

NUNAVUT WATER BOARD

Whale Tail Pit Project Type "A" Water Licence
Application No. 2AM-WTP--- and Consequential Amendments
to Water Licence 2AM-MEA1525

PUBLIC HEARING/COMMUNITY SESSION

VOLUME 1

Baker Lake, Nunavut

September 26, 2017

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September 26, 2017	
NUNAVUT WATER BOARD	
L. Toomasie	Chair of Hearing
R. Mrazek	Panel Member
A. Ningark	Panel Member
NUNAVUT WATER BOARD STAFF	
S. Autut	Executive Director
R. Dwyer	Licencing Administrator
D. Hohnstein	Director of Technical Services

1	K. Kharatyan	Acting Manager of Licensing,
2		Senior Technical Advisor
3	B. Kogvik	Director of Board Administration
4		and Communication
5	T. Meadows	Legal Counsel
6		
7	NUNAVUT IMPACT REVIEW BOARD STAFF	
8	S. Granchinho	Manager of Impact Assessment
9		
10	AGNICO EAGLE MINES LIMITED/APPLICANT	
11	M. Groleau	Geotechnical Coordinator
12	J. Quesnel	Environmental Superintendent
13	C. Ramcharan	Community Coordinator
14	R. Vanengen	Whale Tail Project Lead
15	E. Voyer	General Supervisor, Environment
16	V. Bertrand	Consultant (Golder Associates)
17	M. Julien	Consultant (Golder Associates)
18	C. Prather	Consultant (Golder Associates)
19	C. Kowbel	Legal Counsel
20		
21	INTERVENORS	
22		
23	DEPARTMENT OF JUSTICE	
24	S. Gruda-Dolbec	Legal Counsel
25		
26	ENVIRONMENT AND CLIMATE CHANGE CANADA	

1	T. Auser	Water Quality Expert
2	M. Pinto	Senior Environmental
3		Assessment Coordinator
4		
5	FISHERIES AND OCEANS CANADA	
6	M. D'Aguiar	Senior Fisheries Protection
7		Biologist
8	L. Watkinson	Fisheries Protection Biologist
9		
10	INDIGENOUS AND NORTHERN AFFAIRS CANADA	
11	A. Belanger	Water Policy Analyst
12	K. Costello	Director of Resource Management
13	I. Parsons	Regional Coordinator,
14		Project Lead
15	T. Brown	Consultant (Arcadis)
16		
17	KIVALLIQ INUIT ASSOCIATION	
18	J. Hart	IIBA Coordinator/Lands Inspector
19	L. Manzo	Director of Lands
20	J. Tulugak	Land Use Inspector
21	A. Sexton	Consultant (Geology and Mining
22		Development)
23		
24	INTERPRETERS/TRANSLATORS	
25	A. Alooq	Inuktitut Language Translator
26	B. Kogvik	Inuktitut Language Translator

1

2 E. Royal, CSR(A) Official Court Reporter

3

4 W. Nicoll Sound Technician

5

6 (PROCEEDINGS COMMENCED AT 9:11 AM)

7 THE CHAIR TOOMASIE: Good morning, everyone. The
8 public hearing shall start now.

9 My name is Lottie Toomasie. I'm the Chair of the
10 Nunavut Water Board, and I'll be chairing this Panel,
11 Water Board Panel, conducting this public hearing.

12 On behalf of the Nunavut Water Board, I would like
13 to welcome everyone to this public hearing in respect
14 of applications submitted by Agnico Eagle Mines Limited
15 for a new Type A water licence seeking authorization
16 for the use of water and deposit of waste associated
17 with the mining undertaken at the Whale Tail Pit and
18 application for potential consequential amendments to
19 an existing water licence, 2AM-MEA1525, issued for
20 Meadowbank Gold Mine. These applications are in
21 relation to Agnico Eagle Mines Limited's proposal to
22 construct a gold mine at the Whale Tail Pit and to use
23 existing gold processing infrastructure at the
24 Meadowbank Gold Mine to process the ore from the Whale
25 Tail Pit.

26 Before we proceed any further with the hearing, we

1 would like to begin with an opening prayer. Please
2 stand for opening prayer.

3 (OPENING PRAYER)

4 Opening Remarks by the Chair

5 THE CHAIR: On behalf of the Nunavut Water
6 Board, I welcome you to the community of Baker Lake.

7 Now to provide some background and set the stage
8 for the hearing, the Nunavut Water Board, which I shall
9 refer to as "the Board" or "the NWB", is an institution
10 of public government created under Article 13 of the
11 Nunavut Agreement. The NWB is responsible for the use,
12 management, and regulation of freshwater in the Nunavut
13 settlement area.

14 The purpose of this public hearing is to review
15 the applications filed by Agnico Eagle Mines Limited --
16 I may refer to as "Agnico Eagle" or "applicant" -- a
17 new Type A water licence to authorize the new water
18 uses and waste deposits associated with proposed gold
19 mining at the Whale Tail Pit as well as an application
20 for amendments to the existing Type A water licence to
21 reflect changes at the Meadowbank mine site required to
22 process the additional ore from the Whale Tail Pit.
23 These proceedings are being conducted in accordance
24 with the Nunavut Water -- Nunavut Agreement -- sorry --
25 the Nunavut Agreement and the NWB's legislation, the
26 Nunavut Waters and Nunavut Surface Rights Tribunal Act.

1 As set out in Article 13, Section 13.3.6 of the
2 Nunavut Agreement and Section 29 of the Nunavut Waters
3 and Nunavut Surface Rights Tribunal Act, the Board has
4 delegated its power to dispose of all matters related
5 to the processing of the application for the new Type A
6 Licence Number 2AM-WTP and then blank -- will be the
7 new number once it's passed -- and potential
8 consequential amendments to the existing 2AM-MEA1525
9 licence, including the conduct of this public hearing,
10 to this three-person Panel of the Board, which is
11 referred to as the Panel 17 -- "P17 --" sorry "-- Whale
12 Tail Pit Panel".

13 For those of you who were in attendance at last
14 week's final hearing conducted by the Nunavut Impact
15 Review Board, you may be wondering why the Nunavut
16 Water Board is conducting our public hearing so soon
17 after the Impact Review Board final hearing concluded
18 and before the NIRB has issued their recommendations
19 about whether or not the Whale Tail Project Proposal
20 should be allowed to proceed. This public hearing is
21 being conducted at this time as part of the coordinated
22 review of the project proposal by the Nunavut Impact
23 Review Board and consideration of water licencing
24 requirements by the Nunavut Water Board. The
25 coordinated process means that the Nunavut Water Board
26 will conduct its public hearing over the next two days

1 but that the Nunavut Water Board's public hearing
2 record will not be closed and the file will not be
3 remitted to the Panel for decision-making until after
4 the Nunavut Impact Review Board has issued their report
5 and recommendations about whether the Whale Tail Pit
6 Project Proposal can be allowed to proceed to the
7 Minister of Indigenous and Northern Affairs Canada and
8 the Minister has made her decision to accept or reject
9 NIRB's recommendation.

10 If the Nunavut Impact Review Board recommends and
11 the Minister accepts that the project be allowed to
12 proceed, the Nunavut Water Board would then give all
13 parties one final opportunity to provide written
14 comments and updated information about the water
15 licence applications. Once the NWB has received all
16 information and closes the public hearing record, the
17 Board would remit the file to the Panel for
18 decision-making.

19 However, if the Nunavut Impact Review Board
20 recommends and the Minister accepts that the project
21 should not be allowed to proceed, then the Nunavut
22 Water Board will not consider the applications further
23 and the Panel would not issue a decision in respect of
24 the applications.

25 I will be chairing this Panel. And with me today,
26 as members of the Panel, are the Board members: Ross

1 Mrazek on my right; on my left is Alex Ningark.

2 Several staff members who have contributed to the
3 NWB's administration and technical review of the
4 application are present along with legal counsel to the
5 NWB, and I will introduce the individuals in
6 attendance: Stephanie Autut, executive director; David
7 Hohnstein, director of technical services; Ben Kogvik,
8 director of Board administration and communication;
9 Karen Kharatyan -- I really had a hard time pronouncing
10 this name. Sorry about that -- acting manager of
11 licencing, senior technical advisor; Richard Dwyer,
12 licencing administrator -- he's at the back, by the
13 door -- and Teresa Meadows, legal counsel to the Board.

14 We also have with us Sophia Granchinho, manager of
15 impact assessment with the Nunavut Impact Review Board.
16 Sophia is joining us today as part of a coordinated
17 review of the project proposal by the Nunavut Impact
18 Review Board and consideration of water licencing
19 requirements by the Nunavut Water Board.

20 In addition, we have two interpreters available
21 for simultaneous interpretation: Ben Kogvik, in-house
22 interpreter to the Board; and Alexander Alooq, who is
23 from Baker Lake.

24 For audio support, William Nicoll from the Nunavut
25 Impact Review Board is helping us out with the NIRB
26 audio system. If you experience any difficulties with

1 your headsets, William is able to assist you.

2 To ensure an accurate record of the proceeding is
3 kept, we have with us a court reporter, Elizabeth Royal
4 from Dicta Court Reporting Inc. To assist our court
5 reporter and our interpreters, we ask that all parties
6 please state their names prior to speaking, speak
7 clearly and at a reasonable pace, and avoid the use of
8 abbreviations.

9 In the past, parties in other proceedings have
10 approached the media prior to the release of the
11 Board's decision, suggesting comments about what the
12 Board is doing -- going to do either procedurally or in
13 terms of final results. Since the Board cannot comment
14 on pending matters, either by confirming or denying
15 accuracy of statements by others to the media, the
16 Board would appreciate if all parties refrain from any
17 such comments that may imply a certain action or
18 decision by the Board. Board members will not discuss
19 the hearing or the matters before the Board with any of
20 the parties or the media.

21 If you have questions regarding the Board and its
22 practices or procedures, please speak with the
23 executive director; she will assist you.

24 Prior to identifying and introducing all of the
25 parties in attendance today, I will provide a brief
26 history of the applications that are before the Board.

1 In terms of pre-licencing requirements, on
2 June 17, 2016, the NWB received correspondence from the
3 Nunavut Impact -- sorry -- Nunavut Planning Commission
4 that, subject to the project complying with the
5 conformity requirements set out in the plan, the
6 project proposal conforms to the Keewatin Regional
7 Land Use Plan. The project proposal was then forwarded
8 to the Nunavut Impact Review Board, NIRB, for
9 screening.

10 On July 21, 2016, the Nunavut Impact Review Board
11 provided its determination that the proposed Whale Tail
12 Pit Proposal has not been assessed as part of the
13 original Meadowbank gold project and, due to its
14 location outside of the original Meadowbank project
15 footprints, would require a separate screening
16 assessment under the Nunavut Planning and Project
17 Assessment Act, NuPPAA. On August 18, 2016, NIRB
18 issued a screening decision report indicating that the
19 proposal -- proposed project required a review under
20 Article 12, Part 5 or Part 6 of the Nunavut Agreement
21 and Part 3 of the NuPPAA.

22 As I mentioned earlier, last week on September 19
23 to 22, the NIRB conducted its final hearing in respect
24 of its review of the Whale Tail Pit Project Proposal
25 and is expected to issue the NIRB's final hearing
26 report and recommendations within 45 days from the

1 close of the hearing on September 22.

2 I am going to move on to the application that is
3 before the Board. As mentioned earlier, the
4 applications that are currently before the Board are
5 for a new Type A water licence, Number 2AM-WTP -- and
6 the number will come out after that -- requested by
7 Agnico Eagle Mines Limited for the proposed Whale Tail
8 Pit Project as well as some potential amendments to the
9 existing Type A water licence, Number 2AM-MEA1525.

10 The scope of the application for the new water
11 licence is generally as follows: a new eight-year water
12 licence for the development of Whale Tail Pit,
13 including development and operation of one open pit and
14 the following related facilities and infrastructure at
15 Whale Tail Pit site: a personnel camp -- it's actually
16 a main camp -- with accommodation buildings and
17 maintenance and storage areas and helipad; crusher,
18 power plant, explosive magazines; waste rock and
19 overburden storage facility; ore stockpiling facility;
20 haul roads and access roads; quarries and borrow pits;
21 fuel storage facility, 0.5 million litre; landfill;
22 water collection and treatment system, including
23 potable water and sewage treatment plants; water
24 management infrastructure, et cetera -- attenuation
25 pond, water collection pond, water retention dikes and
26 dams, water diversion channels, water passage culverts;

1 expansion of the existing 64.1-kilometre Amaruq
2 exploration access road (Water Licence 8BC-AEA1525 --
3 sorry -- it's -- I'll repeat: 8BC-AEA1525) to a haul
4 road from 6.5 metres wide to 9.5 metres wide to
5 accommodate increased traffic rates and haul trucks.

6 The following key documents pertaining to the
7 Type A Water Licence Application Number 2AM-WTP--- were
8 included within the Environmental Impact Statement
9 Number 2, environmental overview and Type A water
10 licence, submitted to the Nunavut Water Board on
11 June 30, 2016: cover letter; Appendix 2-C, regulatory
12 history; Appendix 2-H, completed application form for
13 water licence amendment; Appendix 2-I, Nunavut Water
14 Board conformity; Appendix 2-J, project design
15 considerations; Appendix 2-K, record of compliance to
16 the Water Board [sic]; and \$30 application fee.

17 The Environmental Impact Statement Volume 8,
18 monitoring, mitigation, and management plans, also
19 included numerous updated Meadowbank environmental
20 management plans with addenda to reflect the addition
21 of the Whale Tail Pit as well as some standalone plans
22 specifically for the Whale Tail Pit site.

23 Between December 7, 2016, and January 27, 2017,
24 Agnico Eagle Mines Limited added to the application
25 materials provided to the Board by filing several
26 updated plans, technical memoranda, and additional

1 information requested by intervenors during their
2 technical review of the applications. On April 7,
3 2017, Agnico Eagle Mines Limited also filed the Whale
4 Tail Pit final technical comment responses with the
5 Board.

6 From May through July 2017, Agnico Eagle Mines
7 Limited filed a number of additional documents with the
8 Board in fulfillment of their commitments provided to
9 various intervenors at the joint NIRB/NWB technical
10 meeting and prehearing conference on April 29 -- 28 --
11 sorry -- April 28 to May 1 and 2, 2017, including a
12 water licence application -- I think this April 28-19 --
13 I think there's an error here. I think it's supposed
14 to be read April 18 and 19 and May 1 to 2. Correct me,
15 staff.

16 MR. HOHNSTEIN: Thank you, Mr. Chair. David
17 Hohnstein.

18 Yeah, the dates there should be April 28th to 29th
19 instead of 19th.

20 THE CHAIR: Thank you.

21 A water licence application for a new water
22 licence filed on May 25, 2017; and an application for
23 water licence amendment, also filed on May 25, 2017.

24 Copies of all submissions received in support of
25 these applications as well as documents related to the
26 file are available on the NWB's public registry and FTP

1 site.

2 In addition, our licencing administrator, Richard
3 Dwyer, can make available for public review at this
4 hearing electronic copies and paper copies of some of
5 the key documents for the applications received to
6 date. If you are interested in reviewing any of the
7 documentation, ask Richard.

8 Now I am going to provide you with a brief
9 overview of the procedural history for the application
10 that is being -- before the Board, which captures only
11 the major procedural steps:

12 July 8, 2016, NWB received an
13 application from Agnico Eagle for amendments
14 to Type A water licence for the Meadowbank's
15 mine to include development of the Whale Tail
16 Pit.

17 August 18, 2016, NWB received NIRB's
18 determination that a separate
19 assessment/review of the Whale Tail Pit
20 Project should be conducted under the terms
21 of Nunavut Agreement and Nunavut Planning and
22 Project Assessment Act, NuPPAA.

23 October 3, 2016, NWB publicly
24 distributed the application for a
25 completeness check and initial technical
26 assessment. NWB requested Agnico Eagle

1 confirm that the application could be
2 considered by NWB as an application for a new
3 Type A water licence and consequential
4 amendments to the existing Type A water
5 licence.

6 October 15, 2016, Agnico Eagle confirmed
7 their acceptance of this approach.

8 November 3, 2016, NWB received comments
9 related to the completeness/initial technical
10 assessment of the application from
11 Environment and Climate Change Canada, ECCC;
12 Fisheries Canada -- Fisheries and Oceans
13 Canada -- sorry -- DFO; and Indigenous and
14 Northern Affairs Canada, INAC.

15 December 7, 2016, and January 26, 2017,
16 AEM provided responses to the comments
17 provided by intervenors in the context of
18 their completeness review.

19 January 27, 2017, NIRB and NWB jointly
20 distributed the Whale Tail Pit Project
21 Proposal and water licence application for
22 full technical review.

23 March 28, 2017, NWB received technical
24 review comments from DFO, ECCC, INAC, and
25 Kivalliq Inuit Association.

26 April 7, 2017, NWB received Agnico

1 Eagle's preliminary response to technical
2 review comments.

3 April 28-29, 2017, NIRB and NWB held a
4 joint technical meeting/prehearing conference
5 in Baker Lake.

6 June 8, 2017, NIRB and NWB jointly
7 released the TM/PHC decision. Subsequent
8 NIRB and NWB hearings were scheduled for the
9 weeks of September 18 and 25, 2017,
10 respectively.

11 June 8 to July 14, 2017, Agnico Eagle
12 provided submissions to fulfill the
13 commitments agreed to at the TM/PHC.

14 July 17, 2017, NWB issued notice of
15 public hearing.

16 August 14, 2017, NWB received final
17 submissions for this public hearing from DFO,
18 ECCC, INAC, and Kivalliq Inuit Association.

19 August 28, 2017, NWB received Agnico
20 Eagle's final submission for this public
21 hearing.

22 September 5, 2017, NWB received copies
23 of presentations to be relied on at this
24 public hearing and executive summaries from
25 DFO, ECCC, INAC, Kivalliq Inuit Association,
26 and Agnico Eagle.

1 September 8, 2017, NIRB [sic]
2 distributed a reminder of public hearing and
3 proposed agendas for this public hearing and
4 community session.

5 Complete details on all submissions received in
6 relation to the applications are available on the NWB's
7 FTP site.

8 I will now move on to a list of issues to be
9 addressed at this hearing as identified during the
10 technical meeting and prehearing conference:

- 11 • integration between existing licences and
12 the new licence
 - 13 ◦ scope of consequential amendments/
14 modifications to existing Water
15 Licence 2AM-MEA1525
 - 16 ◦ term of the licence
- 17 • water management
 - 18 ◦ scope of new Type A water licence
19 applicable to the mining undertaking
20 at Whale Tail Pit
 - 21 ◦ water balance for all withdrawal
22 sources (Nemo Lake)
- 23 • water use
 - 24 ◦ annual water use amounts from each
25 source, including changes to
26 allocations of existing licenced water

- 1 uses
- 2 • updated water quality predictions and
- 3 updates to water quality models
- 4 • water quality and flow monitoring
- 5 ◦ speciation of arsenic to monitoring
- 6 ◦ water quality modelling
- 7 ◦ adaptive management
- 8 • wastewater and effluent discharge criteria
- 9 • water treatment
- 10 ◦ water treatment methods selected for
- 11 the undertaking, et cetera, arsenic
- 12 and phosphorous -- if I didn't
- 13 pronounce it properly, I'm sorry.
- 14 • waste rocks and tailings management
- 15 ◦ design changes at the tailings storage
- 16 facility at Meadowbank site
- 17 ◦ waste rock non-potentially
- 18 acid-generating and potentially
- 19 acid-generating characterization
- 20 ◦ thermal modelling for waste rock
- 21 storage facility design
- 22 • mitigation measures
- 23 • management plans and reports
- 24 ◦ content of plans
- 25 ◦ updates to plans
- 26 ◦ approval of plans

- 1 • closure and reclamation planning
- 2 ◦ pit and Whale Tail Pit [sic] north
- 3 basin water quality
- 4 ◦ tailing impoundment area water
- 5 quality
- 6 ◦ tailing storage and waste rock storage
- 7 facility cover
- 8 ◦ updates to the interim closure and
- 9 reclamation plan
- 10 ◦ security cost estimate
- 11 • water user compensation
- 12 ◦ confirmation from Kivalliq Inuit
- 13 Association, KIA, and Agnico Eagle
- 14 that there are no outstanding issues
- 15 of water user compensation

16 If I have missed any written submissions of any
17 intervenor, please advise Stephanie Autut, the NWB
18 executive director, as soon as possible.

