is a 2030 figure.
2 The estimated usage for 2014 is actually about 358,000
3 metres (sic). And the same for the next slide. The
4 difference calculated for 2013; that should say for
5 "2030". The difference in 2014 is about 47,000 cubic
6 metres. So ...

7 All right. Thank you, Mr. Chair. We'll get into
8 our presentation. I'll just wait 'til the slides are
9 up.

10 That's not our presentation.

11 MR. BOYER: Mr. Chair, Craig Boyer. There
12 needs to be some reorganizing of the PowerPoints. If
13 we could have a five-minute break?

14 THE CHAIR: Five minutes?

15 MR. BOYER: Yeah.

16 (ADJOURNMENT)

17 THE CHAIR: Welcome back. And before we
18 proceed with the hearing, I understand the -- we have
19 an audience (sic) in the -- in our -- I understand the
20 SAO from Rankin is in this building. I'd like to ask
21 you to go to the microphone and introduce yourself,
22 please. Thank you.

23 JUSTIN MERRITT: Good morning. My name is
24 Justin Merritt. I'm the acting SAO with the hamlet of
25 Rankin Inlet, and it's nice that you're all here this
26 morning, and I'll hope our application goes well.

1 Thank you, very much.

2 THE CHAIR: Thank you.

3 The application (sic), I understand you are ready
4 to go? Please go ahead.

5 MR. ACORN: Joe Acorn. Thank you,
6 Mr. Chair. So our presentation's up there now. This
7 is just a photo of the pipeline.

8 So the -- this is the Type "A" Water Licence
9 issued by the Board on June 9th, 2010. The activities
10 permitted under the licence were the operation of the
11 water supply facilities, the Utilidor, and the sewage
12 treatment facility, with an annual withdrawal allowance
13 of 850,000 cubic metres from Nipissar Lake.

14 In 2009, CGS contracted Stantec and RMSI to
15 complete the water supply capacity consumption and
16 conservation study to evaluate decreases in the water
17 level of Nipissar Lake. What it found was that the
18 volume in Nipissar was decreasing by about 44,000 cubic
19 metres per year, and it was concluded that Nipissar
20 would be an unsuitable potable water supply source by
21 2019 due to low volumes. There's actually an error in
22 the next one. The natural replenishment in Nipissar
23 Lake was -- it shows -- that should be 311,000 cubic
24 metres, not litres there.

25 In 2010, CGS contracted Stantec to complete the
26 design of a water intake pipeline to replenish

1 Nipissar. In 2012, CGS constructed the 4-kilometre
2 pipeline to pump water from the Char River to Nipissar
3 Lake. And in 2014, CGS submitted the regulatory
4 applications to the Nunavut Water Board, the Nunavut
5 Planning Commission, and NIRB to obtain approval to
6 pump water from the Char River.

7 The pipeline is designed with a screened water
8 intake pipeline located in the Char River extending
9 from the intake location to the pump, 175 horsepower
10 intake pump, a 4-kilometre HDPE pipeline. There are
11 two high-point air releases and one low-point drain and
12 a sea can as a storage container to house the intake
13 pipe and pump during the wintertime.

14 There's just a map of the pipeline showing the
15 route it takes in the upper left corner is just our in
16 point where it would withdraw water from the Char
17 River. There's three blue dots shown -- it's a little
18 difficult -- where culverts were constructed to bury
19 the pipeline to keep it underground, and there's -- the
20 one larger blue circle is the low-point drain line. So
21 there's two high points and one low-point drain
22 where --

23 MR. HOHNSTEIN: Sorry, Mr. Chair. Dave
24 Hohnstein here. I was just going to mention that you
25 can use the mouse, if you wanted, to point out where
26 things are there.

1 MR. ACORN: Joe Acorn. Yes. So there's a
2 culvert here and a culvert here and a culvert down
3 here, and the low-point drain is located here. So
4 there is the intake spot off the Char River after it
5 comes out of Lower Landing Lake, and there is the
6 outlet into Nipissar Lake down here. And -- thank you.

7 The pipeline would be a summer-only operation when
8 there is sufficient flow available in the river. So
9 anticipated something from June to September. Even
10 right now, there's very little water flowing out there
11 in that river. So, I mean, that's one of the things we
12 would have to -- operations would be adjusted as
13 required based on the actual flow each year, which we
14 anticipate would change each year according to
15 precipitation each summer. The duration of the pumping
16 would be dependant upon the -- the population of Rankin
17 Inlet. The consumption rate, which we have a target of
18 344 litres per person per day, and the pipeline would
19 have a -- the pump has a maximum pumping rate of .04
20 cubic metres per second. So the pump can be throttled
21 back. So if a pumping rate of less than the maximum is
22 required to stay within the 10 percent withdrawal
23 limit, then the pump will be throttled back.

24 So here's our numbers for 2014 and 2030. So the
25 2014 population of 2,859. The calculated volume
26 required -- that would've been required to maintain the

1 existing volume in Nipissar Lake would've been a
2 transfer of about 47,000 cubic metres with a -- which
3 would've required a pumping duration of about 14 days
4 operating around the clock, so 24 hours a day.

5 In 2030, assuming a population estimate in Rankin
6 Inlet of 4,649 -- and that assumes a 3 percent annual
7 growth rate of population between now and 2030 -- we
8 calculate that the volume required in that year would
9 be about 272,000 cubic metres to be transferred into
10 Nipissar in order to maintain the volume of the lake
11 with a pumping duration of about 79 days.

12 So during the -- the preparation of documents for
13 the Nunavut Impact Review Board, we prepared the
14 environmental screening report. And so we looked at --
15 the project was evaluated for its environmental effects
16 during the construction, operations, and
17 decommissioning phase. So valued ecosystem components,
18 were evaluated. The list is just up there: Terrain,
19 stability, and permafrost, soil quality, air quality,
20 water quantity and quality, vegetation, wildlife, and
21 avifauna, fish and habitat, socioeconomic, and
22 archaeological and heritage resources. All the details
23 with regarding to what was exactly evaluated, which
24 species were evaluated, for instance, in a -- for
25 wildlife are all detailed in the environmental
26 screening report.

1 The environmental screening report details a
2 number of mitigations which are put in place based on
3 our findings in the environmental screening report.
4 Air quality, just follow best practices, reduce vehicle
5 and equipment, exhaust emissions, implement dust
6 suppression techniques when required. For water
7 quantity, complete regular monitoring of the flow rate
8 of the river, adhere to a maximum withdraw rate of 10
9 percent of the flow rate while maintaining an in-stream
10 minimum depth of 0.5 metres. Pumping would cease if
11 the minimum depth of 0.5 cannot be maintained. And
12 complete annual monitoring to ensure natural drainage
13 is not obstructed and et cetera.

14 For water quality, just maintaining working areas
15 and equipment clean and free of potential deleterious
16 substances; implement sediment and erosion protection
17 (sic) and control measures when required; implement
18 spill prevention and response protocols; limit surface
19 disturbance, especially near water bodies and riparian
20 areas; conduct routine equipment inspections and comply
21 with fuel-handling best practices, including personnel
22 training, setbacks, and secondary containment.

23 To protect vegetation, if any off-road requirement
24 is -- use to be low-ground pressure vehicles, i.e. ATV,
25 where offset (sic) road travel is required. Wildlife
26 fisheries, we would be conducting regular monitoring

1 during pumping of the flow rate in the Char River, and
2 again, adhere to the maximum withdrawal rate of 10
3 percent, minimum in-stream depth of 0.5 metres, with
4 pumping ceasing if that depth cannot be maintained.

5 During the operational phase, what we're proposing
6 to do is to conduct a hydrological assessment. So what
7 we're going to be doing this fall is there's going to
8 be surveys of a number of cross-sections of the river
9 to develop a theoretical flow curve, and during next
10 season, there will be -- we're planning to have three
11 site visits, so a pre-freshet, and then another visit
12 in July and August to calibrate the flow curve to make
13 sure that the flow curve accurately represents the flow
14 in the river at any particular time. So we'll be using
15 the flow curve along with an in-stream staff gauge in
16 the Cullar (sic) River -- in the Char River to complete
17 the seasonal flow monitoring each year. As I said, a
18 water withdrawal limit to 10 percent of the
19 instantaneous flow with a 0.5 metre depth minimum with
20 periodic monitoring of the community's water use.

21 Now, we recognize that the data set with regards
22 to how much water is available in the river right now
23 is certainly not complete, and much more work needs to
24 be done, and we're planning to do that. And so if a
25 longer term alternative water supply source is
26 required, CGS accepts its responsibility to ensure that

1 there is a safe and secure long-term water supply that
2 is also protective of the environment.

3 To that end, with CGS, we are requesting that a
4 clause be included in the Water Licence stating that,
5 If water withdrawal from the Lower Landing Lake becomes
6 a preferred option in the future due to low water
7 levels in the Char River, that CGS be required to
8 prepare and provide a water balance to the Nunavut
9 Water Board at least six months prior to pumping from
10 Lower Landing Lake to demonstrating that the proposed
11 pumping rate is acceptable and will not be harmful to
12 the environment in Lower Landing Lake.

13 And that's about it. So there's any questions?

14 THE CHAIR: Thank you. Questions from
15 AANDC? Any questions from AANDC?

16 Questioning of the Applicant by the Parties

17 THERESIE TUNGILIK: Hello. I've been here for
18 nearly 36 years, and I've seen the difference in the
19 Meliadene River itself. It has dried within the last
20 36 years about 4 feet. And I'm sure that Char River
21 is -- it is happening to Char River as well, because
22 when I first moved here, the water used to be near the
23 bridge, and now some people can walk across it. What
24 happens when -- when the pumping area is getting dry?

25 MR. ACORN: Just in the last slide there,
26 that's what I mentioned, is that we recognize there is

1 uncertainty with regards to how much water is available
2 right now in Char River to pump to Nipissar Lake, and
3 as you say, how much longer will that water be
4 available? How many years in the future would a
5 transfer from Char River to Nipissar be viable? So we
6 think the next best option, if Char River isn't viable
7 in the long term, would be to probably extend the
8 pipeline into Lower Landing Lake and the intake to that
9 point. And so that's -- we're -- we're suggesting that
10 we include a clause in the Water Licence that requires
11 CGS to do a water balance if that becomes an option
12 that CGS wishes to pursue at some time in the future.
13 And if Lower Landing Lake itself becomes unacceptable,
14 then perhaps there will be -- need to be a larger
15 regional water balance and evaluation of potential
16 supply options.