19 If there are no concerns, I would like to move
20 forward to a roll call. I will begin with the roll
21 call with the applicant, Agnico Eagle Mines Limited.

22 Roll Call

23 MR. QUESNEL: Thank you, Mr. Chair and the
24 Board.

25 My name is Jamie Quesnel. I'm with Agnico Eagle,
26 environmental superintendent for Agnico Eagle's Nunavut

1 projects and operations. To the far left, we have
2 Michel Julien, vice president of environment with
3 Agnico. To the right of Michel is Erika Voyer, general
4 supervisor, environment, with Agnico Eagle. To the
5 right of Erika is Candace Ramcharan, community
6 coordinator. Next to Candace is Ryan Vanengen, the
7 Whale Tail Project lead. To my right is our legal
8 counsel, Christine Kowbel. And behind me, Michel
9 Groleau, geotechnical coordinator for -- including
10 water and tailings. Beside Michel is Valerie Bertrand
11 with Golder, and beside Valerie is Colleen Prather with
12 Golder Associates.

13 Thank you.

14 THE CHAIR: Thank you.

15 I will now go to local associations and
16 representatives and intervening parties.

17 Kivalliq Inuit Association.

18 MR. MANZO: Thank you, Mr. Chairman.

19 Kivalliq Inuit Association -- my name is Luis
20 Manzo, Kivalliq Inuit Association. And with me is Alan
21 Sexton, our technical advisor; and two members of
22 staff, Jeff Hart and Jeff Tulugak, with us also -- KIA
23 member.

24 Thank you.

25 THE CHAIR: Thank you.

26 Fisheries and Oceans Canada.

1 MR. D'AGUIAR: Thank you, Mr. Chair.

2 Mark D'Aguiar with Fisheries and Oceans. I'm a
3 senior fisheries protection biologist. And with me is
4 my colleague Laura Watkinson, fisheries protection
5 biologist with Fisheries and Oceans Canada.

6 Thank you.

7 THE CHAIR: Thank you.

8 Environment and Climate Change Canada.

9 MS. PINTO: Thank you, Mr. Chair.

10 Melissa Pinto, Environment and Climate Change
11 Canada. I'm a senior environmental assessment
12 coordinator. And behind me is Trish Auser, our water
13 quality expert.

14 THE CHAIR: Thank you.

15 And then Indigenous and Northern Affairs Canada.

16 MS. COSTELLO: Good morning, Mr. Chair.

17 My name is Karen Costello. I'm the director of
18 resource management with the Nunavut regional office of
19 Indigenous and Northern Affairs Canada. I am joined by
20 some colleagues in the back, and I just ask that they
21 raise their hands as I introduce them.

22 Ian Parsons is the regional coordinator and
23 project lead for this licence application review.
24 Amanda Belanger, our water policy analyst from our
25 office in Gatineau. Indigenous and Northern Affairs
26 Canada is also supported by our technical consultant,

1 Tony Brown from Arcadis.

2 And the Government of Canada overall is supported
3 by Justice Canada, and I'd like him to introduce
4 himself at this time.

5 MR. GRUDA-DOLBEC: Good morning, Mr. Chair.

6 My name is Simon Gruda-Dolbec from the Department
7 of Justice.

8 THE CHAIR: Thank you.

9 If there are any intervenors not mentioned who
10 would like to speak, please identify yourself.

11 I don't see hands; so we'll continue on.

12 It is our tradition to give respect to our elders.
13 Therefore, at any time during the proceedings, an elder
14 may speak to the application that is before the Board.

15 Are there any members of the general public who
16 would like to identify themselves?

17 Are there any representatives from agencies,
18 associations, et cetera, who have not submitted
19 interventions but would like to speak?

20 Before proceeding with the hearing, I would like
21 to request that, if you haven't already done so, all
22 parties present register and sign in with the Richard
23 Dwyer, NWB's licencing administrator, at the side table
24 located at the entrance so the Board can -- so the
25 Board can have a complete record of everyone in
26 attendance.

1 I will now turn to the identification of any
2 motions or any objections to the application that is
3 before the Board.

4 Motions/Objections

5 THE CHAIR: Okay. I will now proceed with
6 Item 8 of the agenda, the presentation by the
7 applicant.

8 Maybe before we proceed with this, maybe a short
9 break first would be better. At least ten-minute
10 break.

11 Thank you.

12 (ADJOURNMENT)

13 THE CHAIR: Let's proceed from the break.

14 The applicant has requested to make a brief
15 presentation on the application before the Board.

16 Mr. Vanengen, how much time will you and your
17 presentation require?

18 MR. QUESNEL: Thank you, Mr. Chair. Jamie
19 Quesnel.

20 About 20 minutes for the first presentation.

21 THE CHAIR: Okay. So, Teresa, do you
22 swear or affirm?

23 MS. MEADOWS: Thank you, Mr. Chair. Teresa
24 Meadows, legal counsel for the Nunavut Impact Review
25 Board [sic].

26 Mr. Chair, it's my understanding that there are a

1 number of exhibits that we should be filing to commence
2 the hearing. And as well I will need to swear or
3 affirm the witnesses that are going to be speaking in
4 this first panel.

5 JAMIE QUESNEL, RYAN VANENGEN, CANDACE RAMCHARAN, ERIKA
6 VOYER, MICHEL GROLEAU, VALERIE BERTRAND, Affirmed

7 MS. MEADOWS: Thank you, Mr. Chair. Teresa
8 Meadows, legal counsel for the Nunavut Impact Review
9 Board. So, Mr. Chair, I have -- sorry. Nunavut Water
10 Board. First one. That was last week, so last week.

11 Mr. Chair, I have before me the presentation
12 materials, so hard copy PowerPoint presentation
13 materials, for the next seven presentations for Agnico
14 Eagle. So I will mark those as the first seven
15 exhibits in this public hearing.

16 EXHIBIT 1 - Agnico Eagle hard copy PowerPoint
17 presentation entitled "Part I - Introduction
18 and Overview" (English/Inuktitut)

19 EXHIBIT 2 - Agnico Eagle hard copy PowerPoint
20 presentation entitled "Part II - Public
21 Participation" (English/Inuktitut)

22 EXHIBIT 3 - Agnico Eagle hard copy PowerPoint
23 presentation entitled "Part 3 - Waste
24 Disposal and Management" (English/Inuktitut)

25 EXHIBIT 4 - Agnico Eagle hard copy PowerPoint
26 presentation entitled "Part 4 - Water Use and

1 Management" (English/Inuktitut)

2 EXHIBIT 5 - Agnico Eagle hard copy PowerPoint
3 presentation entitled "Part 5 - Abandonment,
4 Reclamation, Closure, and Security"
5 (English/Inuktitut)

6 EXHIBIT 6 - Agnico Eagle hard copy PowerPoint
7 presentation entitled "Part 6 - Accidents and
8 Malfunctions" (English/Inuktitut)

9 EXHIBIT 7 - Agnico Eagle hard copy PowerPoint
10 presentation entitled "Part 7 - Management
11 Plans and Monitoring Programs"
12 (English/Inuktitut)

13 MS. MEADOWS: But it is also my
14 understanding that there are three additional exhibits
15 that Agnico Eagle wishes to tender before they speak,
16 as they will be referring to these documents throughout
17 their presentation materials.

18 So, Ms. Kowbel, if I can have confirmation from
19 you. The first of these additional exhibits is a
20 letter dated May 25th, 2017; and the letter is
21 addressed to both the Nunavut Water Board and the
22 Nunavut Impact Review Board. And it is the -- entitled
23 "The NWB Consideration of Agnico Eagle Mines Limited
24 Whale Tail Pit Project Proposal and Revised Water
25 Licence Applications", and so it speaks to the
26 amendment to the existing water licence, 2AM-MEA1525,

1 and also the new licence, 2AM-WTP---. So that's the
2 first additional exhibit I have.

3 EXHIBIT 8 - Agnico Eagle hard copy
4 correspondence dated May 25, 2017, to
5 K. Kharatyan (NWB) and copied to
6 S. Granchinho (NIRB) entitled "The NWB
7 Consideration of Agnico Eagle Mines Limited
8 Whale Tail Pit Project Proposal and Revised
9 Water Licence Applications" (English)

10 MS. MEADOWS: The second additional exhibit
11 is a proposed Whale Tail Pit Project Type A water
12 licence framework for Water Licence Number 2AM-WTP---,
13 and this document was provided and circulated
14 yesterday, I believe, to all the parties that are here,
15 but this is the hard copy of that presentation
16 material.

17 EXHIBIT 9 - Agnico Eagle hard copy proposed
18 Whale Tail Pit Project Type A water licence
19 framework for Water Licence Number 2AM-WTP---
20 (English)

21 MS. MEADOWS: And then the third thing is an
22 exhibit that was previously filed in the Nunavut Impact
23 Review Board hearings that is -- consists of meeting
24 notes between Indigenous and Northern Affairs Canada,
25 Agnico Eagle, and Golder Associates Limited. The
26 meeting date is September 14th, 2017; and it is

1 entitled "Golder Document Number 145, Meeting Notes,
2 Whale Tail Pit Response Package Clarifications".

3 EXHIBIT 10 - Agnico Eagle hard copy meeting
4 notes between Indigenous and Northern Affairs
5 Canada, Agnico Eagle, and Golder Associates
6 Limited dated September 14, 2017 (English)

7 MS. MEADOWS: I believe I have all the
8 exhibits, but if I can confirm that with Ms. Kowbel.

9 MS. KOWBEL: Thank you, Mr. Chair.
10 Christine Kowbel for Agnico Eagle.

11 Yes, those are all the exhibits that we have for
12 now.

13 MS. MEADOWS: Thank you, Mr. Chair. Teresa
14 Meadows, legal counsel for the Nunavut Water Board.

15 Mr. Chair, it's also my understanding that there
16 are two additional exhibits that will be tendered by
17 Indigenous and Northern Affairs Canada but that it
18 would be preferable if we actually marked these
19 exhibits and enter them now, as they are referenced in
20 the materials that Agnico Eagle will be presenting.

21 So I have before me Indigenous and Northern
22 Affairs Canada reclaim estimate for Whale Tail Pit
23 Project, Revision 6, dated September 11th, 2017.

24 EXHIBIT 11 - Indigenous and Northern Affairs
25 Canada hard copy reclaim estimate for Whale
26 Tail Pit Project, Revision 6, dated

1 September 11, 2017 (English)

2 MS. MEADOWS: And I also have the Whale Tail
3 security management agreement, final, September 5th,
4 2017, between the Kivalliq Inuit Association, Agnico
5 Eagle Mines Limited, and Her Majesty the Queen in Right
6 of Canada as represented by the Minister of Indigenous
7 and Northern Affairs.

8 EXHIBIT 12 - Indigenous and Northern Affairs
9 Canada hard copy Whale Tail security
10 management agreement, final, September 5,
11 2017, between the Kivalliq Inuit Association,
12 Agnico Eagle, and Her Majesty the Queen in
13 Right of Canada as represented by the
14 Minister of Indigenous and Northern Affairs
15 (English)

16 MS. MEADOWS: So if I can just confirm with
17 legal counsel for the Department of Justice that those
18 are the two exhibits that INAC wishes to tender.

19 MR. GRUDA-DOLBEC: Simon Gruda-Dolbec from the
20 Department of Justice. I confirm this.

21 Just an additional comment in regard to the
22 product licence: We just want to mention that we have
23 not had the opportunity yet to review it; so we cannot
24 confirm that we agree to its content, and we might have
25 some comments to make about it eventually.

26 Thank you.

1 MS. MEADOWS: Thank you, Mr. Chair.

2 And so that exhibit is the proposed Whale Tail Pit
3 Project Type A water licence framework. It's my
4 understanding that perhaps at the end of this public
5 hearing, before we go into closing statements, if we
6 can have any of the comments that any of the parties
7 have on this document or any of the revisions that may
8 be required, there may be an updated copy that
9 potentially could be tendered. But we'll mark this one
10 as "draft" for this exhibit.

11 Thank you, Mr. Chair. Those are all my procedural
12 matters.

13 THE CHAIR: Thank you.

14 Participants are reminded to state their name
15 prior to speaking to assist the stenographer in keeping
16 an accurate record of the proceeding.

17 Thank you, Mr. Vanengen. Please go ahead with the
18 presentation.

19 Presentation by Agnico Eagle Mines Limited
20 (Introduction and Overview)

21 MR. QUESNEL: Thank you, Mr. Chair and the
22 Board. Jamie Quesnel with Agnico.

23 I would like to start this presentation by
24 thanking the Water Board and its staff for their clear
25 guidance and direction during this coordinated Nunavut
26 Impact Review Board and Nunavut Water Board review

1 process and for the opportunity that they have provided
2 to Agnico Eagle and all intervenors and interested
3 parties to address issues related to the Whale Tail Pit
4 Project in a very thorough and constructive way.

5 We believe that the process that was established
6 by both Boards for the Whale Tail Pit Project has given
7 us the opportunity to undertake a comprehensive review
8 of issues related to water and waste. We are going to
9 provide a detailed summary of the issues that we
10 considered during the review during today's
11 presentations to the Board.

12 I would like to thank all the parties that are
13 here today and others that are not here today,
14 including our consultants and the Agnico team, for the
15 work they've done over the past one and a half years to
16 help us improve the proposed Whale Tail Pit Project.

17 There's been a lot of work completed by all the
18 parties. This has led us to a better proposal. We
19 thank the parties for the comments and recommendations
20 that were submitted. In preparation for the hearing,
21 we captured and addressed these recommendations in our
22 final written submission to the Nunavut Impact Review
23 Board and Nunavut Water Board on August 28th.

24 Through that submission, we indicated those
25 recommendations where we were in agreement with the
26 parties. We provided them a detailed response to

1 comments where we believed that such a response would
2 be helpful and also flagged those recommendations where
3 further discussion is required or where we did not have
4 agreement at that point in time. All of these were
5 filed with the Board as part of our submission.

6 Since that filing, we have worked with several of
7 the parties to better understand each other's
8 positions, provide better clarity, and to try to find
9 agreement. We had follow-up meetings and discussions
10 and made some additional commitments. You will hear
11 more about this engagement and the outcome as we move
12 through our presentations today.

13 Mr. Chair, I am pleased to report that, through
14 collaboration with all of the parties, we have been
15 able to reach consensus on the key technical matters
16 related -- relating to the water licence and we believe
17 there are no significant outstanding issues.

18 And with that, I will start with an introduction
19 and overview of the Whale Tail Pit Project and a quick
20 overview of the company.

21 Thank you.

22 So in this slide, some of the key items we will be
23 looking at in this presentation: We introduced the
24 Agnico Eagle team; we're going to look at Agnico Eagle
25 operations globally and also in Nunavut; Agnico Eagle's
26 Indigenous People engagement commitment; a brief

1 regulatory history of the Whale Tail Pit and also the
2 Meadowbank -- part of the Meadowbank division project;
3 a summary of the Whale Tail Pit Project, which is the
4 future of the Meadowbank division located on the Amarug
5 exploration property; an overview of the construction
6 and operations at the Whale Tail Pit; overview of the
7 use of the Meadowbank mine facilities; and, most
8 importantly, highlight the continued success of
9 training and development of our skilled Nunavut
10 workforce.

11 And, also, this is an overview, but my colleagues
12 will be presenting much more detail in selective
13 subjects that I'll be discussing in this presentation.

14 This slide just highlights the -- where we are
15 globally. We are a Canadian-based company. We started
16 in Cobalt, Ontario, 1957. This is our 60th anniversary
17 of the company. We're very proud of that. We're
18 listed on the Toronto Stock Exchange and also in the
19 New York Stock Exchange. We're a publicly traded
20 company. All that information can be found on our
21 website and other locations. We have nine operating
22 mines in Nunavut, Quebec, Finland, and Mexico. At this
23 time, we have more than 7,500 employees, and we're
24 planning to build on that. We produced over 1.6
25 million ounces of gold in 2016. And, also, we're proud
26 to be one of Canada's top 50 responsible companies.

1 Here in Nunavut, we have the one operating mine,
2 Meadowbank, located approximately 70 kilometres north
3 of Baker Lake, which is shown on the right side of this
4 slide; and it's the only operating mine in the Kivalliq
5 Region. Agnico Eagle has advanced projects -- the
6 Meliadine project, just north of Rankin Inlet. We're
7 under construction at this time, well advanced with
8 that project schedule, with production -- commercial
9 production scheduled for September 2019.

10 Also, just briefly, with marine transportation for
11 the Whale Tail Pit Project, the shipping route is the
12 same; no additional ships for Whale Tail. So it's the
13 same as it is right now, up to nine ships per year.

14 This slide here highlights Agnico's Indigenous
15 People engagement commitment: Agnico Eagle Mines will
16 work in partnership with Indigenous People to establish
17 a mutually beneficial, cooperative, and productive
18 relationship. Our approach will be characterized by
19 effective two-way communication, consultation, and
20 partnering.

21 And part of this -- I'll just briefly discuss this
22 because my colleague Candace will talk about this a
23 little bit more. We have a system: the planning of
24 events for public engagement; the doing, where we
25 complete these things; the checking, to just see where
26 we can improve, if there's anything that we missed,

1 things that we have to improve upon; and act, where we
2 put that into place with management reviews, external
3 reviews with Kivalliq Inuit Association, internal and
4 external stakeholder commitments to advise us on
5 improvement.

6 This slide summarizes Agnico's history and also
7 the future in Nunavut, but I'm just going to focus on
8 the Whale Tail Pit activities. The first gold
9 discovery was in 1972. Agnico's acquisition of the
10 property was in 2007. Agnico Eagle's first drilling
11 activity was in 2013. Approval for construction with
12 Agnico Eagle's board, pending approvals of all permits,
13 2017. Construction period would be 2018 to 2019;
14 commercial production, 2019. End of production, that's
15 corrected. It's not 2021; just a correction, it is
16 2022.

17 So with the Amaruq exploration project, we have
18 extensive exploration drilling. We have a resource
19 estimate of 3.7 million ounces. There's a proposed
20 satellite deposit, the Whale Tail Pit, to supply ore to
21 the Meadowbank mill. It will be using existing
22 Meadowbank facilities, including the maintenance shops,
23 the processing plant, the tailings storage facility,
24 the camp, the airstrip that we have at Meadowbank.
25 This infrastructure will be used at Meadowbank for the
26 Whale Tail Pit Project.

1 This is just an overall summary of the permitting
2 update. I think that's been presented by the Board.
3 There's really nothing else to add. We're into the
4 Water Board hearings right now. So I'd just like to go
5 on to the -- a little bit more description on the Whale
6 Tail Pit Project.

7 This slide just highlights some of the key
8 activities dealing with the existing Meadowbank life of
9 mine, where the ore would be exhausted, would be
10 depleted, by the third quarter of 2018. This is a
11 very -- this is why it's so important to have our
12 licence in place by July 2018, to initiate the
13 construction for the dikes, the Whale Tail dike and the
14 Mammoth dike.

15 The Whale Tail Pit construction -- site
16 preparation to construction by July 2018. We have our
17 operational window from 2019 to 2022. The closure
18 stage is 2022 to 2029. And based on our security and
19 the final closure plan -- not the final closure plan
20 but our security agreement with Indigenous and Northern
21 Affairs Canada and the Kivalliq Inuit Association, our
22 post-closure stage is from 2030 to 2046.

23 So some of the key aspects of construction of the
24 Whale Tail Pit Project would include the dikes -- the
25 Whale Tail dike, the Mammoth dike -- the site pads, the
26 site and haul road expansion. Right now we have our

1 exploration road at six-and-a-half metres. Part of
2 this application would be to expand that to nine and a
3 half. Operationally, we have 650 employees. The ore
4 from the Whale Tail Pit will be hauled to the
5 Meadowbank mill. We'll have a camp at Whale Tail and
6 also continued use of the Meadowbank camp and
7 infrastructure, as I mentioned earlier.

8 Meadowbank will continue to operate at the 11,000
9 tonnes per day until the third quarter of 2018.
10 There's going to be a production gap between the third
11 quarter of 2018 and the third quarter of 2019. In this
12 application, the approvals are very important for the
13 continuity of the workforce, to ensure everyone stays
14 employed during this gap related to construction of the
15 activities at Whale Tail. If approved, the Whale Tail
16 Pit is proposed to operate up to 11,000 tonnes per day.
17 Initially, it would be 9,500 tonnes per day beginning
18 the third quarter of 2019. We'll ramp up to 11,000
19 tonnes per day beginning in 2020. We're estimating
20 about just over 8 million tonnes of ore will be mined.
21 And, again, the total gold resource for the Whale Tail
22 Pit will extend the life of mine at Meadowbank.

23 As we're -- the Whale Tail Pit is 64 kilometres
24 away from Meadowbank, we'll be hauling this ore from
25 Whale Tail Pit to Meadowbank by using 18 long-haul
26 trucks. The trucks will travel from Whale Tail to

1 Meadowbank with the ore, heavy, to the ore -- to
2 Meadowbank and will return empty to Whale Tail Pit.
3 We're operating 24 hours per day. We'll have
4 two-and-a-half cycles per day or five trips per day per
5 long-haul truck. An estimate is about 154 trips on the
6 road. But out of the calendar year, we have estimated
7 28 days to shut down for blizzards and also for any --
8 for the caribou migration.

9 This slide shows a couple of trucks we're looking
10 at for the long haul. We'll select this from a pilot
11 that will be starting next month, just based on the
12 road and the -- how it fits into the north related to
13 the distance and also the driver capabilities. The
14 first truck is a six-by-six, all-wheel drive. So all
15 three axles with the six wheels are driving the truck,
16 moving the truck. It's like a four-by-four truck or an
17 ATV. The second one is a ten-by-ten, where we have the
18 five axles and all the wheels on those axles are
19 powered to move the truck.

20 The capacity remains the same for both options,
21 which is 150 million tons -- 150 metric tons. Sorry.
22 And the truck trailer length is 84 feet. So with both
23 options, 150 tons in the box, 84 feet in length.

24 This slide summarizes the road alignment. Right
25 now the exploration road from the Meadowbank Vault pit,
26 which is to the bottom right, and up to Whale Tail.

1 This reddish colour is the Inuit-owned land, and this
2 area here is Crown land.

3 Again, 64 kilometres of length for the haul road
4 that will connect to Meadowbank, two thirds of this
5 road alignment is on Crown, one third on Inuit-owned
6 land. Right now, the exploration road, which has just
7 been connected between Meadowbank and Whale Tail about
8 three weeks ago, that road is six-and-a-half metres
9 wide. Part of this application is to widen an
10 additional three metres. And along this road
11 alignment, we have nine clear-span bridges. And just
12 at the bottom of this slide shows the alignment of the
13 bridges, typical plan view of that.

14 The next slide is a video. We will show -- it
15 will show the -- as it is right now -- the
16 predevelopment, operational window, and closure.

17 Thanks, Ryan.

18 This shows the Whale Tail Lake. The water is
19 flowing in this direction right now, from Whale Tail's
20 south basin, north basin, through the Mammoth Lake
21 channel, towards Mammoth Lake, and continues in this
22 direction. So Whale Tail Lake, Mammoth channel,
23 Mammoth Lake. And, also, we have a 3-D model in the
24 back that highlights this.

25 This is during operations. So we have the Whale
26 Tail dike. This is the south basin. The water would

1 flow in the opposite direction. My colleagues will
2 talk about that. The attenuation pond. The Whale Tail
3 Pit. The Mammoth dike. The waste rock storage
4 facility. So it's cut off here, and it's cut off in
5 Whale Tail Lake during operations. Waste rock storage
6 facility.

7 This is during closure. The dikes will be
8 breached, Whale Tail and also Mammoth; and the water
9 will return, flowing in this direction, the natural
10 direction. The Whale Tail Pit will be re-flooded.

11 The dikes would not be breached until the water
12 quality meets the criteria. So it would be like a big
13 bathtub until the water quality meets that objective;
14 and then we would breach those dikes, and the water
15 will be flowing through that.

16 And that's all for the video.

17 THE CHAIR: Thank you.

18 Is there any questions/concerns to the
19 presentation? Just asking to have in between. Thank
20 you.

21 MR. QUESNEL: Thank you, Mr. Chair. We have
22 a few more slides for this presentation. That was the
23 last -- that was the end of that video. We just have a
24 few more slides of this presentation.

25 Thank you.

26 THE CHAIR: Okay. Go ahead. Continue.

1 MR. QUESNEL: This slide is just -- I'll
2 just talk to it very briefly. My colleagues will talk
3 about this in more detail, and we have the posters at
4 the back of the room.

5 It just highlights the construction window for the
6 Whale Tail dike and also the Meadowbank -- Mammoth
7 dike -- sorry -- and also for the berm for the waste
8 rock storage facility.

9 This slide just highlights the construction phase,
10 the dewatering phase, and the operational phase. So
11 the construction's planned to begin as soon as permits
12 are received. Again, the critical milestone is
13 building the Whale Tail dike in open water beginning in
14 July 2018. That's a very important milestone for us.
15 And material preparation must begin as early as
16 possible, to ensure we have the volume of material to
17 complete this construction. Again, Ryan and Michel
18 Groleau will get into more discussions on these
19 details.

20 This just shows a site plan during operations of
21 the site and infrastructure. Some other key areas
22 would be the camp area, the industrial pad. We have
23 the stockpiles and overburden storage, the north
24 stockpile, the waste rock storage facility. Again, at
25 the back of the room, we have the 3-D model which
26 highlights this phase of the operation. So it gives

1 you a good indication of where everything sits compared
2 to the surrounding lakes.

3 In addition, at the Whale Tail Pit Project, we'll
4 have a camp. We'll have eight wings to accommodate 210
5 workers. There we'll have a kitchen, a mine dry, and
6 office space. 440 persons, approximately, will stay at
7 Meadowbank and the existing camp at Meadowbank. At
8 Whale Tail, we'll have a sewage treatment plant that
9 will discharge into the attenuation pond. Freshwater
10 use, approximately 118- cubic metres per day -- per
11 year. Sorry. And exploration site will need to move.
12 So we have an existing camp right now that would -- for
13 exploration purposes that would be moved, and this camp
14 here is at our Meliadine location. This gives you an
15 idea what this camp will look like at Whale Tail.

16 Additional infrastructure, Whale Tail: power
17 plant, fuel storage, and also hazardous material.
18 We'll have two 250,000-litre tanks with secondary
19 containment for fuel. We'll have two 1.8-megawatt
20 power plants, generators. The hazardous material will
21 be temporarily stored in a small laydown. Typical
22 items for hazardous material: waste grease, batteries,
23 used hydraulic hoses. Those type of things will be
24 collected at Whale Tail, shipped to Meadowbank, then
25 shipped down south to a licenced facility in Quebec.
26 Organic waste will be shipped in closed containers back

1 to Meadowbank for incineration.

2 This is just a site plan for closure. Again, more
3 details in following presentations.

4 And, also, this is post-closure, when the water
5 quality meets those objectives in the flooded -- in the
6 flooded pit and the dikes are breached.

7 Continued use of the Meadowbank camp, mill, and
8 tailings storage facility. This is a photograph of our
9 entry to the Meadowbank camp.

10 This shows the existing Meadowbank operation. We
11 have our existing -- our Bay Goose pit. That's
12 finished production. Portage pits. Our tailings
13 storage facilities are here. The Vault pit is up here,
14 on the top of the slide. Our airstrip is located right
15 here. Our camp and our mill facilities, located here.

16 So Q3 2018, no additional ore will be coming from
17 these pits. That will be completed. And the Whale
18 Tail Pit, based on approvals, will start production in
19 2019.

20 This is our tailings storage facility, north cell.
21 This is our tailings storage facility, the south cell.
22 And the following presentations will provide more
23 detail.

24 This shows part of the application for a small
25 raise in the north cell, along that perimeter.

26 So Agnico Eagle's vision: We want to be in

1 Nunavut for decades. Nunavut platform can be a
2 cornerstone for Agnico Eagle for several decades. We
3 could secure a production base of approximately 700,000
4 ounces per year. The Meadowbank lessons and successes
5 can be leveraged in new Agnico projects in Nunavut,
6 like the Whale Tail Pit Project. The Whale Tail Pit
7 Project will extend the life of Meadowbank, and Amaruq
8 is the future of the Meadowbank division. Again, with
9 Meliadine, another hub in Nunavut remains a significant
10 potential catalyst for Agnico's growth in Nunavut.
11 And, overall, our vision is to have our mines managed
12 by Inuit.

13 Thank you.

14 THE CHAIR: Thank you, applicant.

15 Is there questions, concerns?

16 Start with Kivalliq Inuit Association.

17 MR. MANZO: Thank you, Mr. Chairman. Luis
18 Manzo, Kivalliq Inuit Association.

19 No questions at this time.

20 THE CHAIR: Thank you.

21 Next, INAC, do you have questions, concerns?

22 MS. COSTELLO: Karen Costello for Indigenous
23 and Northern Affairs Canada. Thank you, Mr. Chair.

24 We have no questions at this time.

25 THE CHAIR: Thank you.

26 Next, Environment and Climate Change Canada.

1 MS. PINTO: Thank you, Mr. Chair. Melissa
2 Pinto, Environment and Climate Change Canada.

3 We have no questions at this time.

4 THE CHAIR: Thank you.

5 Next, Department of Fisheries and Oceans Canada.

6 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
7 D'Aguiar for Fisheries and Oceans Canada.

8 We have no questions at this time.

9 Thank you.

10 THE CHAIR: Thank you.

11 Next, public. Is there questions, comments from
12 the public?

13 Go ahead. Come to the -- come to the mic.

14 The Public Questions Agnico Eagle Mines Limited

15 EDWIN EVO: Thank you, Mr. Chair.

16 My question is if Agnico Eagle will be operating
17 Amaruq and Meliadine at the same time.

18 THE CHAIR: Thank you.

19 Applicant.

20 MR. QUESNEL: Thank you, Mr. Chair.

21 Meadowbank will be operating 'til the
22 third quarter 2018. Whale Tail will start in 2019.
23 Meliadine will start in September 2019. So based on
24 approvals, if we do receive them for Whale Tail,
25 they'll both be operating at the same time.

26 EDWIN EVO: Mr. Chair, this is not a

1 question. It's more of a concern regarding winter
2 operation, as probably some of the people here have
3 experience, a great amount of snow over at
4 Coral Harbour. But I'm a -- I'm a blind person, but
5 what my son and my granddaughter told me, last winter,
6 there was a tremendous amount of a snowstorm that --
7 over at the Coral Harbour -- that -- this is just an
8 example -- that some of the buildings' chimney was
9 sticking out through the snow and then some of the
10 snowmobiles drive right over the roof.

11 And then my fear is that something like this might
12 happen in one of the winters. Is a gold mine operation
13 prepared for that kind of incident? That -- what my
14 worries are -- tailings impound could be pretty well
15 covered. Some of the areas are covered at 12, 15 feet
16 of snow, even in town here.

17 Thank you, Mr. Chair.

18 THE CHAIR: Thank you.

19 Is there any more questions/concerns from public?
20 Okay. There's none.

21 So NWB staff.

22 Nunavut Water Board Staff Questions Agnico Eagle Mines
23 Limited

24 MR. KHARATYAN: Thank you, Mr. Chair.

25 Just a small comment.

26 On Slide 12, we can see that in the schedule the

1 closure will change to 2022-2029, and I guess the
2 Slide 13 is just an oversight stating still 2022-2025?

3 MR. QUESNEL: Thank you, Mr. Chair.

4 Yeah. Just to clarify, operations, 2019 to 2022;
5 closure phase, 2022 to 2029; the post-closure stage,
6 2030 to 2046.

7 Thank you.

8 MR. KHARATYAN: Thank you. No more questions.

9 THE CHAIR: Okay. Thank you.

10 Any further questions from the staff? No? Okay.

11 And the Board? Okay.

12 Thank you, applicant, for your presentation.

13 Okay. Go ahead. Continue.

14 Presentation by Agnico Eagle Mines Limited (Public
15 Participation)

16 MS. RAMCHARAN: Blatsiq [phonetic], Mr. Chair
17 and members of the Board. My name is Candace
18 Ramcharan, and I will be speaking about public
19 participation for the Whale Tail Pit Project.

20 As mentioned by my colleague Jamie, Agnico's
21 public participation is shaped by our corporate-wide
22 Indigenous People engagement commitment that states
23 that Agnico will work in partnership with Indigenous
24 People to establish a mutually beneficial, cooperative,
25 and productive relationship. Our approach will be
26 characterized by effective two-way communication,

1 consultation, and partnering.

2 Our responsible mining management system guides
3 how Agnico manages health, safety, environment, and
4 community relations activities and provides the
5 framework for how we do public participation.

6 The responsible mining management system guides
7 our public participation through four main
8 activities -- plan, do, check, and act -- and is
9 presented in more detail in Appendix 8-G of the
10 environmental impact statement. The plan, do, check,
11 and act framework shapes our public engagement
12 approach.

13 The policies and frameworks that go into the
14 planning phase of our engagement approach are the
15 Agnico Eagle sustainable development policy, which is
16 included in Volume 1, Section 1.13 of the environmental
17 impact statement, Nunavut Impact Review Board
18 requirements, as well as our Inuit Impact and Benefit
19 Agreement.

20 The way we implement our plan, the "do" part of
21 the responsible mining management system, is through
22 our community offices in Baker Lake and in Rankin Inlet
23 where we have community relations representatives who
24 interact on a regular basis with different community
25 members and groups. This includes quarterly meetings
26 with hamlets and hunters and trappers organizations,

1 open houses and public meetings throughout the year.

2 In order to check or monitor the effectiveness of
3 our public engagement, Agnico has a number of
4 mechanisms to receive feedback from communities of
5 interest, such as our formal community complaints and
6 agreements mechanism named "tusaajugut", "We're
7 Listening". This mechanism allows for anonymous,
8 unnamed complaints by community members and groups and
9 provides multiple points of contact -- such as email,
10 phone, or in person -- for community members and
11 organizations to formally report their concerns related
12 to environmental and wildlife issues, tendering and
13 hiring processes, or any other aspects of Agnico's
14 operations.

15 Finally, our public engagement plan activities and
16 monitoring are reviewed internally by management as
17 well as externally by different groups, such as the
18 Kivalliq Inuit Association as well as our corporate
19 stakeholder advisory committee.

20 Some examples of Agnico's public participation in
21 action are the Baker Lake Whale Tail information
22 session that was held in April of this year. This was
23 a public meeting attended by 122 community members.
24 There have been many other public engagement
25 activities, such as quarterly community employment
26 information sessions held in Baker Lake and in all

1 seven communities of the Kivalliq, Festival by the
2 Lake, site tours for Baker Lake residents at the
3 Meadowbank mine, and public meetings for the Baker Lake
4 wellness plan.

5 A key goal of Agnico Eagle's public participation
6 program has been to ensure that we provide people with
7 the mechanisms they need to provide inputs, including
8 Inuit Qaujimagatuqangit, so that the project is better
9 to inform its decision-making and project design.
10 Throughout Meadowbank and for the Whale Tail Pit
11 Project, 147 consultations have taken place between
12 2012 and 2017. These consultations have taken
13 different formats, such as formal meetings; site
14 visits; workshops; and public meetings, such as
15 open houses and information sessions, which are less
16 formal and open to anyone from the public. Different
17 communities and community organizations have been
18 engaged, such as the Baker Lake Community Liaison
19 Committee, elders, youth, women, the Hamlet, Hunters
20 and Trappers Organization, as well as communities and
21 organizations from Chesterfield Inlet, Rankin Inlet,
22 Coral Harbour, Naujaat, and Whale Cove. The details of
23 these consultations can be found in the consultation
24 log of the environmental impact statement in
25 Appendix 2-G.

26 Agnico Eagle recognizes the importance of Inuit

1 Qaujimajatuqangit and has been able to incorporate
2 these values to Agnico practices throughout the Whale
3 Tail Pit Project. For example, the principle of
4 pilimmaksarniq is used in the development of our
5 training programs and upward mobility programs, such as
6 the career path and apprenticeship program, which can
7 help our employees in developing transferrable skills
8 to use at either of our sites or elsewhere in their
9 communities.

10 Avatittinnik kamatsiarniq, respect and care for
11 the land, animals, and the environment is incorporated
12 in the environmental policies and practices, Inuit
13 Impact and Benefit Agreement, environmental
14 obligations, and ongoing working relationships with the
15 Baker Lake Hunters and Trappers Organization. For
16 example, Agnico has committed to hiring a wildlife
17 monitor from the Baker Lake Hunters and Trappers
18 Organization to assist in our environmental monitoring.

19 The basic approach of integrating Inuit
20 Qaujimajatuqangit into the baseline studies and
21 environmental assessment conducted for the project
22 takes the basic framework of workshops, baseline data
23 collection, feedback, integration, and review. This
24 process has been endorsed by the Kivalliq Inuit
25 Association representatives.

26 I'll pass it over to my colleague Ryan to explain

1 this approach in more detail.

2 MR. VANENGEN: Mr. Chair and Board members,
3 for the next five slides, I'm going to present on a few
4 examples of how we integrated the workshop information
5 into our impact assessment and into, ultimately, the
6 Nunavut Water Board licence.