17 THE CHAIR: Thank you.

18 Question from AANDC?

19 MR. PARSONS: Good morning, Mr. Chair. Ian
20 Parsons with AANDC. Just one question. You were
21 talking about the in-stream minimum depth of .5 metres.
22 Just wondering where along the river that that was
23 going to be taken; is it the whole river or just at
24 certain points because the profiled river changes
25 upstream compared to downstream?

26 MR. ACORN: Joe Acorn. Thanks. Yes.

1 When the surveyors are up here to do the
2 cross-sections, we will be searching the river for what
3 it would -- we would consider to be its widest point.
4 So that would be, essentially, the -- the minimum depth
5 bottle neck, you want to call it. So when we're
6 evaluating a -- requiring an in-stream minimum depth of
7 0.5 metres, it would be at the lowest point of depth
8 within the river in its -- in an entirety. So if
9 there's -- could be a 1 metre of depth at the pipe
10 intake location, if there's 0.5 metres of depth at the
11 low water point at some other point within the river,
12 well, that's the point that's going to dictate whether
13 or not we continue pumping or we shut off pumping. So
14 we'd be looking for the widest and shallowest point in
15 the river to make that determination.

16 THE CHAIR: Thank you.

17 Anybody any supplementary?

18 MR. PARSONS: Again, Mr. Chair, Ian Parsons,
19 AANDC.

20 Just one follow-up question to that, I guess. Is
21 that going to be looked at daily or weekly, because I
22 know, myself, I'm not from here, but I've been here
23 time and again, and the change is quite rapidly (sic),
24 the flows in Char River.

25 MS. LUSTEY: This is Megan Lustey. Yeah,
26 with the operation and maintenance plan that we

1 submitted to the Water Board, it will be monitored, the
2 flow rate and the depth at that .5 metre location, on a
3 daily basis during operation and for the first year for
4 the entire summer to create the background data that we
5 need for this to have more information on this project.

6 THE CHAIR: Thank you. Any further
7 questions from AANDC? Thank you.

8 DFO?

9 MS. DAHL: Julie Dahl, DFO. I just have
10 a few questions. You have indicated that the pump that
11 you're using is a variable pump, that you're able to,
12 as you say, throttle back from the .04 metres per
13 second maximum. Do you know what the minimum pumping
14 rate may be of that -- that that pump could be operated
15 at?

16 MR. ACORN: Sorry. Right off the top of
17 my head, I can't recall, but I can try and find that
18 out for you.

19 MS. DAHL: Okay. Thank you.

20 I've got another question here. Sorry. Give me a
21 moment. Okay. Just looking at your slide here where
22 you gave a comparison of pumping requirements between
23 2014 and 2030, you had indicated that in 2014, a volume
24 of just over 47,000 cubic metres needed to be pumped,
25 and I'm assuming that that relates to the figure that
26 you gave on the third slide that said that Nipissar

1 Lake dropped by 44,000 cubic metres per year. I was
2 just wondering if that -- on Slide 3, it says that the
3 lake dropped by 44,000 cubes per year. Over which
4 years is that, and how many years, because I'm
5 wondering whether or not there's a cumulative water
6 level drop and whether a one-time replenishment in 2014
7 would account for one year of drop, but has there been
8 a cumulative over-year drop of about
9 40-some-odd-thousand cubic metres each year?

10 MR. ACORN: It's Joe Acorn. That
11 \$44,000 -- sorry, 44,000-cubic-metre figure comes from
12 the water consumption study that was done in 2010, and
13 it was estimated that the Nipissar Lake water volume
14 had been dropping over a number of years at a rate of
15 44,000 cubic metres per year.

16 MS. DAHL: Okay. So is there a
17 cumulative water level drop?

18 MR. ACORN: Yes. The rate -- the -- the
19 level of -- in Nipissar Lake is continuing to go down,
20 so it is cumulative.

21 MS. DAHL: Okay. So will the one-time
22 replenishment that was proposed for 2014 just address
23 the drop for that one year?

24 MR. ACORN: Yes. The 47,000 that would've
25 been transferred in 2014 would've simply maintained the
26 level for that year, so it would've been enough to

1 accommodate the community's requirements and maintain
2 the lake level. So it really wouldn't have been a -- a
3 replenishment in 2014, it would've been simply a
4 maintenance transfer.

5 MS. DAHL: Thank you.

6 THE CHAIR: Thank you.

7 For the benefit of our court reporter, please
8 state your name prior to either questioning or
9 answering, please. Thank you.

10 Next we have anybody from GN? Questions?

11 THERESIE TUNGILIK: I have one more question.

12 THE CHAIR: Theresie Tungilik, Counsellor
13 of Rankin Inlet. What is the pipeline material made
14 of, and how durable is it?

15 MR. ACORN: Joe Acorn. It's an HDPE pipe,
16 which is high-density polyethylene. The pipe was
17 designed to last at least 20 years, but the expectation
18 is that it would last much longer than that. I can't
19 say right now exactly how long its life span could be,
20 but I know it was designed to last for at least a
21 20-year period.

22 THE CHAIR: Thank you. Anybody else?

23 AANDC?

24 MS. COSTELLO: Thank you, Chair. Karen
25 Costello, Aboriginal Affairs Northern Development
26 Canada. On your figure, you illustrated two

1 air-release valves which are close to the Char River.
2 I have seen these valves. There's no lockout on them.
3 Is there a possibility in the interest of safety during
4 operation -- you wouldn't really want to have someone
5 releasing these valves while you're pumping. Is there
6 a -- can you make adaptations to these valves so that
7 there's a lockout provision so they cannot be released
8 or opened during operation? Thank you.

9 MR. ACORN: It's Joe Acorn. I can speak
10 to one of our engineers, but that certainly doesn't
11 sound like that would be a problem at all. So we can
12 look into that.

13 MS. COSTELLO: Thank you, sir.

14 THE CHAIR: Thank you. Anybody else?
15 Anybody from staff questions to the applicant?
16 Questioning of the Applicant by Nunavut Water Board
17 Staff

18 MR. KHARATYAN: Thank you, Mr. Chair. Karmén
19 Kharatyan. I have a couple of questions, please.

20 So the first question is with respect to actual
21 water usage, which is around the 500 or 550 litres per
22 capita. So in calculation, you use the target of 340
23 something litres per capita. How you will (sic) meet
24 this target ETS water consumption per capita?

25 MR. ACORN: Joe Acorn. CGS is
26 implementing, and is continuing to implement, a number

1 of water-minimization methods in the community. Megan,
2 you can speak better about that? Could you? Do you
3 want to talk?

4 I can refer back -- just a second here. I'll dig
5 up the letter here that we got. Yeah, here it is. If
6 you want to refer back to the letter we submitted on
7 May 9th, 2014, it was Item Number 6 that came out of
8 the prehearing conference, and what it was, was to
9 outline water-saving measures implemented or to be
10 implemented. And the response at that time was: (as
11 read)

12 CGS is committed to establishing
13 water-conservation initiatives and improve
14 water utilization in the community. As part
15 of these initiatives, CGS has installed
16 district and zone meters to record water use
17 and identify losses for leakage reduction.
18 In addition, CGS is working with the Nunavut
19 Housing Authority to evaluate water usage and
20 identify further opportunities for water
21 conservation in units, and the CGS will
22 continue to work on water-saving initiatives
23 in the future.

24 MR. KHARATYAN: Karmén Kharatyan again. Why I
25 ask this question, because I remember during technical
26 meeting where we already raised this issue, and from my

1 understanding, this is a very long-term target because
2 we were provided with information that the licensee or
3 CGS needs to go to housing corporation and change many
4 appliances in -- in every housing -- every houses to
5 meet this target. So is it really realistic for short
6 term or no?

7 MR. ACORN: In the short term, probably
8 not, but we're looking at a -- a 2030 -- or a 16-year
9 time horizon here. As we said, CGS is looking at a
10 number of options, and if water-minimization efforts
11 are more economical on a -- a dollars-per-saving basis,
12 than perhaps upgrading the existing facilities, then I
13 think that will be the option that CGS will be
14 pursuing.

15 If you look at the water supply report, there are
16 a number of options in there for things that CGS can do
17 if it chooses to pursue those options. But the 2030
18 numbers, I mean, a lot of it is based on projections,
19 which we're not sure of at this time. We're using a 3
20 percent annual growth rate for the community of Rankin
21 Inlet, which, if you look at the -- at Nunavut Bureau
22 Statistics, we're probably quite overestimating what
23 the population in Rankin Inlet will be in 2030. So the
24 numbers we're using are -- are quite conservative in --
25 in the fact that the required water in 2030 is probably
26 quite likely going to be lower than what we're

1 estimating in our project, just to make sure that we
2 have it covered. So we -- we think there's -- there's
3 quite a bit of safety factor built into what we're
4 projecting here. But, again, if -- if additional
5 water-saving measures are required, CGS will continue
6 to pursue them.

7 MR. KHARATYAN: Thank you.

8 One more question, please. In the beginning or in
9 the initial documentation submitted to the Board, from
10 our understanding, the goal of licensee is replenish
11 Nipissar Lake. From the last submissions, I was a
12 little bit confused because I noticed that the goal
13 is -- is not really replenish, it's just preventing the
14 further decrease of water level. And the plans with
15 the last submissions was going -- pumping rate or
16 pumping days will increase progressively to 43 or 79 in
17 2030. So the question is: If you think that in 2030
18 you can take this water, so Char River will allow you
19 to take 'X' amount of water in 20 years or 15 years,
20 why not taking this water right now or from when it's
21 approved in 2015, for example? So not going
22 progressively, but trying to replenish the lake, which
23 is more sustainable solution.

24 MS. LUSTEY: This is Megan Lustey. Yes,
25 what we have submitted in the last document there would
26 be the minimum pumping days that we need to pump in

1 order to maintain. Because we don't have the data at
2 this time to know how many pumping days are available,
3 we just wanted to present what we would need to do to
4 maintain. But the plan is that we would create a
5 withdrawal plan from Char River next year when we have
6 that hydrological data and be able to pump as much
7 water as possible every year, making sure that we don't
8 exceed the thresholds of 10 percent and the .5 metres
9 depth at the widest area of the river.