7 So as my colleague Candace explained, the Whale
8 Tail Pit Project is a very good example of how we
9 integrated Inuit Qaujimajatuqangit and traditional
10 knowledge into our project design during baseline
11 studies, as shown here in the slide, and then
12 ultimately into our project as we integrated and
13 reviewed our project.

14 We hosted a number of workshops already beginning
15 in December 2014 that provide us the information that's
16 shown on the next two slides. The information
17 collected in the workshops, the Inuit Qaujimajatuqangit
18 and traditional knowledge was -- in those workshops --
19 were shared with our scientists, our engineers, and our
20 biologists which then allowed us to then design things,
21 like the roadway and our site here, with the
22 information provided during those workshops. That
23 happened in 2014; it happened in 2015; and then it also
24 happened in 2016 -- where we shared in kind of that
25 loop with our scientists all of the Inuit
26 Qaujimajatuqangit.

1 What it showed us, as demonstrated in this slide,
2 are where the harvest sites are and also where the
3 wildlife are moving and interacting with our project
4 and, related to the Nunavut Water Board, where some of
5 the traditional land use was around some of the
6 waterways. And what we found was that from these
7 workshops that the Inuit traditional land use was
8 focused very much on the centre of our road, and these
9 trails -- these lines marked with dash -- yellow dash
10 marks are trails that are traditionally used for moving
11 between Baker Lake and Gjoa Haven. And this is the
12 area of land that's typically used; and, therefore, in
13 the spring, when there's still ice and the travel on
14 the land is more common, fishing and water use would
15 occur on those lakes and, also, of course, hunting in
16 the area. It also identified some of the
17 archaeological sites, and these here are grave sites
18 that were identified during the Inuit Qaujimajatuqangit
19 workshops.

20 One important example of how we integrated Inuit
21 Qaujimajatuqangit into our baseline studies was through
22 our archaeological baseline studies. As a result, we
23 were able to avoid the majority of the archaeological
24 sites along our road, and this added an additional
25 approximately 1.5 kilometres to our proposed haul road.
26 Related to waste and water for the Nunavut Water Board,

1 it also -- these workshops informed us on ensuring that
2 our road material protected the waterways. So we've
3 ensured that our road material is non-potentially acid
4 generating and non-metal leaching, and that was
5 informed through those workshops.

6 The next set of slides -- so that's the first
7 example. The second example, more detailed example, is
8 how we integrated and workshopped with the Baker Lake
9 Hunting and Trapping Organization, elders, and other
10 stakeholders in the design of our -- of our traditional
11 land-use crossings on the haul road.

12 So we began meeting with stakeholders in December
13 of 2014, as I described. We followed up with
14 stakeholders visits in September 2015 related to the
15 crossings on the road, the traditional land-use
16 crossings. We then followed up with another meeting
17 and workshop in 2016. This was followed up with
18 another series of meetings in 2016. And, ultimately,
19 in the spring of 2017, we finalized one of our
20 locations, including the design of that traditional
21 land-use crossing; and it looks like this here in this
22 photo. We're working with the HTO, the Hunting and
23 Trapping Organization, to finalize that; but we've
24 decided on the design and collectively decided on the
25 location of that traditional land-use crossing. And
26 that's located on the map right here, of our roadway.

1 So now I'll pass it to Candace to provide a
2 summary of our presentation.

3 MS. RAMCHARAN: The Inuit Qaujimajatuqangit
4 collected on the Whale Tail Pit Project includes
5 knowledge on the existing condition of the area,
6 concerns on the various project impacts, and
7 recommendations for the project. Concerns that were
8 highlighted on the various project impacts -- such as
9 caribou, shipping lanes, spills, employment and
10 training, as well as legacy infrastructure -- are
11 included as part of the effects assessment, and
12 recommendations are considered when we were developing
13 our mitigation and monitoring plans. More information
14 on these areas of concern as well as the mitigation
15 plans are found in Volume 7 of the environmental impact
16 assessment.

17 Agnico Eagle will continue to use its public
18 participation framework and Inuit Qaujimajatuqangit
19 values to address concerns over the life of the project
20 through continued engagement and consultation with key
21 communities of interest.

22 Mat'na.

23 THE CHAIR: So that's the end of the
24 presentation, second presentation?

25 MR. VANENGEN: Yeah, Mr. Chair, that's the
26 end of the public participation presentation.

1 THE CHAIR: Okay. Can I ask questions or
2 concerns? Can I ask, KIA, you have concerns or --
3 questions/concerns?

4 MR. MANZO: Thank you, Mr. Chairman. Luis
5 Manzo, director of lands, Kivalliq Inuit Association.

6 No questions at this time.

7 THE CHAIR: Thank you.

8 INAC, do you have questions or concerns?

9 MR. PARSONS: Ian Parsons, INAC.

10 Mr. Chair, no comments or concerns.

11 THE CHAIR: Thank you.

12 Environment and Climate Change Canada.

13 MS. PINTO: Thank you, Mr. Chair. Melissa

14 Pinto, Environment and Climate Change Canada.

15 We have no questions at this time.

16 THE CHAIR: Then DFO.

17 MR. D'AGUIAR: Thank you, Mr. Chair.

18 Fisheries and Oceans, Mark D'Aguiar.

19 We have no questions at this time.

20 Thank you.

21 THE CHAIR: Thank you.

22 Is there concerns/comments from public? Is there
23 concerns or questions from public?

24 Comments by Kivalliq Inuit Association

25 MR. MANZO: Thank you, Mr. Chairman. Just
26 to correct my first intervention -- Luis Manzo,

1 Kivalliq Inuit Association.

2 We have concerns on the -- on the road: It's too
3 narrow; the slopes are too high; and it require more
4 friendly crossings for caribou.

5 Thank you, Mr. Chairman.

6 THE CHAIR: Thank you.

7 And then NWB staff.

8 MR. KHARATYAN: Thank you, Mr. Chair. Karen
9 Kharatyan, NWB staff.

10 No questions at this time.

11 THE CHAIR: Thank you.

12 Panel members? I have none. Okay. Thank you.

13 So you may continue on with your other
14 presentation.

15 MR. VANENGEN: Mr. Chair, we're just going to
16 take 30 seconds to just have Michel and Valerie join
17 us.

18 Presentation by Agnico Eagle Mines Limited (Waste
19 Disposal and Management)

20 MR. GROLEAU: Good morning, Mr. Chair and
21 Board's members. My name is Michel Groleau. I'm the
22 geotechnical coordinator in Meadowbank.

23 The geotechnical team in Meadowbank is in charge
24 of the construction of the dewatering and tailing
25 dikes, the site water management, and the operation of
26 the tailings storage facility. I am glad to present

1 you with the support of Valerie Bertrand and Erika
2 Voyer the global waste management strategy for the
3 Whale Tail Project.

4 I will initiate the presentation with an overview
5 of the history of the Meadowbank tailings storage
6 facility, the tailings storage requirement for the
7 Whale Tail Project, and the closure of the Meadowbank
8 tailings storage facility. Valerie Bertrand will then
9 follow with the presentation of the Whale Tail waste
10 rock storage facility and proposed thermal
11 instrumentation. And, finally, Erika Voyer will close
12 the presentation with an overview of the Whale Tail
13 waste rock management.

14 The Nunavut Water Board Type A Licence 2AM-MEA1525
15 allow Agnico Eagle to build tailings dike up to
16 elevation 150 metre above sea level and to store
17 approximately 30.2 million cubic metres of tailing.
18 The initial mining plan of Meadowbank was based on the
19 economic situation at that time and of the project
20 design. Since then, the economic forecast changed and
21 the mining plan have been revised, and forecasted
22 tailing produce has been reduced accordingly. The
23 total capacity required to complete the mining of the
24 Meadowbank project is currently evaluated at 23.8
25 million cubic metre, which gave us a residual capacity
26 of 6.4 million cubic metre to store new tailings.

1 The Whale Tail Project production plan is
2 forecasting the production of 8.3 million tonnes of
3 tailing. In order to store that mass of tailing,
4 Agnico Eagle Mine is planning to increase by 1.9
5 million cubic metre the capacity of the north cell
6 tailings storage facility by building the north cell
7 internal structure. The total capacity of the tailings
8 storage facility will be then of 32.1 million cubic
9 metre.

10 The chart on this slide presents the storage curve
11 of the north and south cell tailings storage facility
12 until the completion of the Whale Tail project. As you
13 can see, when we sum up those two curves together, we
14 get a total of 30 million cubic metre of tailings at
15 the end of the Whale Tail Project, which leaves us
16 2.1 million cubic metre of available capacity to
17 perform proper water management of the tailing impound
18 and buffer capacity in case of operational issue.

19 Mr. Board, there was a concern related to snow
20 management. That available capacity will help us to
21 store that -- you know, those large snow event as well.

22 Here, on that slide, we have a picture of the
23 north cell tailings storage facility. This tailing
24 impound is delineated by the Saddle Dam 1, the Saddle
25 Dam 2, the storm water dike, the Rock-Fill -- the
26 Rock-Fill Dam 1, and the Rock-Fill Structure 2 here.

1 The reclaim pump is located in the middle here of the
2 pump. The north cell infrastructure will be built on
3 the periphery of the facility, so from here and all
4 around up to here. Finally, as you can see, the
5 tailing is well contained inside the facility, and no
6 trace of seepage or other type of contamination can be
7 seen outside the footprint of the tailings storage
8 facility.

9 This picture shows the south cell tailings storage
10 facility. This tailing impound is delineated by the
11 central dike here. And the early construction stage of
12 the Saddle Dam 5, that will -- that is located around
13 here. Here is the Saddle Dam 4; and on the left here,
14 it will be the Saddle Dam 3. The reclaim pump is
15 located around here, at the west side of the pump.

16 As mentioned earlier, the north cell internal
17 structure will be built over the north cell tailings
18 storage facility to increase the capacity of around
19 2 million cubic metres. The figure on the left here
20 shows the geometry of the north cell before resuming
21 deposition in June 2019. The incline structure will
22 start from here and go all around the tailing impound.
23 And deposition will be more or less from the north end
24 here, where you can see the small red line, and will
25 push tailing to the south. That reclaim pump will get
26 smaller and smaller and will transfer water from that

1 area to the mill.

2 On this slide is the same slide but much more on
3 the -- based on the south cell tailings storage
4 facility. As mentioned earlier, the dikes and the dam
5 delineating the south cell tailings storage facility
6 will be raised to elevation 150 and will gain
7 6.4 million cubic metres of capacity.

8 Note there's a small mistake on that slide. You
9 should read here "south cell raise", and here it should
10 be write [sic] down "south cell before resuming
11 deposition". Sorry about that, Mr. Chair.

12 The figure here on the right side depicts the
13 geometry of the south cell before resuming deposition
14 in October 2019. For the operation of that tailings
15 impound, tailings will be discharged from the central
16 dike, and the tailings will push the water here in
17 direction of the reclaim pump, and the water will be
18 transferred to the mill.

19 This slide is presenting the design of the north
20 cell internal structure. This rock-fill structure is
21 30 metres wide, and tailings will be discharged on the
22 upstream side, located here. Sump and trenches are
23 planned to be dig on the downstream side. These water
24 collection infrastructure are built to collect seeping
25 water, and they will be built within the footprint of
26 the tailing impound. The seepage water will be pumped

1 back inside the tailings pump and reclaimed then after
2 to the mill. To give you an order of magnitude, the
3 seepage volume will be in between 4,000 and 12,000
4 cubic metre per year, which is considered manageable,
5 according to the designer and Agnico Eagle.

6 I think there's a -- Ryan? Yeah. There's a
7 mistake here. That slide shouldn't appear in that
8 presentation; so I will just skip it.

9 Geochemistry of the Whale Tail and Meadowbank
10 tailing are similar. Both mineralization are low
11 sulphur that carries arsenic and have similar
12 characteristic, as both are potentially acid generating
13 but show delay to onset acidification. They are
14 arsenic leaching; they carry cyanide by-product; and
15 they have similar grain size.

16 Agnico Eagle Mine do not foresee any problem
17 related to acid generation and arsenic leaching during
18 operation and closure of the tailings storage facility.
19 During the closure of the tailings storage facility,
20 any chemical produced during the operation will be
21 treated prior to pump the water, the residual water,
22 contained in the facility to the Portage pit as part of
23 our closure plan. Treatment criteria will be set in
24 order to meet CCME, our site-specific water quality
25 requirement, prior to do the Goose dike breaching at
26 closure.

1 Once the tailing pump reclaim water will be empty,
2 when there will be no more water in the tailing
3 facility, we'll cover the beach with the 2-metre-thick
4 layer of non-acid-generating material or rock. At this
5 point, we'll perform a thermal encapsulation of the
6 tailing, which will prevent arsenic leaching and acid
7 generation during post-closure. Agnico Eagle is
8 planning to use soapstone as a cover material for the
9 Meadowbank storage facility.

10 Agnico Eagle has performed environmental testing
11 on the soapstone in 2015 and 2016 following concerns
12 raised by the Meadowbank independent dike review board
13 regarding the long-term physical properties of the
14 Meadowbank soapstone unit planned to be used to build
15 that cover. It was suggested that the resistance to
16 freeze-and-thaw and wet-and-dry cycles had to be
17 evaluated through laboratory testing. The objective of
18 these tests was to evaluate erosion potential of this
19 material.

20 The table below shows result of mass loss after 80
21 cycles of wet-dry or free-and-thaw. These tests was
22 conducted by the Research Institute on Mines and
23 Environment. These tests are common in construction
24 industry to evaluate durability of concrete or stone.

25 A summary of the soapstone environmental testing
26 results are presented on this slide. I will summarize

1 it: The results suggest that the freeze-and-thaw and
2 wet-and-dry cycle on the integrity of the soapstone are
3 small and that the Meadowbank soapstone is a good
4 material for the construction of the structure as the
5 cover for the tailings storage facility.

6 In 2015, Agnico Eagle completed the design of the
7 tailings storage facility landform with the support of
8 O'Kane Consultant. The landform design objectives were
9 to ensure water-shedding landform, which will prevent
10 any water ponding over the cover; and to ensure
11 stability of the landform by limiting erosion of the
12 cover. To achieve these objectives, the direct runoff
13 will be diverting out of the landform via channels, as
14 you can see in blue on that figure. Post-construction
15 discharge can be controlled and treated in order to
16 meet CCME or site-specific water quality criteria and
17 where long-term water discharge is approved.

18 The other important objective of the landform are
19 to ensure the landform will fit into the landscape and
20 not generate post-construction dust and not interfere
21 with caribou migration. The landform design is
22 consisting of a non-acid-generating rock thermal cover
23 with a minimal thickness of 2 metres. In order to
24 build those -- oops -- to build those channels, we need
25 to have higher cover, and more than 90 percent of the
26 surface will have a cover thicker than 4 metres and

1 will reach up to 8 metres in those areas.

2 The channels are presented by the blue arrows.
3 There's two outlets, one going to the south cell and
4 one going to the diversion ditches and then flowing to
5 third Portage lake. A sump will be built in this area
6 to collect the water and do testing before discharge to
7 the third Portage lake. The system will be closed
8 until we meet the water quality criteria.

9 Here you have a picture of the south cell tailings
10 storage facility landform. It's the same principle
11 than the -- on the north cell. We have channels in
12 blue that divert the water, the runoff water, and will
13 mix with the water running from the north cell, Outlet
14 Number 1. This water will be mixed together and then
15 flow to the south cell outlet. A large sump will
16 collect the water prior to discharge to third Portage
17 lake.

18 In summary, the north cell tailings storage
19 facility will reach maximum capacity in September 2021
20 with 16.2 million cubic metres of tailings stored. On
21 the other end, the south cell tailings storage facility
22 will reach maximum capacity in January 2022 with
23 13.8 million cubic metres of tailings stored.

24 Agnico Eagle submitted a standalone tailings
25 management plan to Nunavut Water Board on January 25th,
26 2017. And as a Nunavut Water Board condition, the

1 tailings management plan will be updated prior to
2 operations.

3 This slide is presenting the progressive closure
4 work did on the north cell tailings storage facility
5 over the last year. We built a 2-metre cover here on
6 the north end of the pump to evaluate the
7 constructability of this thermal cover. And the
8 picture here at the bottom right is showing a test cell
9 in which we put instruments to see the -- how the
10 permafrost is building up in the tailings with that
11 cover. So we have thermistors and the other
12 instruments to collect data and evaluate the efficiency
13 of this cover.

14 Finally, here you've got some pictures presenting
15 the soapstone slabs that were used to do the
16 wet-and-dry and the cycle testing by the Research
17 Institute on Mines and Environment and the typical
18 section of our test cell over the tailings.

19 We'll be happy to answer more questions. Before
20 that, I will let my colleague Valerie Bertrand continue
21 with the presentation about the waste rock storage
22 facility.

23 MS. BERTRAND: Thank you, Mr. Chairman and
24 the Board. My name is Valerie Bertrand, and in the
25 next eight slides, I'll talk about the waste rock
26 studies that led to the development of the waste rock

1 management plan. Details of the plan, of that
2 management plan, will then be provided by Erika Voyer
3 after I'm done.

4 So this slide shows the alternatives assessment
5 that was done to position the waste rock pile -- to
6 propose a position for the waste rock pile.

7 Oops. This one.

8 This is the position, the proposed location of the
9 waste rock pile. These other areas were assessed in
10 the process of determining what is the best location
11 for the waste rock pile. So the location was selected
12 after evaluating these alternatives shown, and the
13 criteria for evaluating the best location included
14 proximity to the pit, how close it was to the pit --
15 the closer, the better for ease of transport -- and the
16 ability to have good water drainage control and affect
17 the least amount of watersheds as well as the ability
18 to contain and direct the contact water from the rock
19 storage facility.

20 The location of the -- the location north of
21 Mammoth Lake was selected. So they said this location
22 was selected because it is proximal to the pit. It is
23 only -- it is on a slightly elevated topography with a
24 small -- within a small watershed that drains to one
25 location, over here, such that it makes it easier to
26 collect and capture all the waters for water quality

1 control.

2 So this slide, this picture, shows a schematic of
3 the geology of the Whale Tail area. The following
4 slides talk about the effect, the potential effect, of
5 waste, tailings, waste rock, overburden, the potential
6 effects of these on water quality. These depend on the
7 chemical composition of the rock excavated by mining
8 and the tailings produced as well as the overburden,
9 the sediments of the lake that's going to be dried
10 before mining. This in turn depends on the geology of
11 the deposit. Both are described in the following
12 slides.

13 The Whale Tail Pit geology -- okay -- this area --
14 consists of very old volcanic rocks. The gold
15 mineralization highlighted here in red -- so the pit is
16 over here. The mineralization in red is gold
17 mineralization in a low-sulphur system. And that's
18 important; I'll tell you why later. It's hosted in
19 rock that is iron formation, in chert, and a bit in
20 ultramafic rock. These other rock types that are
21 encountered are on this table here. On either side of
22 the ore deposit is greywacke rock, in here, and the
23 diorite rock -- which contain no gold and very little
24 sulphur. The quantity of rock that will be removed
25 from the open pit is shown over here. And the
26 proportion of it in the waste rock pile -- that will

1 report to the waste rock pile -- is in the last column
2 over here.

3 To date, over 200 samples of waste rock, ore,
4 tailings, and lake sediments have been collected for
5 testing -- okay -- to determine what the chemical
6 properties are of that rock so that we can define what
7 the potential effects on water quality will be when
8 these rocks are exposed in the open-pit wall and on the
9 rock pile as well as in the tailing and pond facility.
10 The sampling plan was based on industry-standard
11 practices. It considers the amount of waste rock. It
12 captures the distribution of the different rock types
13 and their composition -- the varied composition.

14 This slide's a schematic of the geology viewed
15 from the surface with each rock types shown in
16 different colours. Okay. So from the surface, if you
17 were to look at it, you wouldn't see these colours.
18 But this is the different rock types here. The ore is
19 over here. On this side is the waste rock, the rock
20 that would go in the big rock storage facility, and so
21 is this as well.

22 The surface outline of the pit is shown in a
23 dashed line here, over here. So this is what you
24 will -- you have seen in the prehearing, the -- that
25 was shown at the prehearing conference in April. The
26 dark lines, over here, are the pushback areas that

1 you'll hear about a bit later. The pushback areas will
2 be completed for the following reasons: The north
3 pushback, here, is proposed it will be removed to
4 remove the rocks -- more of the rocks shown in purple,
5 these rocks, so that they're not part or a smaller part
6 of the open-pit wall because these rocks affect the
7 quality of the flooded pit water at closure. Okay. So
8 the pushback, we'll remove more of these rocks to
9 improve water quality. The southern pushback will
10 be -- will proceed, but a very shallow layer of rock
11 will be removed in order to allow access to additional
12 good rock for the cover, if needed. If needed.

13 So this one slide on the results of the
14 investigation to determine whether the rock could have
15 an effect on water quality shows the laboratory
16 analyses that were completed on the samples of all the
17 mine waste -- the rock, the tailings, the ore, the
18 sediments, and the overburden -- within the pit
19 footprint. These analyses were done to evaluate
20 whether the material could be acid generating and, if
21 they were acid generating, how much time it would take
22 for acid to start to occur and whether they could
23 release chemicals to the environment, in water, and to
24 what levels -- like, a lot of chemicals or not so much.
25 Let me explain why these issues are of concern or
26 interest.

1 Acid can be released from sulphur. Sulphur is a
2 chemical that is naturally in the minerals, in the
3 rock, of this deposit and of many deposits, including
4 the deposit at Meadowbank. Now, the sulphur when it's
5 exposed to air can rust, can oxidize or rust. It rusts
6 just like a car or snowmobile. The ability of the rock
7 to generate acid is measured by the amount of this
8 chemical, the sulphur, in the rock; and that amount is
9 compared to the amount of another mineral, a carbonate
10 mineral, that neutralizes this acid in the rock. So
11 rock is considered non-acid generating when it has at
12 least twice the amount of neutralization capacity than
13 sulphur. So "PAG" is an acronym to say "potentially
14 acid generating". Non-potentially acid generating is
15 this part of the graph, above a ratio of two, so two
16 times buffering; and below here is what could be acid
17 generating.

18 So the right -- so that graph demonstrates the
19 rock really has a low potential for acid rock drainage.
20 Most of the rock types are in this area. This area
21 really is only two rock types. They represent about a
22 third of all the waste rock that will be put in the
23 rock storage facility. Okay. These rock types are
24 located really in the centre of the open pit.

25 Another aspect of rock composition that can effect
26 water quality, as I said earlier, is the amount and

1 type of metals in the rock that can be diluted in
2 water. So, for example, the water that we're drinking
3 contains metals. The evidence of that is sometimes
4 when we boil water we see a residue on the teapot or we
5 see residue on the showerhead. Those residues are
6 metals that have precipitated out of the water. Now, a
7 small amount of metals in water is normal, but too much
8 metals can have a negative effect on fish and humans
9 depending on the amount and also depending on the
10 actual metal, what metal it is.

11 So for these rock types, the ability to release
12 metals from rocks or tailings was evaluated, and the
13 results are summarized on the -- over here. So the
14 result is, in summary, that most of the chemicals
15 contained in the Whale Tail mine waste -- okay -- they
16 are released to water but in very low concentration.
17 They're not of concern.

18 One that might be is arsenic because it can -- it
19 releases at high concentrations for some of the rock
20 types. Those rock types are the iron formation and the
21 ultramafic rock, the purple rock that you saw in the
22 previous slide. So that one can release a little bit
23 of arsenic -- can release arsenic. Okay. These two
24 rock types, they make up 46 percent of the waste rock
25 from the open pit. So this rock needs to be managed
26 and will be managed in the waste rock facility. Erika

1 will explain how, a little bit more about that. And
2 the control strategy at the long term -- in the long
3 term, the control strategy of a cover and then
4 freezeback of the mass below the cover where these
5 rocks are will be effective at preventing negative
6 effects to the receiving environment. These points
7 have been discussed quite a bit extensively with the
8 intervenors, and this together with commitments on
9 monitoring and management of the waste rock are such
10 that there are, we understand, no further issues.

11 Altogether, about 30 percent of the rock is
12 non-acid generating or low chemical content to release
13 and can be used for cover on the waste rock storage
14 facility.

15 Now, that potentially acid-generating rock that we
16 talked earlier was a point of discussion with the
17 intervenors. We found that this rock does not oxidize
18 or does not rust very quickly at all. The sulphur
19 minerals are such that they don't rust very quickly.
20 The reactivity is lower than that of the rocks at
21 Meadowbank. Meadowbank also has some potentially
22 acid-generating rock, as Erika will explain; and those
23 rocks have not generated bad water quality after seven
24 years of operation. And for these, Whale Tail -- so
25 the delay to the possible onset of acid generation is
26 longer, much longer, than what is expected to take to

1 freezeback and to cover the waste rock pile.

2 So this graph has pH, which is a measure of how
3 acid the water is. Down here, it says the water is
4 acid. Up here, the water is good; it's within the
5 criteria. But some test work has been done on all
6 these samples for a period of over two years -- or
7 just -- sorry -- just under two years, and we see --
8 and that's in conditions in the laboratory much more
9 aggressive than what will happen at site because of the
10 climate and because of other things. And so this test
11 work that we've done -- this is only a small part of
12 the results -- show that how very little -- very low
13 reactivity these materials are, adding to our
14 confidence that there will be no problem of acid
15 generation during operation or closure.

16 This slide is about what materials are going to be
17 used for construction at site. The material that will
18 be used will be non-acid generating. The 30 percent of
19 material that is non-acid generating and non-leaching.
20 These materials are easily identified and separated
21 from the rocks that are leachable and acid generating.

22 It is currently expected that a thickness of about
23 3-and-a-half, 3.3 metres is required to contain the
24 active thaw depth and keep the waste rock pile frozen.
25 To this estimate is added another .7 metres as
26 contingency for a total cover thickness of 4 metres.

1 This is really expected to be adequate for covering the
2 waste rock storage facility. Should more cover be
3 needed in places, there is ample additional good rock
4 in that southern portion and also ample additional rock
5 within the existing footprint.

6 The following slides present the steps of the
7 waste rock management plan that will be implemented in
8 order to have an effective identification and
9 segregation of waste rock to minimize possible impacts.

10 MS. VOYER: Thank you, Mr. Chair, members
11 of the Board. Erika Voyer, Agnico Eagle Mine.

12 These following slides, as mentioned by Valerie,
13 will present the main step for waste rock management at
14 the Whale Tail Project. The waste rock --

15 THE CHAIR: Excuse me. One of the Board
16 members requires a short break, so a quick break. We
17 may as well take lunch for now, I guess. It's 12:00
18 now; it's five after 12. So is that convenient for
19 you?

20 MS. VOYER: Yeah. Perfect. We will
21 continue after lunch.

22 THE CHAIR: Yeah. Okay. One hour. Okay.
23 Come back 1:30, yeah, would be good.

24 Thank you.

25 (LUNCHEON ADJOURNMENT AT 12:06 PM)

26 (PROCEEDINGS RECOMMENCED AT 1:33 PM).

1 THE CHAIR: Good afternoon. We shall
2 start now our afternoon session, continue on from this
3 morning's presentation.

4 Applicant, go ahead.

5 Resumed Presentation by Agnico Eagle Mines Limited

6 MS. VOYER: Thank you, Mr. Chair, Board
7 Members. Erika Voyer, Agnico Eagle Mine. I will
8 continue with the presentation started this morning.

9 These following slides present the main step for
10 the waste rock management at the Whale Tail Project.
11 The waste rock management plan define quantities as
12 well as timing of the waste rock availability and also
13 define the various uses for the waste rock material.
14 The mine waste rock prediction sequence is determined
15 for every mine plan. We know how much waste rock and
16 which type we will encounter during mining.

17 The material balance is completed for each year of
18 operation. The material balance consists of the
19 calculation of material quantity, including waste
20 material and ore available at different stage of
21 mining. The material balance indicate the various
22 types and use of material that's being mined.

23 Depending of their type, waste rock material can be
24 used for general construction, dam construction,
25 non-acid generator cover required for closure, and the
26 rock can also be disposed at the waste rock storage

1 facility. Non-potentially acid generator and non-metal
2 leaching waste rock produced by mining activity is used
3 for the construction of the remaining mine
4 infrastructure and also for closure requirement.

5 What are the main steps for the waste rock
6 management? First, at the baseline stage, meaning at
7 the very beginning of the project, from the geological
8 information available, we have identified the type of
9 waste rock by lithology that are present in the pit and
10 also their potential use. The rock type are identified
11 in our model of the pit for each geological formation.

12 During the mining process in the pit, the geology
13 team will do sampling of every blast by sampling the
14 material coming out of selected drill hole during
15 drilling. The analysis of the sample is completed
16 on-site in our laboratory. With the data from the
17 laboratory analyses of the rock, we can define the acid
18 rock drainage potential and classify if the waste rock
19 is either potentially acid generator or non-acid
20 generator. To validate the method used by Agnico Eagle
21 on-site laboratory, some duplicate samples are also
22 sent to external laboratory for external quality
23 control and assurance.

24 On a daily basis, the geology team characterizes
25 the rock types being mined and transferred this
26 information to the staff working in the pit who are

1 mining the material. After each blast, each rock type
2 is marked with ribbon and tape in the pit to delineate
3 the rock type to guide the shovel operator during the
4 excavation of the material.

5 In the pit, we mark or delineate the waste rock
6 potentially acid generating or metal leaching that is
7 to be transported to the waste rock storage facility.
8 The waste rock non-acid generating and non-metal
9 leaching that can be used for construction of
10 infrastructure; and, also, we mark or delineate the ore
11 to be placed in the ore stockpile and to be -- or to be
12 sent at the mill to be processed.

13 All the waste rock will be classified according to
14 site-specific acid rock drainage and metal leaching
15 criteria. As for Meadowbank, the Whale Tail Project
16 will have a metal leaching and acid rock drainage
17 sampling plan which will include the specific detail
18 and criteria for the different type of rock we will
19 encounter.

20 Sampling of the waste rock will be done during
21 mining. Testing for acid rock drainage and metal
22 leaching will be done on-site to determine the rock
23 type and the ore. The waste rock will be identified in
24 the pit prior to excavation, segregated, and
25 transported to the appropriate location according to
26 the waste rock management plan.

1 During the mining process, the geology team will
2 conduct sampling of every blast by sampling the
3 material coming out of a selected drill hole. The
4 analysis on-site of the sample will be done for total
5 sulphur and inorganic carbon to determine acid rock
6 drainage potential to be able to differentiate if the
7 rock is potentially acid generating or non-acid
8 generating. Arsenic will also be analyzed on selected
9 lithology. Gold value contained in the rock will also
10 be analyzed to differentiate the ore from the waste
11 rock.

12 Results of the analyses is included to the block
13 model by the mine geologists to adjust the waste rock
14 management plan as needed during production. The
15 management plan is reviewed and adjusted with the
16 information gained throughout the operation.

17 Field sampling of rock material for analysis to
18 determine the acid rock drainage and metal leaching
19 potential will follow specific guidelines, including
20 specific sampling frequency on the drill hole, specific
21 labelling procedure for traceability, and use of
22 composite samples will be avoided, as they're not
23 considered representative samples.

24 Following laboratory analysis, geology staff will
25 classify the waste rock and also overburden as non-acid
26 generator or potentially acid generator material. The

1 NPR, net potential ratio, is a value that is calculated
2 and basically consists of the ratio of carbonate and
3 sulphur contained in the rock. This ratio is used to
4 classify if the rock is potentially acid generator or a
5 non-acid generator.

6 The engineering team is in charge of the waste
7 rock management plan. The plan is reviewed on a weekly
8 basis by the engineering planning group, and production
9 maps are issued showing classification of the waste
10 rock and ore trucking and deposition location. The
11 waste rock management is an essential part of the
12 mining plan.

13 The waste rock types in the appropriate deposition
14 locations are identified in the same way that gold ore
15 is identified and trucked to the mill or placed in the
16 ore stockpile. This step is crucial to the operation
17 and to the development of the open pit.

18 As mentioned, after each blast in the pit, each
19 rock type is marked clearly with ribbon and paint in
20 the pit by the geology team and the surveyor team in
21 order to delineate properly the rock type and to guide
22 the shovel operator and loader operators during the
23 excavation. Daily maps are provided to pit shift boss,
24 as presented on the right figure. The map include the
25 different types of rock in the pit identified by the
26 geology team.

1 On this slide, the figure on the left presents a
2 schematic view of the delimitation of the packet in the
3 blasted rock material in the pit. We can see the
4 specific colour of tape and paint delineating the
5 different type of material, such as ore in yellow,
6 potentially acid generating and non-acid generating in
7 green here on the figure on the -- on the left. The
8 right photo show blasted material delineated with tape
9 by the geology team to indicate the material
10 transition. We can't see very well on the figure, but
11 just the tape is located where the arrow is pointing on
12 the right figure.

13 In the addition to the waste management maps
14 provided by the engineering and the geology information
15 marked every day in the pit, the dispatch system is
16 also a control tool for the segregation,
17 transportation, and placement of the waste rock. The
18 dispatch system is used at Meadowbank and will also be
19 used at Whale Tail.

20 The information for each area ready to mine
21 prepared by the geology team is imported in the
22 dispatch system. The system and the dispatcher in
23 charge, as shown on the left picture, guide the
24 operators and ensure the ore and the waste rock
25 material are transported to the appropriate destination
26 at all times. The execution of the waste rock

1 management is a step-by-step process that includes
2 different team during the whole mining process.

3 Because of the large requirement of material for
4 construction and also the requirement for non-acid
5 generator material for the cover and also for adequate
6 disposal to meet our closure objective, waste rock
7 management is a key component of the mining planning.

8 The photo on the right on this slide shows the
9 Portage Waste Rock Storage Facility at Meadowbank. The
10 sector for potentially acid generator material and the
11 non-acid generator material, as well as for the cover
12 of non-acid generator are clearly indicated in the
13 field with markers so the operator can see during their
14 work clearly where are the different zones. Those
15 sector are also -- will also -- are also identified --
16 sorry -- in the dispatch system. Location for the
17 waste rock placement will also be clearly defined and
18 marked for the Whale Tail Project. Periodic sampling
19 of waste rock material in pile and in contact water to
20 verify and document the effectiveness of the waste rock
21 management plan is conducted at Meadowbank and will
22 also be completed at Whale Tail.

23 Agnico will follow the effective operational
24 practices adapted from Meadowbank and will adhere to
25 their management plan for the Whale Tail Project. The
26 best practices for waste rock management adopted at

1 Meadowbank will continue at the Whale Tail Project with
2 the same qualified and trained staff. Agnico also
3 proposed to update the waste rock storage facility plan
4 to outline the waste rock segregation practices.
5 Agnico believed that closure of the waste rock storage
6 facility will be controlled through on-site monitoring,
7 as well as with experience gained at Meadowbank and
8 also through adaptive management.

9 Following the technical meeting for the Whale Tail
10 Project in April, Agnico completed the thermal analysis
11 of the Whale Tail waste rock storage facility and
12 determined that a non-acid generator cover of 3.3 metre
13 thick may be required to ensure thermal and chemical
14 stability of the waste rock material at closure. As my
15 colleague Valerie mentioned previously in the
16 presentation, 0.5 metre will be added for safety for
17 the cover for a total of 3.8 metre cover thickness.

18 Agnico Eagle will construct a 4 metre non-acid
19 generator cover over the waste rock storage facility at
20 Whale Tail. The material balance indicate that there
21 is sufficient, good waste rock material to complete the
22 cover. Also, the waste rock management, including the
23 segregation protocol as presented in the previous
24 slide, as well as the mitigation strategy, were
25 reviewed and discussed with Indigenous and Northern
26 Affairs Canada, Environment Canada, and the Kivalliq

1 Inuit Association. Finally, Agnico has performed
2 sensitivity analyses model to consider the worst-case
3 scenarios for waste rock segregation, including the
4 waste rock material coming from the north wall of the
5 Whale Tail Pit.

6 Finally, regarding the water quality prediction
7 for the Whale Tail Pit Project, modelling predict that
8 arsenic and phosphorous treatment may be required
9 during operation. With treatment of arsenic to 0.1
10 milligrams per litre, the base-case model predict that
11 concentration at downstream location are below Canadian
12 Environmental Quality Guideline for all applicable
13 parameter and below site-specific water quality
14 objective for arsenic are met at all stage of
15 operation, closure and post-closure. Post-closure
16 base-case prediction indicate that all applicable
17 dissolve and total perimeter concentration are
18 predicted to meet Canadian Environmental Quality
19 Guideline, and arsenic is predicted to meet the
20 site-specific water objective. Additional information
21 on water quality prediction will be presented by my
22 colleague in the next presentation.

23 This concludes the presentation. Thank you.

24 Mat'na.

25 THE CHAIR: Thank you. So we'll open for
26 questions or concerns.

1 So we'll start with the Kivalliq Inuit
2 Association.

3 MR. MANZO: Thank you, Mr. Chairman. Luis
4 Manzo, director of land, Kivalliq Inuit Association.

5 No questions at this time.

6 THE CHAIR: Thank you.

7 INAC, do you have questions, concerns?

8 MS. COSTELLO: Indigenous and Northern
9 Affairs, Karen Costello.

10 We have no questions at this time. Some of the
11 statements that Agnico has brought forward in this
12 section we will speak to in our presentation. Thank
13 you, Mr. Chair.

14 THE CHAIR: Thank you.

15 Then Environment and Climate Change Canada.

16 MS. PINTO: Thank you, Mr. Chair. Melissa
17 Pinto, Environment and Climate Change Canada.

18 We have no questions at this time.

19 THE CHAIR: Thank you.

20 Next, DFO.

21 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
22 D'Aguiar with Fisheries and Oceans Canada.

23 We have no questions at this time.

24 Thank you.

25 THE CHAIR: Thank you.

26 Is there questions or concerns from public? Is

1 there concerns from public? There's none?

2 Okay. DFO -- sorry. NWB staff.

3 Nunavut Water Board Staff Questions Agnico Eagle Mines
4 Limited

5 MR. KHARATYAN: Thank you, Mr. Chair. Karen
6 Kharatyan, Nunavut Water Board staff.

7 Can you go back to Slide 13, please. Couple
8 questions. Yes, this one. Just to confirm, what is
9 the meaning or definition of "post-construction for
10 tailings storage facility"?