10 MR. KHARATYAN: Okay. So the plan may change
11 from preventing to replenishing, really?

12 MS. LUSTEY: Yes. The information -- this
13 is Megan Lustey. The information provided was the
14 minimum we needed to maintain the water levels, but the
15 goal is to replenish the lake. And so, because the
16 data shows that the lake has been dropping for quite a
17 few years, it will take more than one year to replenish
18 the lake to historic levels, but our information
19 provided was to show that this is how much of minimum
20 pumping days that we're going to need, and because we
21 don't have the number of pumping days that we can use
22 from the river yet, that's what that was to show.

23 MR. KHARATYAN: Thank you.

24 One very short question. Do you know how much is
25 the -- or how deep is the lake now?

26 MR. ACORN: Lower Landing Lake, you mean?

1 Sorry.

2 MR. KHARATYAN: Nipissar Lake, the --

3 THE CHAIR: Do you have a name? Please
4 state your name.

5 MR. KHARATYAN: Karén Kharatyan again. I mean
6 Nipissar Lake. How much is the -- the maximum depth
7 now?

8 MS. LUSTEY: I don't have the measurement
9 of the maximum depth, but if you give me one second, I
10 can grab the latest depth from at the pump -- at the
11 intake.

12 THE COURT: Do you have a name?

13 MS. LUSTEY: Sorry. That was Megan Lustey.

14 THE CHAIR: Thank you.

15 Any further questions from staff?

16 MR. HOHNSTEIN: Thank you, Mr. Chair. David
17 Hohnstein. I think we're going to wait for a quick
18 answer here, and then we've got a couple more
19 questions, I believe.

20 MS. LUSTEY: This is Megan Lustey. At the
21 intake on Nipissar Lake, which is not at the deepest
22 point of the lake, it is 3.4 metres deep as of last
23 month.

24 THE CHAIR: Staff?

25 MR. HOHNSTEIN: Thank you, Mr. Chair. David
26 Hohnstein again. Just one question from my end. Going

1 back a little bit to our -- there was some initial
2 discussion on potential alternative water sources if --
3 if Char River wasn't adequate or through the
4 hydrological studies it was found that additional
5 sources would be needed. I was just wondering if this
6 information might be something that would be presented
7 in a renewal application that would be coming forward
8 to the -- to the Water Board, seeing as the actual
9 licence right now is expiring in May of 2015. So we
10 really won't have the -- I guess, the benefit of
11 another season for determining some of the -- the --
12 the water characteristics or the flow characteristics
13 of the Char River. Thank you.

14 MS. LUSTEY: This is Megan Lustey. Yes.
15 As soon as this amendment application has been
16 processed, the renewal application for this Water
17 Licence will be going -- moving forward. What we would
18 like to see is, in this amendment, we have the ability
19 to provide information on the water balance for Lower
20 Landing Lake. If, once we've completed the studies,
21 too, that we've committed in our last submission to the
22 Board and to AANDC on September 11th, which we will not
23 have the results for until after next season, at that
24 point, if that shows that we don't have sufficient to
25 pump as much water as we need for -- to the 2030 date,
26 at that point, we can then start doing the water

1 balance information on Lower Landing Lake.

2 What we don't want to see is that the amendment
3 process is held up waiting for that information because
4 we would like to be able to pump in the summer of 2015
5 to replenish Nipissar Lake that year.

6 MR. HOHNSTEIN: Thank you, Mr. Chair. David
7 Hohnstein again.

8 So just for clarification, was there going to be
9 additional alternatives proposed in the -- in the
10 renewal application, or is that waiting for additional
11 information to come in?

12 MS. LUSTEY: This is Megan Lustey. That
13 will be waiting for the information that comes in from
14 the hydrological data that will be done this fall and
15 next summer.

16 MR. HOHNSTEIN: Thank you, Mr. Chair. I
17 don't believe we have any more questions.

18 MR. KHARATYAN: One more, please.

19 MR. HOHNSTEIN: Sorry. One more question.

20 MR. KHARATYAN: Karén Kharatyan again. So the
21 hydrological data to be submitted will also include the
22 chemical data or no? Because I think we discussed in
23 technical meeting in -- there is a study chemical -- or
24 a water-quality study for Char River, Nipissar Lake,
25 and the Lower Landing Lake ongoing. So the question
26 is: Do you intend to submit this information with the

1 renewal licence application, or it will be submitted
2 independently?

3 MS. LUSTEY: This is Megan Lustey. Yes,
4 the chemical water quality of the Char River and
5 Nipissar Lake can be submitted with the renewal
6 application. It was sampled this summer, and our plan
7 is to sample both Char River and Nipissar Lake annually
8 before starting the pumping.

9 MR. KHARATYAN: Thank you.

10 MS. LUSTEY: Sorry, this is Megan Lustey.
11 I just want to add, and at the -- in the case that we
12 will be examining Lower Landing Lake, we'll also be
13 sampling water-quality data from that source as well.

14 THE CHAIR: Thank you. Any further
15 questions from staff?

16 Any questions from Board members, panel members?

17 Questioning of the Applicant by Nunavut Water Board

18 MR. AGLUKARK: Thank you, Mr. Chair. David
19 Aglukark Sr., Water Board member. A question to the
20 lady here that just mentioned just a little while ago
21 the depthness (sic) of Nipissar Lake. My question is:
22 How late is the information -- is that?

23 MS. LUSTEY: This is Megan Lustey. That
24 information is from in August. I could find out the
25 latest depth for you tomorrow, because there's actually
26 someone doing the measurement today, but I don't have

1 the depth from this week.

2 THE CHAIR: Thank you.

3 Before we move on to the next presentation, I will
4 suggest a 15-minute break. Thank you.

5 (ADJOURNMENT)

6 THE CHAIR: Welcome back. Before we
7 proceed with the next presentation, I understand staff
8 has more questions to ask to the applicant.

9 Questioning of the Applicant by Nunavut Water Board
10 Staff

11 MR. KHARATYAN: This is Karmén Kharatyan.
12 Thank you, Mr. Chair.

13 I have a question related to the slide -- I don't
14 see the number -- "Pumping Requirements". Under
15 2014 -- under 2014, we have this calculated volume
16 required, 47,187 cubic metres, and based those -- based
17 on this number, total pumping duration, 14 days. So
18 how this 47,000 was calculated? So what was the per
19 capita water usage used in this calculation?

20 MR. ACORN: That was 356 litres per capita
21 per day multiplied by 352 days per year multiplied by
22 the population.

23 MR. KHARATYAN: So this 356 was actual water
24 usage or targeted value? I don't know. Because I --
25 why I am asking this question -- and I should
26 clarify -- that you mentioned about an error. This

1 wasn't an error, it was just GN-CGS reporting in 2013
2 water usage, which is 600-something thousand. So it
3 gives 500 -- or a little more than 500 litre per
4 capita.

5 MR. ACORN: Yes, I think if you look back
6 in the letter in November 2012, I think there's an
7 acknowledgement that the actual numbers differ perhaps
8 from what's been reported, and the 356 litres
9 per cubic -- litres per capita per day is what is
10 believed to be the actual usage, whereas -- with a
11 target eventually of 344.

12 MR. KHARATYAN: Karmén Kharatyan again. Why I
13 am confused, Joe, because this letter came in 2012,
14 that because they were narrowing calculation before --
15 yes, with the initial application. But this number of
16 water use 6 -- which is 600,000, was reported just in
17 2014 for 2013. So it was just reported in March as
18 water use by community.

19 THE CHAIR: Applicant, do you have a name
20 before you speak?

21 MR. ACORN: It's Joe Acorn. I think,
22 rather than getting into a debate over numbers here,
23 how about we get -- take a look at it and we can get
24 back to you on that, and if we can sort of try and
25 reconcile this.

26 MS. LUSTEY: This is Megan Lustey. I guess

1 one of the things we also want to look at is that we're
2 not saying that we're necessarily pumping this number
3 of days, as I explained. We're pumping for the water
4 'til we reach that 10 percent and that .5. That's --
5 those are going to be our thresholds. This is just an
6 estimate of how much water we're looking at needing in
7 the community. But the thresholds of when we're not
8 going to be pumping is the 10 percent flow rate if
9 we're exceeding that and the .5 metres of the water
10 depth.

11 THE CHAIR: Any further questions from
12 staff?

13 MR. KHARATYAN: Karmén Kharatyan again. Thank
14 you, Megan. I do not worry about the 10 percent or 0.5
15 metres, I'm just -- this is a -- this is just, not
16 confused, but I do worry that you need more water that
17 (sic) you are providing.

18 MR. ACORN: It's Joe Acorn. Sorry, I
19 mean, and that may be the case. I mean, that's
20 something we're going to look at. I think the
21 important point to keep -- is not to get lost in the
22 numbers, but realize what it is we're trying to do
23 here, and what we're trying to do is maintain the level
24 of Nipissar Lake so that it stops decreasing. And we
25 don't know exactly how much we can move out of Char
26 River right now, and so what we're putting in place are

1 essentially environmental safeguards. We will pump as
2 much as we can maintaining the 10 percent withdrawal
3 limit and the 0.5 metre minimum depth. So exactly how
4 much we pump each year, we don't really know right now;
5 we need to do the hydrologies out there. We're hoping
6 to pump as much as we can each season while maintaining
7 those two key environmental protection measures,
8 keeping them in place.

9 So what the actual numbers turn out to be, we
10 don't know yet. We -- we can't say that. That's part
11 of the reason why we're looking at doing the hydrology
12 study. But we're putting in place two measures that we
13 think will protect the environment while we're doing
14 that and while we're getting these numbers in place.

15 THE CHAIR: Thank you. Any further
16 questions?

17 Any further questions from the floor? AANDC?

18 MS. COSTELLO: Thank you, Mr. Chair. Karen
19 Costello, Aboriginal Affairs Northern Development
20 Canada. I appreciate the information that we have
21 received from the -- from the applicant on -- on the
22 water depth. And the benefit of a conversation over
23 coffee break has triggered this question. The
24 statement was made that the water levels in Nipissar
25 Lake in 2014 are similar to the water levels right now
26 that were recorded in 2009. And the pipeline has been

1 constructed for a couple of years now. I just want --
2 has -- just want to get it on the record. Has the
3 pipeline been used at all? Has there been -- or has it
4 just been constructed? Thank you.

5 MEGAN LUSTEY: The pipe -- this is Megan
6 Lustey. The pipeline has not been used at all because
7 we do not have the Water Board amendment in place.

8 MS. COSTELLO: Thank you, Mr. Chair.

9 THE CHAIR: Thank you.

10 Anybody else from the floor?

11 PETER IPKORNERK: My name is Peter Ipkornerk.
12 I'm from Rankin Inlet. This is not a good stand here.
13 You need to have everything well in place.

14 My name is Peter Ipkornerk. I am from Rankin
15 Inlet. Thank you for coming here, and thank you for
16 coming and looking after our community. I thank you
17 all.

18 I want to comment on a few things here because
19 whatever is being talked about is open. I would like
20 to say Nipissar Lake, you probably seen it, the level
21 of the water has gone down, and there's a pipeline put
22 up there, and the pipe has not been used, and it was
23 installed last year or a couple years ago. And it's
24 not been used. There was -- a little bit was flowing,
25 maybe for, like, three weeks it was pumping, and I
26 thought -- I thought it was going to flow over the

1 summer, but, you see, the water is very low. The water
2 is flowing there. And just this summer, I'm not too
3 sure if it was flowing from Char River, and the
4 pipeline that is up there is just on the main --
5 mainland. It's, like -- it's not properly installed.
6 It's funny to see it just being -- laying on the
7 ground. If the water starts flowing there and if -- if
8 it keeps flowing or whether to -- coming from -- during
9 the summer, it only -- we only have three -- you can
10 finish it in three months of the year coming from
11 Rankin Inlet to end of the road, using that road to --
12 I'm pretty sure we can get water from Meliadene because
13 I'm pretty sure we would -- the population of Rankin is
14 growing, and there's a lot of people that use water.
15 Because of the population of Rankin, we are using so
16 much water. We've been using Nipissar Lake for so many
17 years. I just wanted to comment -- comment on this.
18 Thank you. I don't want to speak too long. I'll
19 probably say something later on. Thank you.

20 THE CHAIR: Thank you.

21 Anybody else? If there are no more questions to
22 the applicant, we will move on to our next intervener,
23 AANDC.

24 MR. BOYER: Mr. Chair, Craig Boyer. I
25 will propose to swear in the witnesses.

26 KAREN COSTELLO & IAN PARSONS, Affirmed

1 THE CHAIR: You may proceed with your
2 presentation. Go ahead.

3 Presentation by AANDC

4 MS. COSTELLO: Thank you, Mr. Chair. Good
5 morning. As stated, my name is Karen Costello. I am
6 the director of resource management for Aboriginal
7 Affairs Northern Development Canada, the Nunavut
8 regional office. I'd like to express my appreciation
9 to the Nunavut Water Board for providing this
10 opportunity to make a presentation regarding our
11 intervention regarding the Government of Nunavut's
12 application to amend the Rankin Inlet Hamlet Type "A"
13 Water Licence for the seasonal replenishment of
14 Nipissar Lake.

15 I am joined by Ian Parsons, one of our regional
16 coordinators with the water resources division in the
17 Nunavut regional office.

18 On behalf of the department, I'd like to express
19 my thanks to the Hamlet and the people of Rankin Inlet
20 for their kind hospitality during this visit, and also
21 for the giving up of their Community Hall to facilitate
22 this hearing.

23 We appreciate the efforts of the Nunavut Water
24 Board during this licence application review process,
25 as well as the Government of Nunavut's Department of
26 Community Government Services and Stantec for

1 responding to our questions and concerns during this
2 process.

3 Throughout this presentation, I will refer to
4 Aboriginal Affairs and Northern Development Canada as
5 "the Department". I'm just going to briefly touch on
6 the Department's responsibilities with regard to the
7 licence amendment application on the contributions that
8 the Nunavut regional office has made with respect to
9 this process so far.

10 I will review the technical comments that the
11 Department previously provided, and although resolution
12 of these comments and recommendations with the
13 Government of Nunavut has not yet been confirmed, the
14 Department is confident that they can be resolved.

15 We have provided technical review comments on
16 seasonal flow and availability, on the adaptive
17 management plan, alternatives assessment, and pipeline
18 drainage.

19 Aboriginal Affairs' mandate and responsibilities
20 with respect to Nunavut water resources are derived
21 from a variety of -- of acts and legislation. As you
22 can see from the Department of Indian and Northern
23 Development Act, the Nunavut Land Claims Agreement Act,
24 and the Nunavut Waters and Nunavut Surface Rights
25 Tribunal Act and Regulations, as well as the
26 Territorial Lands Act and Regulations, we have a very

1 broad mandate. In addition, the Department administers
2 and enforces regulatory authorizations that pertain to
3 Nunavut's Crown land and fresh water resources.

4 And as I've mentioned, we participate in the Water
5 Licence processes that are administered by this Board,
6 and our participation is along with other interested
7 parties, and we provide technical advice and expertise
8 for the Board's consideration. Following the issuance
9 of any licence by the Board, we will -- we also inspect
10 for compliance.

11 The contributions to the Water Licence amendment
12 application review have been ongoing for -- since last
13 year. The Department reviewed the scope of the
14 information included in the amendment application and
15 recommended further information requests. A written
16 memo was provided on September 20th, 2013. Following
17 that, the Department conducted a technical review of
18 the amendment application, and comments and
19 recommendations were provided for the Board's
20 consideration in a written memo on December 18th, 2013.

21 The Department participated in a technical meeting
22 and prehearing conference held here in Rankin Inlet
23 earlier this year in January, and the Department
24 conducted a second technical review following the
25 submission of additional information by the applicant.
26 Comments and recommendations were provided for the

1 Board's consideration in a written memo on August 28th.

2 MR. PARSONS: Good morning, Ian Parsons,
3 Aboriginal Affairs. I will now go over our technical
4 review comments.

5 So our first comment revolves around the flow
6 monitoring. We've said this right from the outset of
7 the licence amendment, and it's been a conversation all
8 the way through. So we're recommending that the
9 licensee be required to undertake a multi-year seasonal
10 flow monitoring of Char River. This will clarify the
11 viability of Char River to meet the community needs in
12 the future. This will also provide evidence toward
13 adaptive management of water withdrawals, as well as
14 establishing issue and flow objectives.

15 As I've stated, we've had conversations, either
16 over the telephone or in writing, with the applicant
17 all through the process. They were able to provide a
18 limited flow data set that was provided to them by
19 Agnico-Eagle; however, it was very limited and didn't
20 provide much information. So -- so we're still
21 recommending that the flow monitoring be undertaken.

22 MS. COSTELLO: Karen Costello for Aboriginal
23 Affairs. With -- the applicant had a September 11th,
24 2014, submission. They responded to the Department's
25 technical recommendation for flow monitoring. They
26 indicated a commitment to monitor flows prior to and

1 during pumping events, and were proposing the
2 establishment of in-stream flow objectives based on
3 general Department of Fisheries and Oceans guidelines.

4 Aboriginal Affairs agrees that the use of
5 Department of Fisheries and Oceans guidelines is an
6 acceptable method of establishing in-stream flow
7 requirements and that monitoring of flows during
8 pumping will adequately support the management of
9 pumping operations. It remains unclear, however,
10 whether the annual variability of flow will allow
11 sustained withdrawal sufficient to meet community
12 requirements.

13 The September 11th submission indicates such
14 information is not necessary because other pumping
15 options will be explored if required in the future.
16 And the applicant spoke to that in their presentation
17 about asking for a term and condition.

18 Should the community adopt this approach, there is
19 a risk without this term and condition that another
20 licence amendment may be required on relatively short
21 notice in a crisis situation. Aboriginal Affairs,
22 therefore, continues to recommend a multi-year seasonal
23 flow monitoring program to fully characterize water
24 availability. Our colleague from Fisheries and Oceans
25 will comment more on this in their presentation.

26 In Slide Number 6, here are two recent photographs

1 taken of the area. The photograph on the left shows
2 Char River. In the back, you will actually see the
3 blue sea can, which the applicant has referred to where
4 the pump is stored, and the pipeline just comes to
5 the -- to the left of the sea can. You can actually
6 see the water level of Char River, and this picture was
7 taken on August 23rd of 2014. Over on the right is a
8 picture just highlighting the shoreline of Nipissar
9 Lake. It was taken the same day. And this is just
10 across from the pumping station on Nipissar Lake.

11 We had comments on the adaptive management plan.
12 The operation and maintenance plan developed for the
13 proposed operation does not include management
14 strategies for maintaining in-stream flow.
15 Specifically, Section 5.2 of the plan states that: (as
16 read)

17 If insufficient flow to operate the pump is
18 present, pumping activities will cease until
19 sufficient water is present. Additional
20 commitments in the Stantec submission propose
21 to maintain a minimum flow depth during
22 pumping in accordance with Fisheries and
23 Oceans guidelines.

24 And when we developed this issue, it was not clear
25 what -- that the minimum flow depth would be maintained
26 at all points in the river, which varies considerably

1 in profile -- and you can see a little bit in that
2 previous photo -- or how water withdrawals would be
3 sustained if the minimum depth cannot be maintained.

4 And during some dialogue earlier this morning,
5 there was -- in response to a question from the floor,
6 the applicant indicated that the depth would be
7 determined at various stages, and I think that was new
8 information to -- to explain how the -- this .5 minimum
9 depth was going to be calculated.

10 So the Department recommends that as a condition
11 of the Water Licence amendment, the licensee be
12 required to develop an adaptive management plan that
13 would include flow monitoring of Char River,
14 formulation of in-stream flow objectives for the river,
15 and mitigation options for occurrences when flow may be
16 insufficient to meet pumping objectives. Mitigations
17 should include the identification of alternative intake
18 locations. And here we're thinking back to the
19 original location of Lower Landing Lake. And this goes
20 back to the term and condition that the applicant
21 mentioned this morning.

22 The applicant has indicated that the Char River
23 was selected as a supplementary community water source
24 based on economics and a limited assessment of water
25 availability that did not account for flow variability
26 or competing water uses. The targets for the number of

1 pumping days may exceed the number of high-flow days
2 available for pumping. This raises the question of the
3 viability of the Char River in meeting community water
4 supply objectives.