11 MR. VANENGEN: Mr. Chair. Ryan Vanengen from
12 Agnico Eagle.

13 What's meant by the post-construction discharges,
14 is -- we call the -- when we're planning our -- the
15 construction or closure of our tailings storage
16 facility, we refer to it as the construction of our
17 tailings storage facility cap. So once we've completed
18 the cover design for the closure, we'll achieve -- as
19 the slide says, we'll achieve discharge criteria.

20 Thank you.

21 MR. KHARATYAN: Mr. Chair. Karen Kharatyan,
22 Water Board staff.

23 Follow-up: We know that, with the Whale Tail Pit,
24 the arsenic loading will be much more than in
25 Meadowbank. So from my memory -- I think, based on my
26 memory, CCME doesn't have criteria for arsenic. Maybe

1 we should follow up -- have a follow-up question with
2 Environment and Climate Change Canada.

3 So if CCME doesn't have data for arsenic, so
4 site-specific water quality criteria should be
5 established.

6 MR. VANENGEN: Mr. Chair. The Nunavut Water
7 Board is correct. We would look into defining that
8 when we move into the closure phase, and we would
9 continue to work with the Nunavut Water Board to
10 establish site-specific or appropriate water quality
11 criteria based on the information that we have, and
12 that would be determined in the closure phase and as we
13 lead towards a closure, which would require a new
14 licence at that point in time.

15 Mat'na.

16 MR. KHARATYAN: Mr. Chair. Karen Kharatyan,
17 Water Board staff.

18 One more question: With the thermal licence
19 requested 2025 then updated to 2026, which is during
20 the closure phase now -- based on the information
21 provided, now it's the closure phase. And I remember
22 that it was stated during technical meeting that before
23 post-closure now any direct discharge will happen from
24 waste rock storage facility sump can be -- until -- or
25 during the term of this licence, no direct discharge
26 into environment from waste rock storage facility sump

1 will happen.

2 MR. VANENGEN: Ryan Vanengen from Agnico
3 Eagle. Mr. Board -- Mr. Chairman and Board Members.

4 What you're referring to, Karen Kharatyan, is the
5 sump downstream of our waste rock facility at Whale
6 Tail. And you're absolutely correct; the water that we
7 would -- that would collect in that sump during closure
8 up until 2026 will not be discharged into the
9 environment. Rather, it will be directed -- treated,
10 if needed, and directed to the pit area that's going to
11 be re-flooded during that period of time, and we would
12 continue to monitor that effluent -- or that -- not
13 effluent. It's the water pump from the sump into the
14 pit. We'll continue to monitor that. As well as then
15 its assimilation with the pit water and the area in the
16 north basin area that we're re-flooding.

17 MR. KHARATYAN: Mr. Chair. Karen Kharatyan,
18 Water Board staff.

19 Into pit or into attenuation pond?

20 MR. VANENGEN: Ryan Vanengen from Agnico
21 Eagle.

22 The -- it would be initially -- it would -- in
23 2026, the water levels would be the same. So that --
24 the attenuation pond and the water within the pit area
25 would all be considered one waterbody at that point,
26 and, therefore, it would be considered the north Whale

1 Tail lake basin area. The details before 2026, we have
2 to work out in terms of the sequencing of that -- where
3 the water would go. But, certainly, our -- you know,
4 it would be -- it would be our goal to -- to flood that
5 area as rapidly as possible, so any water would go just
6 into the either the pit or the attenuation pond, and
7 those details we'll work out with the Nunavut Water
8 Board at that time.

9 THE CHAIR: Thank you.

10 MR. KHARATYAN: Thank you, Mr. Chair. I may
11 have a follow-up question later on. Karen Kharatyan,
12 Water Board.

13 THE CHAIR: Thank you.

14 Stephanie, go ahead.

15 MS. AUTUT: Thank you, Mr. Chair.

16 Stephanie Autut, Nunavut Water Board.

17 If you could just refer to the cover slide of this
18 presentation, please. I just need to seek some
19 clarification for the purposes of the exhibit that's
20 been filed. Okay.

21 So I just -- if you could confirm for the record
22 for the purposes of the exhibits that this cover slide
23 is not the slide that was provided electronically in a
24 presentation to the Board, as well as Slide Number 8, I
25 believe it was, which was in the -- in this
26 presentation but not filed electronically with the

1 Board that you skipped over in your presentation.
2 We're just looking for clarification that nothing else
3 in the presentation has changed.

4 THE CHAIR: Applicant, go ahead.

5 MR. QUESNEL: Thank you, Mr. Chair. Jamie
6 Quesnel.

7 Yeah, with this presentation, what you see on the
8 screen right now is not correct. It's the handouts and
9 electronic versions that we provided were Part 3, Waste
10 Disposal and Management. And also in this presentation
11 that we went through, Slide 8, we did skip that. We
12 did not talk about that slide. So all the other slides
13 in the presentation are correct based on the handouts
14 we have that we provided to the Board and also
15 electronic version that we provided to the Board
16 earlier. So apologize for that. Hopefully that
17 answers your question.

18 MS. AUTUT: Okay. Thank you for that
19 clarification. And for the purposes of the record, the
20 exhibit will stand.

21 Thank you.

22 THE CHAIR: Thank you.

23 Karen.

24 MR. KHARATYAN: Mr. Chair. Karen Kharatyan,
25 Water Board.

26 As a follow-up, yes, I am a little bit confused

1 because, from my understanding, the waste rock storage
2 facility seepage, et cetera, from sump was going to
3 attenuation pond. Now, if by 2026 this attenuation
4 pond may be flooded already by pit, how this will be
5 treated, if needed, by that time?

6 THE CHAIR: Applicant.

7 MR. GROLEAU: Michel Groleau, Agnico Eagle.

8 Mr. Chair.

9 To answer your question, the water that will be
10 stored in that waste rock pump will be -- before -- be
11 transferred to the pit or into the attenuation pond
12 during the closure process to make sure it's meeting
13 the criteria of CCME or site-specific before dike
14 breaching. So at this point, there will be no more
15 attenuation pond. We'll get into more details about
16 that in the next presentation about water management.

17 MR. KHARATYAN: Thank you.

18 THE CHAIR: Thank you.

19 And then, Panel members, do you have questions?

20 No questions.

21 So, applicant, you can continue with your next
22 presentation. Go ahead, applicants.

23 Presentation by Agnico Eagle Mines Limited (Water Use
24 and Management)

25 MR. VANENGEN: Thank you, Mr. Chair and Board
26 members.

1 For the next -- next hour, because of its
2 importance for the Water Board, we're going to be
3 presenting on our water use and water management. So
4 myself, Ryan Vanengen, and Valerie Bertrand, my
5 colleague, will be presenting. The presentation
6 focuses on issues that were highlighted during the
7 review process, and all issues have since been resolved
8 with intervenors.

9 So for the next hour, we're going to be presenting
10 on the water management, which includes aspects of
11 contact water, groundwater management, fresh water
12 diversion, management of mine water, water quality, and
13 monitoring of -- and its effects on the receiving
14 environment.

15 Water management plans have been adapted and will
16 be -- will continue to adapt with new information that
17 comes in. We'll present on that. And we'll also
18 present a few slides on our fisheries offset planning
19 and fish-out as well.

20 So, overall, I'm sure the Board members have seen
21 this on other projects as well, and the Whale Tail Pit
22 is no different. The overall objective for mine site
23 water management is to reduce the amount of contact
24 water to divert non-contact water away from the mine
25 site area and to limit the quantity of fresh water use.
26 This will be explained in the next few slides with my

1 colleague Valerie.

2 So as presented by Jamie Quesnel in the first set
3 of slides, we have our area around the mine site here,
4 the Whale Tail Pit site, and all of the water within
5 this area is controlled. And we control -- and we call
6 that area "the contact water area". It's controlled
7 through the sump here from our waste rock pile. That
8 water reports to the attenuation pond. The water from
9 our camp facilities is treated at the source. The
10 sewage is treated. And then the water is sent to the
11 attenuation pond. And any sumps in our pit -- all that
12 water is reports in the pit, is sent to the attenuation
13 pond and then treated as necessary and discharged into
14 Mammoth Lake, down here.

15 The ponds and water management systems have been
16 designed to hold all contact waters, and this table
17 presents the mean annual volume of water that are
18 predicted to be managed within the Whale Tail Pit site
19 and the water that will be managed from the site on an
20 average year. You can see all of these volumes here.
21 I've also provided printed and translated copies --
22 that include translated copies to board members and the
23 translators as well of the tables that are in here.

24 To ensure the protection of the receiving
25 environment, we will be using a series of dikes that
26 really build on our Meadowbank experience. We have

1 dikes at Meadowbank that contain, as I described, the
2 surface water and make sure that the surface water of
3 the mine site doesn't interact with the clean receiving
4 environment. Examples of those dikes are -- is the
5 south camp dike, as well as the Vault dike. And at
6 Whale Tail Pit, we're going to construct a dike very
7 similar to those structures, and it's called the
8 Mammoth dike, and I'll just go back to this slide here.
9 It's this dike here, the Mammoth dike, will be similar
10 in its design and construction methodology to these
11 dikes here that are illustrated and taken from photos
12 of our Meadowbank site.

13 The Whale Tail dike -- I'll go back to this slide
14 as well, and my colleague Jamie presented it in his
15 earlier slide deck, the Whale Tail dike located here is
16 going to be constructed very similar to the dikes that
17 we've already constructed at Meadowbank. So the
18 Bay Goose dike and also the east dike, which separates
19 right now the Meadowbank pit -- so the Goose pit
20 here -- from the receiving environment. So this is
21 what essentially we're proposing to do for the Whale
22 Tail dike. And you can see the design here is very
23 similar in its design to the Bay Goose dike at
24 Meadowbank, as well as the east dike at Meadowbank.

25 Using the lessons learned from -- from the
26 construction at Meadowbank, we will manage and control

1 our total suspended solids. We will employ mitigation
2 steps, such as turbidity curtain installation; you can
3 see the turbidity curtains here in the photo. We will
4 use adaptive management steps, if there are indications
5 during construction that we are exceeding our total
6 suspended solids, water quality triggers during
7 construction, and if water quality is below the trigger
8 during dewatering, we'll manage our water by
9 discharging it into the south basin, and during
10 dewatering, if we don't meet our limits or triggers are
11 exceeded, we'll discharge treated water into Mammoth
12 through our Mammoth diffuser. We will meet our licence
13 criteria during dike construction and dewatering of the
14 north basin.

15 We will also use the experience of constructing
16 diversion channels that my colleague Michel Groleau
17 presented around the -- our facilities at Meadowbank.
18 We'll use the diversion channels and ditches, that
19 experience, to also construct another diversion channel
20 located here, which will divert the back-flooded area
21 of South Whale Tail Lake through a diversion channel
22 and into Mammoth Lake during operations, and I'll
23 describe that in the next few slides as well.

24 We're going to use our experience from Meadowbank,
25 which tells us that we should take a simple design of a
26 two-to-one slope for this channel to connect Lake A20

1 to A45. We'll excavate an armour to ensure erosion
2 protection.

3 This figure here or schematic shows the Whale Tail
4 dike located here and the project during operations.
5 So in 2020, the water will be flooded to this elevation
6 and will spill into -- it's A45, Water Body A45, and
7 then be directed to the Mammoth Lake. Historically,
8 the water -- what we found through baseline studies is
9 that the water flows in this direction, historically,
10 as shown in that digital rendering, flows through the
11 north basin into the Mammoth channel and through
12 Mammoth. And by building the Whale Tail dike, we're
13 raising the water level and diverting the water into
14 the south of Mammoth Lake. What this means is that the
15 water level natural elevation which right now is at
16 152.5 metres above sea level will be raised by 3.5
17 metres to an elevation of 156 metres above sea level.
18 This will increase the area of the lake -- of the water
19 bodies here by 40 percent, which is from 369 hectares
20 to 153 hectares. This will take a few years to raise
21 that water level naturally, and by July 2020, the water
22 will spill into our -- into our constructed diversion
23 channel and into Mammoth.

24 So you can see from this schematic the Whale Tail
25 dike will be constructed in 2018. We'll begin raising
26 the water level in 2019, which is represented by this

1 yellow line here. And by 2020, the water level will
2 raise in July, approximately July 2020, will raise such
3 that the water will spill into the constructed
4 diversion channel through the Pond A45 and into Mammoth
5 Lake.

6 The Whale Tail Lake south basin will remain
7 flooded for a minimum of two years, but we'll continue
8 to work with the Nunavut Water Board and, in
9 particular, INAC and the KivIA as it relates to
10 closure. The length of time the flooding will be
11 maintained will be dependent on closure monitoring of
12 the pit, which is in this area. It'll also be
13 determined through monitoring during the operations of
14 the inflows. We'll understand the inflows. And,
15 ultimately, we'll make decisions on the timing of the
16 reflooding and how the system will look during closure.
17 And my colleague Erika will provide a bit more
18 information on timelines in the next deck as well
19 related to closure.

20 So this table here really just summarizes what I
21 just presented in words or -- and won't spend too much
22 time on this.

23 This was a table that was requested by the Nunavut
24 Water Board during the prehearing conference related to
25 the water-taking in Nemo Lake, and what this tells us
26 is that the natural inflows into Nemo Lake can sustain

1 our water-taking proposal. So the inflows are
2 represented here, and our water-taking is here. And
3 what it shows is that we're well within -- we don't
4 expect any changes in water level in Nemo Lake or
5 changes in the system as a result of water-taking from
6 Nemo.

7 So in the next few slides, these are going through
8 the details that have been presented in the May 25th
9 submission to the Nunavut Water Board related to water
10 use. And what this -- just have to look at this. What
11 this is demonstrating is our water use requirements
12 during the operation of the Whale Tail facilities. So
13 we're required to take water from Nemo Lake in the
14 beginning stages of the mine operations through 2022,
15 and right now our projections are -- and this will be
16 based on water quality data, as well as waste rock
17 monitoring. We will determine our closure requirements
18 in 2022 until 2029, as described by Jamie earlier, and
19 will be described a little bit further in detail by
20 Erika. So all of these tables here have already been
21 provided to the Nunavut Water Board in that submission
22 in May.

23 In order to mill the ore at the Whale Tail Pit, we
24 required continued water use for milling at the
25 Meadowbank facilities, and that was described by Jamie,
26 as well as described a little bit by Michel. And our

1 current Type A water licence at Meadowbank requires the
2 following volumes, and as per our letter on May 25th,
3 we're not requesting any change in water use. And
4 we'll work within the water use that's already approved
5 by the Nunavut Water Board under our Type A
6 2AM-MEA1525.

7 So now we've gone through our water use, and I've
8 tried to explain our water use for our project. And
9 now we're back, kind of, thinking about some of the
10 water management at Whale Tail Pit. And what's really
11 important to understand in terms of our water
12 management is that we've gone through a thorough,
13 what's called "multiple accounts analysis" to determine
14 how best we can manage our water at Whale Tail. What
15 we did was we -- we analyzed four different options,
16 and the options are as follows: The first option that
17 we analyzed was simply creating a channel directly from
18 Whale Tail south basin to Mammoth. We also evaluated
19 an option of pumping, actively pumping, from the Whale
20 Tail south basin into Mammoth. We also looked at
21 creating a larger dike and back flooding so that the
22 water would spill into a different watershed to the
23 south. And then, ultimately, we -- we selected the
24 other option that was analyzed, which was Option 4,
25 which I described earlier, which turned out to be,
26 according to the multiple accounts analysis, the best

1 option for water management at our Whale Tail Project.
2 That document has been provided to the Nunavut Water
3 Board.

4 Now, in order to -- as described in the earlier
5 slides, we'll be dewatering the north basin by moving
6 water from the north basin into the south basin. But
7 before we dewater this area, we will complete a
8 fish-out, and that's something that Agnico Eagle has
9 quite a bit experience at through our Meadowbank
10 project. And, certainly, given the importance of fish
11 to the local Inuit, we have developed specific
12 fisheries offsetting plans in fish-outs. We've worked
13 with the Fisheries and Oceans and the Kivalliq Inuit
14 Association to develop these plans and worked closely,
15 especially the last two fish-outs at Meadowbank, we
16 worked very closely with the Hunting and Trapping
17 Organization to enhance and improve our fish-out
18 practices.

19 Based on community feedback and in following
20 Department of Fisheries guidance for fish-outs, we
21 believe our plans will offset for the loss of fish
22 habitat during operations and enclosure. A fish-out is
23 planned to begin in the open water season of 2018 when
24 the dike will be constructed. So as soon as the dike
25 platform is constructed, we'll begin moving fish from
26 the north basin into the south basin. And we will use

1 the -- the success of our past to guide some of our
2 fish-out practices.

3 The updated fisheries offsetting plan will include
4 on-site habitat creation, which means that we'll create
5 new habitat within the north basin. We're also working
6 with Fisheries and Oceans to understand and improve the
7 Mammoth channel. So we'll raise the water levels so
8 that we can enhance fish movement between Whale Tail
9 Lake and Mammoth Lake. And we're also working with
10 Fisheries and Oceans and the Kivalliq Inuit Association
11 and the hamlet on complementary measures that will be
12 off -- that will offset the loss of the fish habitat
13 due to the pit being in that north basin.

14 Agnico Eagle is committed to the concepts
15 presented in the offsetting plan and are confident the
16 loss of fish habitat due to the Whale Tail Pit
17 operations is offset. And Agnico Eagle will continue
18 to work with Fisheries and Oceans and the Kivalliq
19 Inuit Association to finalize the offsetting plan
20 during the authorization phase of the project.

21 More specifically, we will work with Fisheries and
22 Oceans -- we've worked with Fisheries and Oceans to --
23 to improve our methods for calculating the fisheries
24 losses, and these -- these methods have been reviewed
25 and endorsed by experts, including Cam Portt and
26 Dr. Ken Minns. We have adjusted our methods in

1 offsetting calculations based on Fisheries and Oceans'
2 feedback, and that includes -- we've adjusted our equal
3 weights for species.

4 Habitat losses due to enrichment were examined
5 after water quality predictions were updated to account
6 for treatment and habitat losses, and we don't expect
7 any habitat losses associated with the downstream
8 environment. And as I mentioned, we also have a series
9 of complementary measures that we're working with
10 Fisheries and Oceans and the Kivalliq Inuit Association
11 and the hamlet on, and those would include research
12 projects with the University of Manitoba,
13 sustainability projects that are intended to provide
14 direct benefits to the community of Baker Lake. And,
15 in fact, for the past few years, we've heard concerns
16 from the hamlet regarding the water quality of Airplane
17 Lake, which is downstream of their sewage treatment
18 facilities. We've heard those concerns also as it
19 relates to drinking water in Baker Lake itself. And as
20 a result, Agnico Eagle is very committed to enhancing
21 and remediating that sewage treatment plant. And, in
22 fact, yesterday my colleague Michel Groleau and I and a
23 series -- and a number of researchers met with the
24 hamlet to discuss those concepts and to develop studies
25 so that we can enhance and remediate the sewage
26 treatment in Baker Lake. And, certainly, especially

1 after the meeting yesterday, we're very excited about
2 this opportunity. And the hamlet is very supportive of
3 making these changes as it relates to improving the
4 downstream fisheries, as well as the downstream water
5 quality.