5 So the Department recommends that the applicant
6 conduct a more robust assessment of alternative
7 supplementary community water sources that would assess
8 water shed, water balances, seasonal availability,
9 annual flow availability, competing water uses that --
10 and that fully captures implementation and operational
11 costs.

12 Some of our comments, we had noted that the
13 applicant had indicated that the low point in the water
14 resupply pipeline will have a drain valve allowing the
15 remaining water in the pipeline estimated at
16 approximately 127,000 litres to be drained once the
17 resupply was complete. It is the Department's
18 recommendation that structures at the pipeline
19 discharge point be placed to prevent erosion during
20 discharge.

21 Aboriginal Affairs recognizes that it is vitally
22 important that Nipissar Lake be seasonally replenished,
23 and it is no longer an adequate water source for the
24 community of Hamlet Lake (sic). It is necessary to
25 ensure that the water source chosen for the
26 replenishment is both adequate and environmentally

1 sound.

2 Our observation is that the decision to install a
3 pipeline and pump water from Char River did not take
4 the water licencing process a proper assessment of
5 water availability, flow variability, or in-stream flow
6 factors into account. The hamlet is now in an
7 unfortunate position of applying for a Water Licence
8 and beginning to consider important environmental
9 questions, only after having invested in a pipeline to
10 what appears to be an unproven water source.

11 That being said, Aboriginal Affairs supports the
12 issuance of an amendment to the Rankin Inlet Water
13 Licence to allow the use of water from Char River for
14 municipal supply, but only under the conditions we have
15 outlined. It is essential to conduct ongoing seasonal
16 flow monitoring of the Char River to develop an
17 adaptive management plan that better aligns pumping
18 activities with water availability to account for
19 competing uses, and to better understand the viability
20 of the Char River over the medium and long term.

21 Thank you.

22 THE CHAIR: Thank you.

23 Before we move on to the questioning of the
24 interveners, I would suggest that we break for lunch
25 now and be back here at 1. This will give all the --
26 everyone the chance to think about the questions over

1 the lunch hour, and we'll see you back here at 1.

2 (LUNCHEON ADJOURNMENT AT 11:20 AM)

3 (PROCEEDINGS RECOMMENCED AT 1:00 PM)

4 THE CHAIR: Welcome back, everyone. I
5 guess we'll start the questioning by the applicant to
6 AANDC, and we'll go DFO, staff, Board, and public, in
7 that order -- not necessarily in that order, but you're
8 good to go.

9 Questioning of Aboriginal Affairs Northern Development
10 Canada by the Parties

11 MR. ACORN: Joe Acorn. Thank you,
12 Mr. Chair.

13 I just have maybe a couple questions for AANDC.
14 Just, you went through your recommendations that you've
15 made in your submission back in late August. After
16 that, we submitted a letter to the Board on September
17 11th, 2014. There was no chance for AANDC to provide a
18 written response after that date and put it on the
19 record, so if we could, could you maybe explain or
20 acknowledge or provide some kind of response from AANDC
21 to our September 11th letter and sort of indicate to
22 the Board if and how, and if not, how does our
23 September 11th response satisfy the recommendations
24 that AANDC had put forward?

25 MR. PARSONS: Good afternoon. Ian Parsons,
26 AANDC, Mr. Chairman.

1 So, yeah, when we reviewed your September 11th
2 submission, we have (sic) already had everything
3 prepared and done for this public hearing. So our
4 discussions focused around -- but your -- your issuing
5 objective such as the DFO guidelines, which our
6 colleague will speak more to in her presentation. But
7 everything seemed okay to us with regards to the
8 studies that you guys are going to undertake.

9 We just wanted to get on the record that our
10 recommendations still stood at that time with regards
11 to the flow monitoring and the viability of the Char
12 River as a sustainable replenishment source for
13 Nipissar Lake. That's our biggest concern.

14 MR. ACORN: Joe Acorn. Just to follow up
15 just to be clear, then, we're not wanting to start
16 doing an alternative study analysis of other supply
17 options until we know Char Lake (sic) is -- is not a
18 viable source in the long term. So the intention is to
19 do the research that we're doing now, and do our
20 hydrological work next summer. So -- and your -- your
21 recommendation didn't seem to have a timeline to
22 initiate the alternative source study, so just want to
23 be clear, you're acceptable of us sort of waiting
24 perhaps a year, perhaps two, whatever it takes, to make
25 that determination, whether or not Char River is viable
26 or not in the long term before we initiate the study of

1 an alternative source?

2 MR. PARSONS: Mr. Chairman, Ian Parsons,
3 AANDC.

4 Maybe we weren't clear in our presentation, but
5 what we've seen so far, there's very little data to
6 suggest whether or not Char River is viable, so we
7 would like to see an alternative assessment done as
8 soon as possible. With what's been shown to us, we
9 think you're going to need to come up with an
10 alternative source in the very near future.

11 MR. ACORN: Joe Acorn. And I agree. I
12 mean, we don't know for sure how viable Char River is
13 in the long term right now, but I think that that's
14 part of what we're trying to do with the work we're
15 doing this fall and again next summer. I mean, we
16 don't want to initiate a study into an alternative
17 source until we kind of make that determination of how
18 viable Char River is in the long term. So, I mean, we
19 don't think we should be initiating an alternative
20 study at this point. I'd sooner wait until we make
21 that decision on -- on -- on how much flow there is
22 available in Char River. So is that acceptable?

23 MS. COSTELLO: Thank you, Mr. Chair. Karen
24 Costello for Aboriginal Affairs.

25 As I stated, Aboriginal Affairs does support this
26 amendment request, and we recognize that this

1 additional information will only be forthcoming after
2 the fall study and the 2015 planned field work, and
3 based on the commitments made in the 2011 submission,
4 we're satisfied at this point. Thank you.

5 MR. ACORN: Joe Acorn. Thank you. That's
6 all my questions.

7 THE CHAIR: Thank you.

8 DFO? DFO, any questions to --

9 MS. DAHL: No.

10 THE CHAIR: -- AANDC?

11 Go to the microphone, please.

12 MS. DAHL: Julie Dahl -- sorry. Julie
13 Dahl, Fisheries and Oceans. No questions for AANDC.

14 THE CHAIR: Thank you.

15 Any questions to AANDC from staff?

16 MR. HOHNSTEIN: Thank you, Mr. Chair. David
17 Hohnstein, no, we have no further questions.

18 THE CHAIR: Any questions to AANDC from
19 Board members?

20 Any questions to AANDC from the public? Hamlet?
21 Thank you.

22 Next we have DFO with a presentation. Craig?

23 MR. BOYER: Mr. Chair, Craig Boyer. Could
24 I proceed to swear in the witness?

25 JULIE DAHL, Affirmed

26 THE CHAIR: Whenever you're ready, please

1 go ahead.

2 Presentation by Department of Fisheries and Oceans

3 MS. DAHL: Julie Dahl, Department of
4 Fisheries and Oceans. Good afternoon to the Board and
5 Board staff. I will be giving a presentation on behalf
6 of Fisheries and Oceans Canada, or DFO, for this
7 hearing. The -- I'm assuming this works. Oops. Okay.
8 All right. There we go.

9 I would like to apologize, first of all, for the
10 relatively late participation by DFO in this process.
11 We had only recently determined that we would be
12 attending the hearing, and therefore, the written
13 submission had not been provided. I do have my notes
14 that accompany the presentation that I can provide to
15 the Board afterwards as part of -- part of a -- a
16 formal submission.

17 So Fisheries -- DFO is an interested party in the
18 Nunavut Water Board review of the Government of Nunavut
19 proponent or the applicant application to amend the
20 Type "A" Water Licence for the hamlet of Rankin Inlet
21 to allow for annual replenishment of Nipissar Lake.

22 Pursuant to federal legislation, DFO ensures
23 compliance with the fisheries protection provisions of
24 the Fisheries Act, specifically to manage impacts to
25 fish and fish habitat, to provide for the
26 sustainability and ongoing productivity of the

1 commercial, recreational, and aboriginal fisheries that
2 are supported.

3 The proposed licence amendment is intended to
4 address the drawdown of Nipissar Lake, the primary
5 water source for Rankin Inlet, due to increasing water
6 demand by the local population, lower than anticipated
7 annual recharge rates to the lake, and leaks in the
8 water supply system.

9 DFO has considered the project assessment
10 information, as well as responses to questions posed by
11 DFO and other reviewers. After considering the
12 proponent's proposed avoidance and mitigation measures
13 and in consideration of those measures being fully
14 developed and effectively implemented, DFO is of the
15 opinion that there is likely a low probability of
16 detectable impacts to the Char River in terms of its
17 ability to support commercial, recreational, or
18 aboriginal fisheries; however, it is very important to
19 state that this determination is conditional upon the
20 implementation of effective and appropriate mitigation
21 measures, monitoring, and responsive management
22 actions, and the development of a long-term water
23 management plan such that the sustainability of the
24 Char River is not jeopardized.

25 Despite the application of mitigation and
26 monitoring, there is still uncertainty regarding the

1 ability of the Char River to provide the required water
2 to maintain Nipissar Lake without endangering the
3 aquatic resources of the river.

4 In an attempt to provide a basis for DFO's
5 comments, I have used some simplified figures taken
6 from the various numbers that have been provided and
7 revised regarding current water usage and protected --
8 projected usage. I think we have seen that there have
9 been many figures provided, calculated, recalculated,
10 different projections, and I know for myself, it has
11 created a technical challenge to really figure out
12 what -- what we are faced with in terms of water needs,
13 and I'm -- I'm understanding that it's probably a
14 confusion that's among a number of people when we're --
15 in trying to interpret the data in trying to come up
16 with some reasonable recommendations.

17 As I can understand from the data, it appears that
18 the natural recharge of Nipissar Lake is approximately
19 314,000 cubic metres per year, and that is as per the
20 2008 operation and maintenance plan, and then as
21 restated in the updated 2010 operation and maintenance
22 plan.

23 The estimated use of water per year from the lake
24 is stated to be approximately 600,000 cubic metres.
25 And I got that from the -- from the recent public
26 hearing conference report. And that seems to leave an

1 approximate difference of about 286,000 cubic metres of
2 water that need to be pumped from the Char River or
3 elsewhere to the lake each year. Based on an
4 anticipated maximum pumping rate of .04 cubic metres
5 per second, or 40 litres a second, it is expected to
6 take approximately 80 days of pumping from the Char
7 River to replenish Nipissar Lake each year.

8 DFO provided advice to the Board in December of
9 2013 that an authorization pursuant to the Fisheries
10 Act would not be required, and this was based primarily
11 on four proposed mitigation measures, these four
12 measures generally being: A commitment to withdraw no
13 more than 10 percent of the instantaneous flow from the
14 Char River; a commitment to continuously monitor
15 instantaneous river flow to ensure pumping rates do not
16 exceed this 10 percent value; a commitment to include a
17 cutoff limit, in this case, being a water depth below
18 which water would not be pumped from the river; and a
19 commitment to provide an acceptable fish screen on the
20 intake to avoid the entrainment or drawing in of fish.

21 DFO notes that while these mitigation measures may
22 be appropriate to address impacts to aquatic resources
23 in the Char River, uncertainty due to limitations in
24 the data available to adequately describe the flow
25 regime and information on how the measures will be
26 implemented, monitored, and adapted are unclear.

1 So I was just going to briefly review each of
2 these four main mitigation measures and identify a few
3 questions and some recommendations with respect to
4 each.

5 So regarding the commitment to determine daily
6 flows to ensure that pumping rates do not exceed 10
7 percent of the instantaneous flow, it is not clear what
8 is considered a pumping day. While the assessment
9 reports provided imply that the pump will be shut off
10 each day and restarted subsequent -- each subsequent
11 day following a daily flow calculation, it is noted
12 that for the proposed pumping that was to occur in
13 2014, it was stated that the duration of pumping will
14 span over approximately 14 days, with the pump
15 operating 24 hours a day. As well, the anticipated
16 pumping duration of approximately 80 days to replenish
17 the 286,000 cubic metres of water in Nipissar Lake can
18 only be achieved with 24 hours of pumping for the
19 entire period.

20 Our recommendation is that clarification be
21 provided as to whether monitoring of instantaneous
22 flows is continuous, as well, clarification is required
23 as to the procedures for determining daily river flow
24 rates and pumping rates, including the timing of these
25 calculations, how adjustments to pumping rates will be
26 implemented when needed.

1 The second mitigation was regarding stopping
2 pumping if the 10 percent withdrawal rate was exceeded.
3 The intention was to cease the pumping if the flow rate
4 of the river cannot be achieved. This was identified
5 in the assessment report as a mitigation measure to
6 address the potential for loss of habitat and impedance
7 of fish movement associated with the water withdrawal
8 activities. However, during periods of rapid decline
9 in spring freshet flow, it is not clear how it will be
10 ensured that pumping rates will be adjusted so as not
11 to exceed 10 percent withdrawal. In particular,
12 assessment reports indicate that upon completion of the
13 freshet, flow rates drop significantly to approximately
14 1.13 cubic metres per second from an average flow at
15 the peak of the freshet of 7.3 cubic metres per second.

16 The recommendation is that clarification be
17 provided as to the procedure for adjusting pumping
18 rates in response to rapidly changing river flows to
19 ensure the 10 percent of instantaneous flow is not
20 exceeded. In other words, a daily calculation of flow
21 may not be adequate if we are in a rapid decline
22 situation.

23 Regarding the commitment to include a cutoff limit
24 below which pumping would cease, setting a minimum
25 water depth may not provide an additional level of
26 protection for the fish and fish habitat function in

1 the river. Data collected for the Char River in
2 support of the Meliadene project indicate that average
3 water depths in the river were in the range of .5 down
4 to .3 metres from the high flow in the spring to lower
5 flows in the summer, with some areas up to 1 metre in
6 depth in the spring. It is not clear what the water
7 depth is at the pump location -- and I had asked this
8 question of Stantec earlier -- nor how a .5 metre depth
9 cutoff would be applied, especially if that depth is
10 only likely to be achieved in the spring and only in
11 specific areas of the river.

12 As well, the assessment reports reference a 2013
13 DFO document referred -- called the "Framework for
14 Assessing the Ecological Flow Requirements to Support
15 Fisheries in Canada". This document speaks to a cutoff
16 limit, but it is not a minimum water depth, but it is a
17 point where withdrawal would cease if the instantaneous
18 natural flows drop below 30 percent of the mean annual
19 discharge for the river. It is unlikely that
20 sufficient flow data for the river are available to
21 calculate this mean annual discharge.

22 The proponent should -- should refer in more
23 detail to the DFO ecological flow requirements
24 document. A less than 10 percent of instantaneous flow
25 withdrawal limit is likely protective during high
26 seasonal flow; however, a flow based cutoff possibly in

1 the .1 to .6 cubic metres per second range may be
2 required during extreme low events and during the
3 typical seasonal low flows. This would be a flow level
4 at and below which no water should be withdrawn from
5 the Char River.

6 The recommendation is that the water depth at the
7 pump location be clarified, also, given the
8 implications of drawing down a 1-metre deep pool to .5
9 metres on other areas of the river that may only
10 experience a maximum depth of .5 metres should be
11 considered, and the appropriateness of this criteria to
12 manage withdrawal-related impacts should be clarified.

13 The proponent should gain greater knowledge of the
14 river-flow regime to establish a protective limit for
15 water taking during seasonal low flow. This may
16 involve determining the mean annual discharge with some
17 accuracy or modelling natural flow in the Char River
18 such that a 30 percent of mean annual discharge cutoff
19 limit can be defined and compared to in-stream flow
20 suitability measurements for important fish life cycle
21 requirements.

22 Regarding the commitment to provide an acceptable
23 fish screen on the intake to avoid the entrainment of
24 fish, clarification was provided that the
25 screen-opening size would be 2.54 millimetres, in
26 compliance with DFO's fish-screening guidelines, and

1 that the surface area of the intake was developed such
2 that maximum velocities at the face did not exceed .16
3 feet per second, which is .049 metres per second.

4 The recommendation is that the proponent ensure
5 that all of the required design criteria, including
6 determination of an acceptable approach velocity, the
7 required open-screen area, the type of screen and
8 material, and the suitability of the dimensions of the
9 screen have been considered in the design of its water
10 intake fish screen to be in compliance with DFO's fish
11 screen guideline and to avoid serious harm to fish.

12 DFO would like to remind the proponent or the
13 applicant that they are required to demonstrate due
14 diligence in complying with the Fisheries Act, and it
15 is their duty to notify DFO if they have caused or are
16 about to cause serious harm to fish. "Serious harm" is
17 defined in the Fisheries Act as death of fish or any
18 permanent alteration or destruction of fish habitat and
19 applies to fish and fish habitat that are part of or
20 support a commercial, recreational, or aboriginal
21 fishery.

22 I would also like to provide some further
23 clarification regarding a question of potential impacts
24 of water withdrawal on fish habitat compensation works
25 in the Char River. DFO can confirm that there are no
26 fish habitat compensation works constructed, being

1 monitored, or planned in the Char River. Further,
2 there is no fish habitat compensation agreement with
3 Agnico-Eagle that involves the Char River; therefore,
4 DFO can confirm that water -- that water withdrawal
5 from the Char River would not affect an existing fish
6 habitat compensation agreement.

7 Based on the seasonality and the short duration of
8 high flows in the Char River, water withdrawal may only
9 be possible during spring freshet each June. It is
10 unlikely that sustained flows above an ecologically
11 derived cutoff limit will be available to support the
12 anticipated pumping period of 43 to 79 days from the
13 Char River.

14 In closing, I would like to say that DFO notes and
15 supports AANDC's recommendations for multi-year flow
16 monitoring and assessment of viability of the Char
17 River as a water source for adaptive management for
18 when flows in the Char River were insufficient and a
19 robust alternatives assessment of supplementary water
20 sources. Thank you.

21 THE CHAIR: Thank you.

22 Questions to DFO from the applicant?

23 Questioning of Department of Fisheries and Oceans

24 MR. ACORN: Joe Acorn. Yes. A mix of
25 questions and comments, I suppose. I guess the first
26 one would be is that: I appreciate you've done what

1 you can this week; it would've been very helpful if
2 we'd gotten this earlier 'cause the last thing we have
3 on the record from DFO was a statement that you had no
4 comments and support the project. So there's -- there
5 was nothing coming forward from DFO in terms of any
6 types of recommendations from us that we could've
7 responded to earlier.

8 I'm not a fisheries biologist, and if I had known
9 DFO would be attending with a set of recommendations, I
10 either would've brought one with me or had one
11 available by phone here for us today. So we'll try to
12 respond as best we can right now, but we'll want to
13 have one of our senior fisheries biologists have a look
14 at the recommendations, and we'll need to respond at a
15 later date.

16 So if you could back up to Slide 6 right now. All
17 right. So just a clarification on that one. The
18 pumping day, as we talked about, for, like, whether
19 it's 14 days, 43 days, 79 days, those calculations are
20 based on a 24-hour pumping cycle. So whether that's 14
21 days, 24 hours a day, or 28 days at 12 hours a day,
22 we've -- we've -- what we've said is that's the period
23 it would be. So the calculation was 14 days, 24 hours
24 a day pumping.

25 Clarification of whether the instantaneous flow is
26 continuous. I mean, there's not going to be -- there

1 was no plan to have a data log or anything like that
2 there, if that's what you're referring to. The idea
3 is, is that as long as pumping is going on, there will
4 be checks, CGS, Rankin staff will be out there
5 monitoring the pump. There will be -- there will be a
6 staff gauge installed near the bridge, a button and
7 switches close to the -- the intake location. They'll
8 monitor the -- the flow gauge and relate that to the
9 flow curve that's created through the hydrological
10 assessment, and through that, we will know what the
11 instantaneous flow in the river is at any particular
12 time. The indication is that we would probably be
13 doing that once a day. If during periods of rapid
14 decline in the river, that needs to be done more than
15 once a day, well, that's an option we're certainly
16 willing to look at, I think.

17 But, no, there's not going to be some computerized
18 day log or anything like that. So it's simply going to
19 be somebody from the staff reading from the staff gauge
20 and relating that to the flow curve.