6 And, lastly, we will work in partnership with the
7 Kivalliq Inuit Association, Fisheries and Oceans, and
8 other researchers, including the Arctic Research
9 Foundation, to continue to ensure the protection of
10 Baker Lake and collect additional monitoring data
11 associated with that.

12 Our monitoring for fisheries will include water
13 quality monitoring. We will conduct monthly water
14 quality monitoring around the Whale Tail Pit site and
15 in the pit during flooding and closure. And a
16 commitment made during the review process was also to
17 conduct stratified water quality monitoring in Whale
18 Tail Lake, Mammoth Lake, Nemo Lake, and as part of the
19 core -- this will be part of the core receiving
20 environmental monitoring program.

21 As a result, we proposed a number of terms and
22 conditions to meet some of the comments that we
23 received from Fisheries and Oceans, and that includes
24 we will continue to work with the Department of
25 Fisheries and Oceans and the Kivalliq Inuit Association
26 to finalize the offsetting plan for approval prior to

1 construction, and we'll provide contingency offsetting
2 to -- if unable to demonstrate sustainable fish habitat
3 in post-closure.

4 Ultimately, what that means, and Valerie is going
5 to provide a bit more information on that, is that
6 through monitoring our site, we'll use the data that
7 we've collected in baselines to inform our modelling,
8 and any monitoring that we collect during operations,
9 we'll continuously update our modelling and evaluation,
10 which then influences our planning. And then we'll be
11 able to adapt. And that was described very well by my
12 colleagues Erika, Valerie, and Michel on how we
13 adaptively manage for waste, and we'll continue to do
14 that through the operations at the Whale Tail Pit.

15 And now I'm going to pass it to my colleague
16 Valerie to -- for the next half hour, 20 minutes.

17 Mat'na.

18 MS. BERTRAND: Good afternoon, Mr. Chair,
19 Board members. My name is Valerie Bertrand on behalf
20 of Agnico Eagle.

21 So the next few slides -- number of slides will
22 talk about water quality and the steps that were taken
23 to estimate what that future water quality might be and
24 what control mechanisms would be appropriate to ensure
25 no effects to the receiving environment.

26 You've seen this before, and it's to reiterate the

1 point that the pit rock management plan -- as we talked
2 earlier, the waste rock can have some effect on water
3 quality. So the pit rock management plan and the rock
4 testing plan, previously explained by Erika, are
5 designed to successfully execute waste rock segregation
6 and implement progressive closure during mining so that
7 the effects of the closure plan can be monitored, and
8 you can verify, get satisfied that it's going according
9 to plan, that things are going well.

10 A very similar plan to what was explained has been
11 really successful at the Meadowbank mine. This is why
12 we feel that this plan will be successful at Whale
13 Tail, because of the similarities between the two
14 sites.

15 In addition to that, university research is
16 currently ongoing on the cover design and on freeze
17 back -- the rate at which freezing happens, the
18 intensity of freezing. This information being
19 collected now at Meadowbank will certainly inform the
20 design at Whale Tail. So even if Whale Tail life is
21 short, there is a history of information that will be
22 used to predict what will happen and to guide designs
23 in Whale Tail so that the closure scenario can be
24 successful and have minimal impacts on the receiving
25 water quality.

26 So these aspects, along with a great deal of

1 commitments that were made in response to intervenor
2 comments and requests, have satisfied the agencies.

3 Now, on water management. This, of course, is an
4 important issue to avoid long-term effects to
5 downstream lakes from the effluent discharge during
6 operation and after operation to determine what kind of
7 water quality is going to happen in the flooded open
8 pit and to make sure that the dikes can be breached and
9 that post-closure can be initiated.

10 So an estimate of the possible future water
11 quality was completed to identify the potential
12 effects, as was done for Meadowbank project for
13 approval a number of years ago. So both at Meadowbank
14 and at Whale Tail, water quality models are completed
15 to see what the potential impacts could be. In fact,
16 both of these models in Meadowbank and Whale Tail were
17 completed by the same team. The Whale Tail Project
18 model is based on site-specific information and very
19 conservative assumptions on what will happen at site;
20 basically, the same initial assumptions that were used
21 for Meadowbank.

22 The predictions suggest that on a worst case or on
23 a worst-case scenario, arsenic and phosphorous will
24 require treatment prior to discharge. So as a result,
25 Agnico Eagle has committed to treating arsenic and
26 phosphorous prior to discharge during operation.

1 Additional commitments have been made to ensure that
2 long-term water quality objectives are met. So far,
3 this, along with these commitments, have satisfied the
4 intervenors.

5 The model predicts that after treatment, when
6 concentrations are lowered, the effluent into Mammoth
7 Lake during operation will meet the environmental
8 quality criteria that have been agreed to with
9 Environment Canada. It will also meet the federal
10 water quality guidelines that apply to the receiving
11 water body, as well as the site-specific arsenic
12 criteria that was developed for the site.

13 Now, the basis for assessing whether water quality
14 control was necessary, as I said, is the predictive
15 model. Water quality predictions or assessment of what
16 water quality is likely going to be was made at
17 locations where water will accumulate on-site. So
18 these places include -- we estimated water quality
19 within the open pit where water just accumulates in the
20 pit and needs to be pumped. We estimated it here in
21 the attenuation pond. The attenuation pond collects
22 water from all the other sites before it is treated and
23 discharged. We estimated the water quality at the
24 waste rock storage facility and, of course, at the
25 effluent discharge point and within this lake, Mammoth
26 Lake, and in the downstream lakes.

1 At the downstream lakes -- excuse me. I'm having
2 trouble with this. So this is the mine site, and we
3 estimated water quality all along the flow path of
4 water all the way down to this large lake called
5 "Downstream Lake". So we have water quality estimates
6 of the effluent, and then in each of these lakes, as it
7 flows down. At this point here, the water actually
8 flows in two paths -- on two paths. This way, to Node
9 2, we call it "Node 2", to differentiate it from this
10 way, to Node 1. But it's the same lake.

11 So later on I'll present some results, and you'll
12 see water quality at different lakes. This is what it
13 represents. It represents at the source and then
14 farther down the lake -- the chain of lakes.

15 The first point of contact of mine water into
16 these downstream lakes is at Mammoth Lake. The
17 water -- after treatment from the attenuation pond, the
18 water gets discharged here in this basin of Mammoth
19 Lake. We call that "the effluent mixing zone". So
20 regulations are such that the water quality at the pipe
21 is regulated. It must meet certain criteria. And then
22 there's other criteria for water quality at the edge of
23 the mixing zone into the -- into the lake.

24 So when we perform water quality models, the
25 output that we get is something like this. It's
26 time -- in time, and then these are concentration.

1 Concentration is, you know, from very low
2 concentrations to quite high concentrations, and these
3 dotted lines represent criteria. So the metal mine
4 effluent criteria is one of them. The Portage water
5 licence criteria. The -- and then the site-specific
6 water quality objective, down here, criteria that's for
7 the receiving environment after the discharge and once
8 it's mixed into Mammoth Lake.

9 This particular graph is for arsenic. So we'll
10 focus the discussion on arsenic and phosphorous
11 because, as you'll recall from the earlier
12 presentation, all the other metals are really low.
13 They meet criteria. Arsenic requires treatment, and,
14 therefore, we focused on arsenic.

15 The results here show -- so these results -- each
16 of the lines represent a different area. This area is
17 the pit sump. This area is the water quality coming
18 from the rock pile. And these are the downstream
19 lakes. So we can see that the water needs to be
20 treated before it is discharged. We can see that the
21 rock storage facility is just about at the effluent
22 criteria, and the downstream lakes do meet the
23 site-specific water quality objectives.

24 This is another way to look at results, where
25 this -- imagine this is distance from the discharge
26 point and at each of the lakes that you saw earlier

1 that were circled. So this is a discharge point, at
2 the effluent. It's going to be meeting the effluent
3 criteria. And then as soon as you're out of the mixing
4 zone, it meets the water quality -- the site-specific
5 water quality objectives, and then it gets diluted the
6 farther away you are from the mine site. So these
7 results tell us the water quality will be fine in the
8 receiving environment and downstream of it.

9 That was the base case of our model. Then we
10 presented -- the results were presented to the
11 intervenors. Intervenors had a number of questions.
12 There was a lot of interaction with Environment Canada,
13 with Indigenous and Northern Affairs, with the Kivalliq
14 Inuit Association. And the model was tested to see
15 what would happen under various scenarios that are not
16 necessarily the scenarios that will happen but just to
17 test what if this was to happen. What if a worst-case
18 condition was to happen? So we did these tests. And a
19 number of the following slides speak to that, those
20 scenarios that are hypothetical, that may or may not
21 happen.

22 So these outline the sensitivity scenarios that we
23 did just over the summer after the prehearing of April.
24 So those scenarios include -- the first scenario is
25 what if the waste rock storage facility does not get
26 treated and discharges directly to Mammoth Lake after

1 closure, once the dikes are breached, it goes directly
2 into Mammoth Lake. Will that affect water quality of
3 the receiving environment?

4 The second scenario was what if some of that rock
5 that releases arsenic gets mixed in the cover? You
6 heard earlier how Agnico has a good plan to really
7 differentiate the rock that needs to be managed and the
8 rock that is good and will be used for cover. Well,
9 what if there's some of this bad rock that gets mixed
10 in with the cover? What does that do?

11 And the third scenario is the pushback. So
12 there's the pit wall -- there's the pit that you saw on
13 the dotted line, earlier this morning, and there was
14 the rock there that was leaching. And the proposal is
15 to push that pit wall north and remove that rock. What
16 would happen then?

17 So this is the result of the first scenario. The
18 first sensitivity analysis on allowing waste rock
19 contact water to be just released into Mammoth Lake
20 without handling it, without treating it. We expect
21 that the water quality -- so the results show this red
22 line that, you know, water quality can be -- the water
23 quality can be -- will have higher arsenic than if you
24 treat it. Except of interest -- of most interest is
25 that the downstream lake's post-closure still need
26 site-specific water quality objectives.

1 So in that scenario, if you don't -- if the water
2 quality of that pond is not treated, the effect will be
3 minimal to the downstream lakes. So the risk to water
4 quality of releasing non-treated contact water is low,
5 whether you have 2 metre or a 4 metre active thaw depth
6 in the cover or in the waste rock.

7 Now the second scenario. The second scenario was
8 to see the effect of a cover not being perfectly clean.
9 So the results of that are here -- are described here.
10 If some of that leaching material ends up in the cover,
11 this will indeed bring arsenic concentrations higher.
12 These show how high, if there's 2 percent -- an
13 estimated 2 percent of that leaching rock in the cover
14 or 5 percent of that leaching rock. The concentrations
15 definitely are higher, and there's more arsenic in the
16 receiving environment.

17 In this unlikely scenario where material is not
18 properly controlled and higher leaching waste rock gets
19 mixed into the cover, they said there's a possibility
20 that waste rock contact water will be affected. This
21 is why -- this is the reason why a prescriptive waste
22 rock management plan has been set up, has been
23 implemented -- or will be implemented at Whale Tail, to
24 ensure that rock is placed at the correct location
25 according to its end use. This plan's an important
26 component of the successful operation of the Whale Tail

1 Project. It has been effective at Meadowbank, as
2 described by Erika.

3 In addition, we know that the model is very
4 conservative and that should even a little bit -- we
5 think that these numbers are certainly higher than what
6 we would expect in reality given the site conditions
7 that are quite different from the conditions in the
8 laboratory where we're trying to force release of
9 metals.

10 So what is the risk associated with this? Well,
11 we're confident that the risk of improper placement at
12 site is relatively low, and we're confident that the
13 model is very conservative and that the effect of a
14 little bit of mixture will be -- will not be of great
15 importance to water quality. Agnico Eagle has
16 extensive experience in the arctic at the Meadowbank
17 mine, which has somewhat similar waste rock. In
18 addition, ongoing university research right now on the
19 freeze back and the cover performance will be applied
20 at Whale Tail and water management -- you know,
21 prescriptions of the water management plan will help to
22 see that this is being done carefully.

23 The third sensitivity analysis was the effects of
24 the pushback. Recall that this scenario was discussed
25 at the prehearing conference as a contingency measure
26 to improve water quality in the open pit. The scenario

1 was modelled at the request of intervenors and to see
2 what the water quality would be like. So the scenario
3 considers two things: The exposure of a different rock
4 in the open pit, so what that does to the pit water
5 quality; and the placement of this additional rock on
6 the rock storage facility. Remember that there's
7 already going to be some of that in the waste rock.
8 We're just putting more on to the waste rock pile.
9 Okay.

10 So the results suggest that if you remove that
11 rock from the open pit, there's going to be an
12 improvement, actually, in the water quality of the open
13 pit, because there is less material, less bad material,
14 in the open pit. And it actually also improves the
15 water quality of the rock storage facility because
16 there's not that much in the open pit. It's just a
17 thin layer. It gets removed. And because of the pit's
18 slope requirements, they have to remove more rock
19 behind it. So in proportion, you end up having less
20 proportion of that material in the rock pile. So the
21 water quality has actually improved.

22 So there's a 20 percent improvement, and this is
23 the testament of -- you know, of the output of the
24 model. The improvement really of the rock storage
25 facility is seen during operation, predicted during
26 operation, not at closure, because at closure, it's a

1 cover. Regardless of what's underneath, there's the
2 same cover. As I said, the removal of this -- the
3 pushback of this north wall improves the water quality
4 in the pit by about the same, 20 percent, so 20 percent
5 less arsenic. And, consequently, of course, if the pit
6 lake is better quality, then the downstream receiving
7 lakes will also be better quality. The flooded pit
8 lake, the water quality of that pit lake is expected to
9 meet site-specific water quality objectives for arsenic
10 and to meet the federal criteria for the protection of
11 aquatic life under fully mixed conditions.

12 Within that pushback, there's another kind of
13 subscenario that was tested to -- which is a
14 hypothetical but unlikely diffusion scenario where
15 arsenic would actually come from the rock, like, just
16 slowly come out from the rock. This scenario yielded
17 elevated concentration of arsenic in the flooded pit
18 lake post-closure. However, after collecting more data
19 on hydrogeology, this scenario was established early
20 on, before obtaining a bit more information on
21 hydrogeology and groundwater flow. Now, after
22 collecting this information, we are confident that this
23 scenario will not occur. We believe that the risk of
24 occurrence of the sensitivity scenario is low, and we
25 are confident that the plans submitted to the Water
26 Board will be effective in preventing negative effects

1 to water quality. Based on the current understanding
2 of local groundwater regime, the flooded pit will act
3 as a groundwater recharge zone post-closure. As a
4 result, diffusion is not expected to result in an
5 accumulation of significant amount of arsenic in the
6 pit lake over time.

7 So the next few slides explain why. This is a
8 schematic here of the groundwater flow regime at the
9 Whale Tail Project post-closure, when the pit is fully
10 flooded. So this is the pit here. Imagine a section,
11 a long section, along the Whale Tail Lake, the top or
12 the left here is where the open pit will be, and at the
13 bottom is the south portion, the south basin, of Whale
14 Tail Lake. So the groundwater flow direction is
15 dictated by groundwater -- or lake water levels around
16 the -- around Whale Tail Lake. The arrows here show
17 expected groundwater flow direction. This is
18 permafrost here.

19 So post-closure, when it's fully flooded, the lake
20 water elevations around the Whale Tail Lake are such
21 that we expect that groundwater flow will go down
22 before it meets the -- the regional groundwater level.
23 This here is a cross-section, if you look at down here.
24 This is -- these are two cross-sections. So this
25 cross-section here is through the open pit, and this
26 one is the open pit and the south portion of Whale

1 Tail. This is the berm here, this berm. Okay. It
2 shows the anticipated groundwater regime defined from
3 baseline lake level, the groundwater from -- also from
4 groundwater and permafrost information that was
5 collected -- that have been collected for a few years
6 now. It shows the model domains as they relate to the
7 pit and the Whale Tail Lake post-closure. Arrows show
8 the direction of groundwater flow under the pit and
9 under the lake, derived from available baseline data.

10 So with this information, Agnico Eagle is
11 confident, we're confident, that the scenario of this
12 diffusion of arsenic and groundwater flow, you know, is
13 unlikely -- highly unlikely, to occur. Notwithstanding
14 this, Agnico has committed to collecting additional
15 hydrogeological information, permafrost information,
16 and site water quality data during operation to
17 validate this assumption and validate the results
18 should the project be approved. This information,
19 together with commitments on water quality and
20 groundwater flow monitoring, has satisfied the
21 intervenors.

22 A few more to talk about the model, because of its
23 importance.

24 An example of how the water quality model that was
25 built for this is conservative and it is likely to
26 overestimate water quality is illustrated in this graph

1 here. This graph was -- is the original predictions
2 from the Vault area. So in 2008, sitting in front of
3 the Board, again, we produced these concentrations,
4 these -- these results, based on our water quality
5 model. So I'm having trouble with the pointer here.

6 So these lines show the kind of level of
7 prediction. There were many models, but this refers
8 to -- for the intervenors' reference, this refers to a
9 model that used laboratory information, not site
10 information. We used laboratory information for the
11 Whale Tail model. So these are what was predicted, and
12 then these dots are what was actually measured in 2015
13 at Vault. And we can see that the measurements are
14 really very low. I mean, it's here, but it's less than
15 what the laboratory could measure. So we -- from this,
16 it supports our expectation that the model is really
17 conservative. And the reason why we do a conservative
18 model is because the one thing that we don't want to
19 happen is that we underestimate and then we need to
20 catch up. So it's best to overestimate, have
21 everything in place, have water treatment in place, and
22 then if you don't need it, it's -- that's the way it
23 is. You don't want to have a system -- a situation
24 where you say it's fine, and then you need to bring in
25 water treatment after the fact. So that's the reason
26 why we built these models in a conservative fashion,

1 and these real data tell us that, yeah, that's as we
2 expect; we expect the water quality to be better than
3 what we have predicted.

4 The same can be seen here for the Portage area.
5 Now, some are within the same order of magnitude. They
6 are -- the pits have changed. The pits are much bigger
7 now at the Portage area. But a lot of them still are
8 very, very -- much lower concentration in reality.

9 Okay. Done with the model.

10 The next slide speaks to water treatment. The
11 intervenors had interest in knowing what is going to be
12 proposed for water treatment. So this illustrates
13 Agnico Eagle's commitment to treat water quality. This
14 water treatment plant, the Veolia water treatment
15 plant, will attenuate arsenic concentrations, will
16 decrease arsenic concentrations, and will also treat
17 the suspended solids or the mud in the water. The
18 Veolia water treatment plant will be built at Whale
19 Tail to control arsenic and suspended solids. It will
20 operate during construction in case it's needed when
21 dewatering. At Meadowbank, in the early days, there
22 was some treatment of suspended solids towards the end
23 of dewatering. Some muds were brought along with the
24 water. But, actually, the process was perfected at
25 Vault, and the water treatment wasn't used. But it
26 will be available for use during construction. And

1 will also be used, if needed, to treat the arsenic
2 during operation and closure and post-closure, but
3 hopefully not.