21 Could you go to your next one there? Monitor
22 flows and cease pumping if the 10 percent withdrawal is
23 exceeded. That's worded a little bit differently,
24 because, actually, pumping would never exceed 10
25 percent. So -- so that's what the -- the in-stream low
26 flow cutoff is for. So if -- we would never exceed 10

1 percent. But if the depth and the river reaches what
2 we've suggested as a -- as a minimum depth of 0.5
3 metres, then we would simply stop pumping. So we would
4 never exceed the 10 percent withdrawal. As for where
5 that 0.5 is, what we were -- we put forward the 0.5
6 as -- on the basis of some very preliminary research on
7 water needs of Arctic char, and what we found was, is
8 that they would need -- for juvenile rearing would
9 probably be the critical period, and that, for that
10 stage of life for Arctic char -- and we chose Arctic
11 char as a -- as a large-bodied fish on the assumption
12 that it would -- if Arctic -- it was acceptable for
13 char, it would be acceptable for a smaller-bodied fish.
14 And so juvenile rearing for Arctic char favours a 0.1
15 to a 1 metre depth. So that's why we selected a 0.5 as
16 something that would ensure that there was juvenile
17 rearing depth available. The spawning period for
18 Arctic char is around this time of the year, and right
19 now there is little to no flow in the river whatsoever,
20 and so that's why we chose juvenile rearing as the life
21 stage at which we would determine the 0.5 metres.

22 And so the idea there was that the 0.5 was based
23 on a very preliminary review based -- after we saw the
24 AANDC recommendations where they were wanting us to
25 have an in-stream flow cutoff. We are going to --
26 intending to do this fall a more detailed literature

1 search and review of the scientific literature and come
2 up with something. And if the 0.5 metres needs to be
3 adjusted up or down based on that research, that's what
4 will be done, and we'll provide that research to the
5 Board.

6 Now, the 0.5, where it would be measured would be
7 at the -- as I said this morning, at the -- sorry, the
8 widest and shallowest point at the river. So the depth
9 at the actual intake location is not where the 0.5
10 metre would be selected. So if the 0.5 metres is, I
11 don't know, 500 meters down from the intake location,
12 well, that would be related back to the depth at the --
13 the intake. Part of that is that the intake pump is
14 actually located in a scour hole. And so the actual
15 depth of the intake is never going to get down to 0.5
16 metres. You have to -- the river would be dry before
17 the -- the intake hole was down to 0.5. So that
18 obviously couldn't be the shutoff point. So that's why
19 we're suggesting the widest, shallowest place in the
20 river as the 0.5 metre minimum depth.

21 Could you flip to your next one there, please?
22 No, the other way. Right there.

23 The design approach velocity right now. We don't
24 have that. I mean, we do have the screens size, that
25 was 2.45 metres. I don't think there's been any
26 calculation that I've seen of a design approach

1 velocity. That's something we can look at. As I said,
2 the intake -- the screen is located in a scour hole, so
3 I would assume the -- that would slow the water down,
4 but that's something we can certainly look at.

5 If you can flip to your next one. Okay. No, and
6 11. Okay. And 12. Okay. Yeah, I mean, and -- and
7 that one there, we agree. Flow in the Char River may
8 only be available during this freshet. There's no
9 disagreement there. We recognize the need to do the
10 hydrological assessment to determine what is the
11 pumping window and how wide it is. Right now we don't
12 know what it is.

13 In the short term, we think it is enough to start
14 transferring water to at least maintain the level in
15 Nipissar Lake, probably not to bring it up. The
16 43 to -- the 43 to 79 days, remember, that is a
17 projection for 2030. That's not 2014. There's some
18 wildly varying estimates on what the water needs might
19 be in 2030. We used the population growth rates with a
20 3 percent in Rankin Inlet from now until 2030 to come
21 up with an estimated population of about 4,700 people
22 in 2030. The Nunavut Bureau Stats has the forecast
23 population Rankin Inlet in 2030 of around 3,800. So, I
24 mean, there -- there's a swing of about 1,000 people
25 there based on our growth estimates in the Nunavut
26 Bureau of Stats. So, I mean, the actual need in 2030

1 could be much less than what we projected with our 79
2 day, and maybe 43 days is better. But, I mean, we
3 don't know that right now.

4 We also don't know what the actual litres of
5 consumption per day per person is going to be in 2030.
6 We're using a number of 344. I mean, that's certainly
7 the target to try and improve the water usage within
8 Rankin Inlet. CGS is taking steps to do that. So I
9 mean, keep in mind when you're looking at this that,
10 for 2014, the window that was needed to try and
11 maintain Nipissar is much shorter than what is shown up
12 there.

13 And could you bring us up to your next one? And
14 your next one, please? Okay. No, that's -- that's all
15 the only response I can give you right now. I mean, as
16 I said, I'll have one of our senior fish bios have a
17 look at this, and we'll -- oh, the 30 percent -- sorry.
18 Could you go to your slide where you talk about the 30
19 percent annual recharge? Yeah. There.

20 Again, right now, we don't have the data. Simply
21 we do not know what the hydrological regime is in Char
22 River. We went with a 0.5 metres. We thought that
23 would be protective of a key life stage for the Arctic
24 char right now. I mean, that's what we can do right
25 now. We don't know what the 30 percent of the mean
26 annual discharge for the river is. That's the reason

1 why we're doing the hydrological study next year, and
2 when we get that data, then we could report back to you
3 on that, but we simply don't have that right now. And
4 that's about it for me.

5 THE CHAIR: Thank you.

6 Questions from AANDC to DFO?

7 MS. COSTELLO: Thank you, Mr. Chair. Karen
8 Costello for Aboriginal Affairs. We have no questions
9 at this time. Thank you.

10 THE CHAIR: Thank you. Any other
11 questions from the floor to DFO?

12 JUSTIN MERRITT: Good afternoon. Justin
13 Merritt, hamlet of Rankin Inlet. I'm just wondering if
14 DFO has any numbers or any studies of the fish habitat
15 in Char River; is it used for fish run up to Landing
16 Lake or any -- do you have any figures on that? Thank
17 you.

18 THE CHAIR: Thank you.

19 DFO?

20 MS. DAHL: Julie Dahl, DFO. No,
21 unfortunately, we do not have any figures for the
22 habitat in the Char River.

23 THE CHAIR: Thank you.

24 JUSTIN MERRITT: Thank you, Justin Merritt
25 again with the Hamlet. I know, like, maybe 35, 40
26 years ago there was some char -- or some trout that ran

1 up that river, but in the last 20 years, I've never --
2 I thought that most of the fish in Landing Lake were
3 landlocked now. So I'm just wondering what the impact
4 of -- how we can determine the impact of water flow on
5 fish if we don't know what's studied in the river.
6 Thank you very much.

7 THE CHAIR: Thank you.

8 DFO?

9 MS. DAHL: Julie Dahl, DFO. We do have
10 some information on the species of fish that have been
11 captured in the Char River. One of the species that's
12 probably of more concern because of the proposed spring
13 withdrawal be the Arctic grayling because they do spawn
14 in the spring, and their spawning is closely linked to
15 the timing of that spring peak and how long the spring
16 peak is and how big the spring peak is. And so Arctic
17 grayling would be a good indicator species for whether
18 or not withdrawal from the river is going to be
19 problematic to the fish that are present.

20 THE CHAIR: Thank you.

21 Any further questions from the floor? Applicant?

22 MR. ACORN: Joe Acorn. Just to follow up
23 on that, then. I mean, if maintaining -- just to be
24 clear, then, maintaining of the 10 percent withdrawal
25 limit would be protective, in your view, of the Arctic
26 grayling?

1 MS. DAHL: Julie Dahl, DFO. If you stay
2 within the 10 percent withdrawal limit, our science
3 group that developed the ecological framework has
4 indicated that, at a 10 percent withdrawal -- below a
5 10 percent withdrawal, you're unlikely to have
6 detectible changes in the -- in the habitat in the
7 river.

8 We've used the 10 percent figure for a number of
9 years in our -- you're probably familiar with the --
10 the water withdrawal protocol that we had that was
11 subject to a rigorous science review, and they have
12 supported that a 10 percent withdrawal of the
13 instantaneous flow is unlikely to have detectible --
14 detectible impacts. And that's why earlier we had said
15 that, with the implementation of that as a mitigation
16 measure, that probably will mean that there's no
17 detectible change. It's -- it's more of a matter of
18 how much water can you reasonably withdraw when you
19 only can take 10 percent and the flows are dropping
20 rapidly?

21 THE CHAIR: Thank you. Any questions from
22 staff? Sorry. Go ahead.

23 MR. KHARATYAN: No, Mr. Chair.

24 THERESIE TUNGILIK: Theresie Tungilik, Counsellor
25 for Rankin Inlet. I'm wondering if you have taken into
26 consideration when nature takes over. Like, three --

1 two or three years ago, we had very dry winter where we
2 hardly had any snow, and then in the month of March, we
3 had, for three days, our -- 70 percent of our annual
4 snowfall come down. And that kind of winter has an
5 effect on the lakes because when there is hardly any
6 snow on the ice, the -- if there's hardly any snow on
7 the ice, the ice tends to be frozen deeper, and
8 sometimes it does kill the fish.

9 What happens at a point when, you know, something
10 like that happens again and -- like, if -- if we
11 consider what Al Gore has predicted, yes, every year
12 our northern waters are drying up more while there are
13 more floods down south, so those two will have an
14 effect too.

15 THE CHAIR: Thank you.

16 DFO?

17 MS. DAHL: Julie Dahl, DFO. Thank you
18 for that comment, and that is very important to keep in
19 mind, is that the weather patterns are quite variable.
20 And if you've had an extreme, dry year, that will
21 affect the availability of water. And this highlights
22 why it is important to ensure that other water sources
23 are identified and that you don't rely on just one
24 water source that -- that may not be available in a
25 really dry year. And that's why the -- the assessment
26 of alternatives is important.

1 THE CHAIR: Thank you.

2 Any questions from staff?

3 MR. KHARATYAN: No questions. Karmén

4 Kharatyan.

5 THE CHAIR: Thank you.

6 Questions from members? Thank you.

7 MR. ACORN: Mr. Chair, can I respond to
8 that last comment? Joe Acorn. Just one point just
9 related to your last comment there. I just want to
10 make clear -- and we did write this in the written
11 submission -- is that if we did have a really dry year
12 and water levels in the Char River were very low, then
13 we wouldn't pump. I mean -- but what's important for
14 people to be clear of is that that doesn't create any
15 type of emergent situation in Rankin Inlet because Char
16 River is not the water supply for Rankin Inlet;
17 Nipissar Lake is.

18 So if there's a very dry year comes along and we
19 can't make that water transfer, then we won't make it.
20 I mean, it does mean that Nipissar Lake will continue
21 to decline, but it doesn't create a situation in Rankin
22 Inlet where there's a loss of water supply. Obviously
23 if there's a number of years in a row, then that does
24 create more of a concern. And in that type of
25 situation wherein the long term Char River is not going
26 to be sufficient, then CGS is going to evaluate those

1 alternative supplies. But if there is an -- as there
2 was this year -- I think certainly around
3 Yellowknife -- if there is around here a very dry year
4 and we can't pump, then we won't pump. That's --
5 that's not a question. There's not going to be a
6 debate about that.

7 MR. BOYER: Mr. Chair, Craig Boyer. I
8 understood that the applicant would like to have an
9 opportunity to have a fish habitat biologist respond to
10 the comments from DFO, and if I could ask the Board to
11 see about what timelines the applicant is looking at
12 because what he is, in effect, asking for is to keep
13 the record open after the hearing finishes, and we need
14 to be clear on timelines and deadlines and if there's
15 any further response by any of the other parties.
16 Thank you.

17 THE CHAIR: Thank you.

18 On that note, we will take a ten-minute break and
19 resume in ten minutes.

20 (ADJOURNMENT)

21 THE CHAIR: Welcome back, everyone. We
22 understand there's more questions from the floor?

23 ROSIE OOLOOYUK: I just had a questions (sic)
24 to -- well, I had a concern over the -- it's called
25 nowadays it's Nipissar Lake. We've been using it quite
26 a -- quite a few years. My concern is, down the road,

1 I know that Rankin will be booming in the future to do
2 with the mining as well, and Nipissar Lake, it's right
3 in the middle of the town and Char River that I saw a
4 few minutes ago. For now and for down 10 to 15 years,
5 probably for me it's the way we just saw it with our
6 own eyes, probably same. But down the road, I'm
7 just -- I just had a concern. And when it start to
8 pump from Char River, and as well, Char River had a lot
9 of fish that we always enjoying in springtime. And
10 around area of that as well that I could see not too
11 far from me there's a park. So all those pictures that
12 I'm -- have been seeing, when I'm growing up too as
13 well, these are a few other things that are my concern.

14 But just one thing for now, that is Nipissar Lake.
15 I know the road that we using, it's only the road that
16 we are using right now and unbelievable when there's
17 dust. My grandmother wouldn't been able -- never will
18 have the water from there. But now since today, we're
19 using the pump, and I know that it's different. But in
20 the other side right on the left -- or on the right,
21 there's also airstrip. When -- when I was growing up,
22 I only used to see once in a while just a single plane,
23 but now today it's more getting different again because
24 of growing in Rankin.

25 The main thing my concern is Nipissar Lake. I
26 have never seen in years that got so dry. That's a big

1 issue, a big issue and concern to me. Char Lake --
2 Char River, is -- there's another Second Landing Lake
3 that we call today also had a creek going down to Char
4 River, and there are some fish there as everyone else
5 know that 'cause we are enjoying it in springtime. And
6 also, usually there's some plane, singles or whatever,
7 always landed there. And that's one of my concern as
8 well. I don't know how often or how many times a year
9 that water get checked.

10 So these are one, two, three. That I brought it
11 up for as well for my concern. Is that clear, or did
12 I -- did I interpret it for it (sic) or what's -- is it
13 okay? Thank you.

14 THE CHAIR: (OTHER LANGUAGE SPOKEN)

15 ROSE OOLOOYUK: Rose Oolooyuk. Thank you.

16 THE CHAIR: Any other questions from the
17 floor? AANDC?

18 MS. COSTELLO: Thank you, Mr. Chair. Karen
19 Costello for Aboriginal Affairs. If I understood the
20 member of the public who just asked a question, I
21 understood a question to be as: How often is the water
22 monitored at the source, and you're asking about
23 Landing Lake? You were asking how -- if that is
24 monitored.

25 ROSIE OOLOOYUK: Landing Lake, yeah.

26 MS. COSTELLO: Aboriginal -- Aboriginal

1 Affairs has a responsibility to monitor the water
2 quality at -- at the source. So we do this -- that's
3 part of our regular monitoring. So if there's any
4 monitoring that is required of any source water, that
5 is something that -- that we would do. We don't look
6 at the quantity, but we'll -- we'll -- we'll monitor
7 the -- the quality to make sure that there's nothing
8 deleterious in it. Thank you.

9 THE CHAIR: Thank you.

10 Any other questions from the floor?

11 PETER IPKORNERK: Yeah. Peter Ipkornerk, Rankin
12 Inlet resident. The Nipissar Lake that we use for our
13 water, like we have said before, it has -- the water
14 has gone down. It looks like it's an emergency now
15 because every year the water seems to be going -- going
16 lower. Like, I believe this -- this year, I'm pretty
17 sure it's going to go a lot lower than this past year.
18 The -- from Char River, that one that was -- the pipe
19 that was put -- I don't like how it is set up because
20 it's just on the ground, and it's not covered; it's
21 just on top of the land. Like, you can see the pipe
22 right there. And -- and that lake is very small. I'm
23 pretty sure the water will be gone just like that
24 because of the population growing too in Rankin and
25 2,355 is the population now. I'm pretty sure we will
26 go over 3,000 next year, the population. And the

1 houses, there are more houses being built that will
2 need a Utilidor installed, and I'm pretty sure there
3 will be a lot more growth in our population.

4 Like I said this morning, coming from Meliadene,
5 if you can get pipe from Meliadene from up there to
6 here, I think it would be a lot better building a pipe
7 from because the population of Rankin Inlet is growing.
8 And every year there's the ice breaking right away, and
9 the water is less and less, and every year there is
10 less water because there is -- if there's hardly any
11 snow this year, I'm pretty sure there's going to be
12 less water.

13 Like the people from the south say, we are -- the
14 climate is changing, and the weather is getting warmer.
15 I never used to believe that on the climate change, and
16 now I see it's a reality. And sometimes the summer
17 comes earlier, and sometimes 35, 40 percent, it's like
18 that. Like, these are some concerns that he (sic) --
19 he (sic) has, and whether it's the -- the river's flow
20 anywhere, there is dryness too. Like, every year we
21 see dryness, even from the rivers flowing. There's no
22 water in these.

23 Thank you for giving me the time to speak and have
24 yourself a good day. Thank you.

25 THE CHAIR: Thank you. Any other
26 questions from the floor?

1 Looks like there's none forthcoming. We will
2 adjourn for the day and be back here for the community
3 session tonight at 7. We'll see you at 7 tonight.

4 Thank you.

5 MR. BOYER: Mr. Chair, Craig Boyer.
6 There's one issue that I think we should clarify, and
7 that was the comment by the applicant to be able to
8 respond to the comments by DFO, and if there's a time
9 and date by which the applicants could respond so that
10 we can then formally close the record of the hearing.
11 So I would suggest that that be addressed before we
12 close today. Thank you.

13 THE CHAIR: Okay.

14 MR. CÔTÉ: Mr. Chair, Damien Côté. I
15 guess they put that in the form of a question, as you
16 heard from Craig and the Chair. We'd look for some
17 clarification from the applicant with respect to when
18 you would see yourself able to respond to the
19 presentation from DFO. Thank you.

20 MR. ACORN: Joe Acorn. I'll have to see
21 the schedule that my two fish biologists who have been
22 familiar with this file, but certainly by the end of
23 next week would be fine, and if we can get it in
24 earlier than that, we certainly will try to do so.

25 MR. CÔTÉ: Thank you.

26 MR. BOYER: Mr. Chair, Craig Boyer.

1 Just for clarity, are you saying by the end of
2 business on October 3rd that you would be responding.

3 MR. ACORN: If October 3rd is next Friday,
4 yes.

5 MR. BOYER: Yes.

6 MR. ACORN: Okay. All right. Thanks.

7 MR. BOYER: All right. So October 3rd, if
8 the Board is accepting in that date.

9 THE CHAIR: October 4, Mountain, Central,
10 Eastern?

11 MR. BOYER: October 3rd, and it's up to
12 you what time you feel is appropriate.

13 THE CHAIR: Central. I think there are
14 people on the floor who would suggest 5 Eastern would
15 be great.

16 On that note, any other -- on your plate, Craig?

17 MR. BOYER: Mr. Chair, Craig Boyer. Yes,
18 4 PM on October 3rd is going to be the deadline for the
19 response by the applicant to the DFO comments.

20 And the only other matter I'd have is just a
21 confirmation that the panel would have all of the
22 materials that have been presented today by the various
23 parties and interveners entered as exhibits in these
24 proceedings.

25 THE CHAIR: Go ahead.

26 MR. BOYER: Mr. Chair, just if the panel

1 would direct that, then I can keep note of it, that
2 the -- all the things that have been put before the
3 Board today are, in fact, exhibits in these
4 proceedings. Is that yes, that these will be exhibits
5 in these proceedings? Mr. Chair, yes?

6 THE CHAIR: Yes.

7 MR. BOYER: Thank you. And there may be a
8 proceeding this evening where there be materials
9 presented by the Water Board, and so there may be
10 additional exhibits that would need to be entered, but
11 we can deal with that tonight. Thank you.

12 THE CHAIR: Thank you. Anything else?

13 So we'll see you back here at 7 tonight for the
14 community session.

15 (PROCEEDINGS ADJOURNED AT 2:18 PM)

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1 CERTIFICATE OF TRANSCRIPT:

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3 I, Christy Longacre, certify that the foregoing
4 pages are a complete and accurate transcript of the
5 proceedings, taken down by me in shorthand and
6 transcribed from my shorthand notes to the best of my
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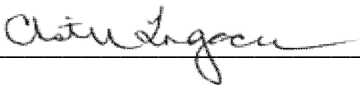
8 Dated at the City of Calgary, Province of Alberta,
9 this 30th day of September, 2014.

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Christy Longacre, CSR(A)

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Official Court Reporter

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