4 The treatment plant is fairly straightforward.
5 It's standard technology. Water comes in here. A
6 chemical is added to retain the arsenic. The filter
7 system is put in place to remove the suspended solids,
8 and clean water gets out. The treatment plant will
9 only be operated during open water season, that is,
10 June to September. No winter discharges. So this
11 is -- oh, and the expected treatment levels, just
12 before -- so this will be -- will take attenuation pond
13 water and treat it just before discharge into Mammoth
14 Lake. And the treatment level is 0.1 milligram per
15 litre of arsenic. Current MMER is 0.5, and Agnico
16 Eagle has proposed a water treatment of 0.1. So better
17 than metal mine effluent regulations. And this has
18 been agreed to with Environment Canada intervenors.

19 Now, remember, there was phosphorous as well. So
20 phosphorous will also be treated. Phosphorous comes
21 from the sewage water, actually. It's a big source of
22 phosphorous. It also comes from some of the rocks in
23 the suspended particulates. There could be phosphorous
24 in there. This will be treated at the sewage treatment
25 plant, so at the camp, before the water goes into the
26 attenuation pond. So there's two treatment plants:

1 One before discharge for arsenic and suspended solids,
2 but the phosphorous gets treated at the source, at the
3 camp, and then that water goes into the attenuation
4 pond. In fact, the system selected -- there's a system
5 that has been selected. It's been purchased, and it
6 will be installed shortly at the Whale Tail site. That
7 system is called the Newterra water treatment plant.
8 It's a membrane bioreactor. It's a bioreactor. It
9 will treat phosphorous to 1 milligram per litre, but it
10 will also remove ammonia and nitrate from the sewer.
11 It's a typical sewage treatment system but can also
12 treat phosphorous. That said, the effluent from the
13 sewage plant will be discharged to the attenuation pond
14 and then to Mammoth via the diffuser. You have there
15 the limits of treatment or the treatment levels.

16 So the next slide is just a schematic of what
17 system looks like. I'm not going to go into details,
18 but basically the water enters and goes through all
19 these chambers to remove some suspended solids and the
20 phosphorous, as well as the ammonia and the nitrate.

21 So after treatment, what does the water look like?
22 Total phosphorous concentrations are predicted to be at
23 the zero to slightly above the 0.01 milligram per litre
24 in Mammoth Lake, but that's -- and slightly lower in
25 downstream lakes. So that's the downstream lakes here,
26 and we can see -- so from the discharge point into

1 Mammoth Lake and then downstream lakes.

2 This is a -- it is -- we expect that the water
3 quality is going to be better than this because of two
4 things: Because in the model we assume that all the
5 chemicals that are discharged get immediately
6 transported to all the downstream lakes. There's no
7 effect of, you know, taking its time to migrate through
8 the system. It's a conservative assumption that comes
9 out in one lake, and it's present in all lakes
10 immediately. And it also assumes that there's a lot of
11 particulate in the water, which carries phosphorous.
12 But we know for a fact, based on what we see at Vault,
13 that particulates in water are not that high.

14 So the environmental quality criteria that are
15 proposed for the project, so those -- those criteria
16 would -- would apply at the effluent discharge into
17 Mammoth Lake. So those would be in the water licence,
18 these numbers. A full suite of these environmental
19 quality criteria have been agreed to with Environment
20 Canada. They are presented right here. The criteria
21 for mercury, here it says, "For further discussion",
22 and, in fact, we have discussed with Environment Canada
23 prior to just recently, prior to the Board hearings,
24 and a number has been agreed to. They will be the same
25 as the Meadowbank Vault discharge criteria. So we have
26 resolution now on these. It'll be .004 average and

1 .008 maximum. So with this, there is now a complete
2 list of -- well, approved criteria, approved with
3 Environment Canada. And as I said, these criteria were
4 included as part of one of the exhibits, the exhibit of
5 the water licence framework that was provided to the
6 Water Board just earlier at the beginning of the
7 session.

8 Another question was that site-specific -- just
9 have two slides left. Another question was
10 site-specific water quality objective. So a
11 site-specific objective for arsenic was developed for
12 Whale Tail. There exists one in the federal water
13 quality objectives, there exists one. It's 5 PPB. But
14 a site-specific one was developed to make sure that
15 water quality was not affecting fish and aquatic life.
16 A method was used; the method used to develop that
17 criteria followed what's called the "species
18 sensitivities distribution protocol", which is a
19 standard method recommended by the Canadian Council of
20 Ministers of the Environment.

21 So a value of 25 PPB or parts per billion or 0.025
22 milligrams per litre was derived. This value was
23 discussed with Environment Canada and agreed to and
24 will be applied in the receiving lake at Whale Tail.
25 So at the discharge point, the arsenic value will be
26 0.1, and within the lake, the guideline value will be

1 0.025.

2 This has been discussed previously. It's the
3 results of phosphorous. And we see that during
4 operation, phosphorous increased because of the sewage,
5 decreases during closure, and then falls off as the
6 water quality is rejuvenated in the lake.

7 Last slide. In summary, site activities are not
8 expected to result in negative effects to water quality
9 in receiving lakes downstream of the project during all
10 stages of mining. Sorry. Last of my slides. Two more
11 for Ryan. We'll discuss some of the key commitments
12 made as part of intervenor review process. Thank you.

13 MR. VANENGEN: Thank you, Valerie.

14 Ryan Vanengen from Agnico Eagle.

15 So just two more slides.

16 In summary, as Valerie pointed out and you can see
17 from all of the information that we've provided, we've
18 worked extensively with the Nunavut Water Board and, in
19 particular, with Indigenous and Northern Affairs
20 Canada, as well as Environment Canada and the Kivalliq
21 Inuit Association to work on revising our models and
22 ensuring that we'll protect the receiving environment.
23 This is just the first step. We're going to continue
24 to look at those data; we're going to continue to work
25 with Nunavut Water Board to ensure that we -- the data
26 that we collect is analyzed properly and that we

1 compare to the conservative predictions that Valerie
2 described. So that's a normal standard practice that
3 we do on these sites.

4 The other point that Valerie made too -- and she
5 illustrated that really well in that one slide where --
6 with the Vault example where -- I can go back to it
7 since I have the controls. These ones here. She
8 illustrated very well with -- is that the one, Valerie?
9 Yes. This one here. Where all of the slides before
10 that were showing what we predict in the beginning, in
11 the baseline, so using conservative estimates. And
12 what we actually see, as Valerie described, in Vault
13 pit sump are these water quality estimates. So our
14 commitment for Whale Tail Pit is to do just the same:
15 Continue to monitor, collect the data, and compare it
16 to what we predict. So that's our commitment, and I
17 think we've demonstrated that commitment with all of
18 the information that we've provided to the Nunavut
19 Water Board.

20 The other thing that Valerie mentioned as well was
21 that we would -- we would treat our water. So if our
22 predictions show that we need to treat to make sure the
23 receiving environment is protected, we're going to do
24 that. And she showed those schematics of the treatment
25 facilities that we're committed to install.

26 And in addition to that, you can see a list here

1 of other commitments that were discussed in the final
2 submissions as well.

3 So, really, in summary of the last two decks, so
4 where we started with Michel presenting and with Erika
5 presenting, Valerie presenting, myself, and then
6 Valerie again, what we -- what we really wanted to
7 demonstrate to the Board is that we've done a very
8 thorough job of understanding our project and also what
9 we want to emphasize is that we have experience. We
10 have a lot of experience with all these things that
11 we've discussed, and we have lessons learned from the
12 Meadowbank mine where we -- we handle waste all the
13 time. Erika showed many great slides showing what we
14 actually do, what our truckers actually see to make
15 sure waste is brought to the right spots. Michel also
16 described how we're going to handle, very well, our
17 tailing storage facility at Meadowbank, and this is
18 already licenced under our Type A water licence
19 2AM-MEA1525, and we're going to continue operating
20 according to that licence.

21 And lastly -- or not lastly, Val explained that
22 we'll going to continue to monitor and continue to
23 model, like I showed earlier. And the important part
24 is that we're not just making decisions based on what
25 we think is going to happen. These are fact-based
26 decisions. This is based on engineering and science

1 and the best models that we can possibly use so that we
2 make sure that the receiving environment is protected.

3 We will work with -- continue to work with the
4 Nunavut Water Board, INAC, and Environment Canada to
5 ensure that the closure meets our goals to protect the
6 environment in the long-term closure and post-closure
7 period. So that's our goal. During operations, make
8 sure we protect so that our models tell us and we'll
9 prove up our models that in closure and post-closure,
10 the site will be able to be returned back to the way it
11 was.

12 We will also work with Fisheries and Oceans to
13 ensure the losses to the fishery are offset.

14 And, ultimately, what all of this information
15 provided to the Board shows is that we do not expect
16 any significant water quality impacts in the receiving
17 environment, and it's Agnico Eagle's commitment to
18 monitor that and to make sure that the water quality
19 into the future, as well as the fish and the food that
20 the fish depend on and the habitat that the fish
21 survive in, is protected.

22 Mat'na, Mr. Chair and Board members.

23 THE CHAIR: Thank you for your
24 presentation.

25 Before we go into questions and concerns from the
26 audience, we shall take a 15-minute break.

1 (ADJOURNMENT)

2 THE CHAIR: So we have questions and
3 concerns to the applicants. I'd like to move on with
4 it.

5 So I will start with the KIA. Do you have
6 concerns or questions? If you are not ready, I can ask
7 INAC.

8 INAC, do you have questions or concerns?

9 MR. PARSONS: Thank you, Mr. Chair. Ian
10 Parsons, Indigenous and Northern Affairs Canada.

11 We have no comments or concerns at this time.
12 Thank you.

13 THE CHAIR: Thank you.

14 And then Environment and Climate Change Canada.

15 MS. PINTO: Thank you, Mr. Chair. Melissa
16 Pinto, Environment and Climate Change Canada.

17 We have no questions at this time.

18 THE CHAIR: Thank you.

19 And DFO.

20 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
21 D'Aguiar for Fisheries and Oceans Canada.

22 We don't have any questions at this time.

23 Thank you.

24 THE CHAIR: All right. Thank you.

25 And then public. Is there concerns? Questions,
26 concerns from the public? There's none? Okay.

1 KIA, do you have questions, concerns?

2 MR. TULUGAK: Jeff Tulugak from Kivalliq
3 Inuit Association. (OTHER LANGUAGE SPOKEN).

4 THE CHAIR: NWB staff, questions,
5 concerns?

6 Nunavut Water Board Questions Agnico Eagle Mines
7 Limited

8 MR. KHARATYAN: Thank you, Mr. Chair. Karen
9 Kharatyan, Nunavut Water Board staff.

10 A few questions, please. Can you go back to
11 Slide 55. Slide 55. Just a clarification. The value
12 for cadmium, how many zeros you have after dot? Can
13 you double-check, please.

14 MR. VANENGEN: Ryan Vanengen from Agnico
15 Eagle. We're just going to double-check to see if that
16 number is correct. We'll get back to you momentarily.
17 Is that okay?

18 MR. KHARATYAN: Mr. Chair. Karen Kharatyan
19 again, Water Board staff.

20 Can you go back to Slide 50, Ryan, please. Just
21 for clarification, this expected level of treatment is
22 for attenuation pond during operation or also for waste
23 rock storage facility sump during closure?
24 Closure/postclosure?

25 MR. QUESNEL: Thank you, Mr. Chair.

26 Yeah, for both, for operation and closure.

1 MR. KHARATYAN: Mr. Chair. Karen Kharatyan,
2 Water Board staff again.

3 Again, follow-up question. So how confident is
4 Agnico Eagle that with this treatment target or level
5 they will meet the site-specific quality criteria which
6 is 0025?

7 MR. QUESNEL: Thank you, Mr. Chair.

8 Yes, we're confident for operations and the
9 closure phase.

10 MR. KHARATYAN: Karen Kharatyan. Mr. Chair.
11 Water Board staff again.

12 Can we go to Slide 21, please. Question about
13 conducting stratified water quality monitoring. This
14 is for north basin Lake Whale Tail -- Whale Tail Lake?

15 MR. VANENGEN: Yes. Ryan Vanengen from
16 Agnico Eagle.

17 The commitment there was related to Fisheries and
18 Oceans and Environment Canada question around
19 monitoring within the core receiving environment
20 program, and as we do at Meadowbank, we'll do
21 stratified water quality monitoring. At Nemo Lake,
22 South Whale Tail Lake, as well as Mammoth Lake. And
23 then into closure scenarios, we'll also do stratified
24 monitoring in the pit as well, as we're actively
25 flooding in closure.

26 MR. KHARATYAN: Mr. Chair, thank you. Karen

1 Kharatyan, Water Board staff.

2 Could you little bit describe this stratified
3 monitoring, Ryan. How many levels -- how deep each
4 levels from each other?

5 MR. VANENGEN: Yes. Ryan Vanengen from
6 Agnico Eagle.

7 Normally when we're doing the, what we call
8 "receiving environment monitoring", so when we're
9 looking in Mammoth Lake, what stratified monitoring
10 means is that we collect a water sample at the surface,
11 maybe at 3 metres below and then down below. So we get
12 an understanding of the entire -- kind of, the water
13 quality at depth which can change because of inputs due
14 to our effluent. So that's what stratified monitoring
15 means.

16 We also use tools, so we water sample at different
17 intervals, but we also use tools, like meters that
18 monitor at .5 metre depths, and it tells us a lot about
19 the water quality also as we move down in depth. So
20 there's kind of a number of tools that inform our
21 stratified monitoring.

22 Mat'na.

23 MR. KHARATYAN: Mr. Chair. Karen Kharatyan.

24 A follow-up, Ryan. Would Agnico Eagle be able to
25 include this information for north basin Whale Tail
26 Lake, the stratified monitoring requirement within

1 water quality and flow monitoring? Because this is not
2 related to CREMP information. This may provide
3 information about in future during closure/postclosure
4 phase whether there is a mixing between pit lake -- pit
5 water and lake water. So this -- including this --
6 within the water quality flow monitoring plan will
7 provide information to parties when reviewing this
8 information to see how this develops, whether there is
9 potential or there will be -- or there's a tendance to
10 have mixing or not between pit and lake water. And
11 also to include definition or description of the
12 stratified monitoring within the monitoring program. I
13 think it was ST10 or 9 for north basin. I am just
14 looking for north basin Whale Tail Lake -- Whale Tail
15 Lake monitoring station.

16 MR. VANENGEN: Ryan Vanengen from Agnico
17 Eagle. Mr. Board and Board members -- sorry.
18 Mr. Chair and Board members.

19 The request by the Nunavut Water Board technical
20 advisors is -- in our view, goes beyond what a water
21 quality and flow monitoring plan is set out to do.
22 Water quality and flow monitoring plan should not, and
23 typically doesn't, include stratified sampling. The
24 reason why that is, it's a compliance driven kind of
25 decision-making framework. So what we ensure is that
26 all the site water here stays in the site and reports

1 to the attenuation pond. It's really not until it
2 discharges into Mammoth Lake that it becomes receiving
3 environment. Everything in here is controlled by the
4 mine operators, Agnico Eagle. And we make sure that
5 that water quality is clean, and we report all the
6 data. These are point sourced kind of samples that
7 inform our models.

8 What the Nunavut -- what I understand the Nunavut
9 Water Board technical staff is asking is that they want
10 stratified sampling to occur in the area during
11 operations, and that doesn't make sense. There's no --
12 it's not a lake. So we can't -- we can't go and do
13 that depth monitoring that I described earlier 'cause
14 it's not a lake. These are point sources of water.
15 But what we are committed to doing in our core
16 receiving environmental monitoring program, which means
17 we're going to monitor in the south basin, as well as
18 Mammoth, as well as in Nemo and other lakes as well, we
19 will make sure that those lakes are clean, and we do
20 that through that stratified monitoring.

21 That said, into closure, if I go to -- hopefully I
22 can find a slide with closure on here. I don't think
23 it's in this deck. But under the closure scenarios --
24 I'll go back to this slide here. In the closure
25 scenarios, this area here is going to be flooded. And
26 under that scenario, we're certainly interested under

1 the -- once it's flooded, and while we're flooding,
2 we'd be interested in doing that stratified monitoring,
3 and that we could make exceptions on the water quality
4 and flow plan during closure. That seems fair. But to
5 put -- build into a licence to do stratified monitoring
6 in these other locations doesn't seem to fit with
7 what's commonly done, and it wouldn't make sense either
8 in the field.

9 Mat'na.

10 MR. KHARATYAN: Mr. Chair. Karen Kharatyan,
11 Nunavut Water Board staff.

12 I should clarify. I mentioned it. I am
13 looking -- we are looking just north basin Whale Tail
14 Lake for closure, post-closure. We are not looking for
15 this information for operation or the other lakes.
16 Because your hypothesis about no diffusion happening in
17 the peak and no mixing happening between the peak water
18 and lake water above is still hypothesis. So this
19 stratified monitoring will allow to see a little more
20 at the time, at closure/postclosure time.

21 MR. VANENGEN: Mr. Chair, that seems
22 acceptable to us. And what we would think to do is --
23 or we'd recommend, perhaps, is to work with the Nunavut
24 Water Board during the closure phase to develop what
25 that monitoring would look like, exactly what it would
26 look like into closure. But we're certainly open to

1 working with the Nunavut Water Board to define that
2 closure monitoring in the north Whale Tail Lake basin.

3 Thank you.

4 MR. KHARATYAN: Thank you, Mr. Chair. No more
5 questions.

6 At this time, maybe you could follow up with the
7 cadmium value.

8 MR. QUESNEL: Thank you, Mr. Chair. If we
9 can -- on Slide 55, dealing with your question
10 regarding cadmium, yeah, that was a mistake. So the
11 mean -- Slide 55. There's one too many zeros. So it's
12 .002 and .004. However, in the water licence framework
13 that we submitted, we have the right concentrations,
14 the correct numbers. Okay.

15 MR. VANENGEN: Two zeros.

16 MR. QUESNEL: Yeah. Two zeros, yeah. Two
17 zeros, not three, two zeros.

18 THE CHAIR: Thank you.

19 The Panel members, do you have questions? No.
20 Okay. Thank you.

21 So, applicant, you have more presentations to do.
22 Go ahead.

23 Presentation by Agnico Eagle Mines Limited

24 (Abandonment, Reclamation, Closure, and Security)

25 MR. QUESNEL: Thank you, Mr. Chair. We have
26 four more presentations. So the next one's on the

1 reclamation closure and security.

2 MS. VOYER: Thank you, Mr. Chair, Board
3 members. Erika Voyer, Agnico Eagle.

4 In this presentation, as Jamie mentioned, we will
5 discuss the reclamation, closure, and associated
6 security for the Whale Tail Project.

7 We had a chance to see that slide in the previous
8 presentation. So this is the map showing the road from
9 Meadowbank to Whale Tail. So the closure and the
10 security includes the component of the Whale Tail
11 Project and also include the component of the Whale
12 Tail haul road. The map presenting the road from
13 Meadowbank to the Whale Tail Pit Project is on this
14 slide. The actual Whale Tail exploration road that was
15 completed at the end of August 2017 will become, upon
16 approval, the Whale Tail haul road when it will be
17 enlarged by 3 metres passing from 6.5 metres wide to
18 9.5 metres.

19 The haul road has a total length of 64.13
20 kilometre connecting the Vault haul road to the Whale
21 Tail Project. Two thirds of the road is constructed on
22 Crown land and one third on Inuit-owned land. All
23 these components of the road -- so the road itself, the
24 embankment, as well as the nine bridges and the
25 culvert are included in the global security that
26 Kivalliq Inuit Association, Indigenous and Northern

1 Affairs Canada, and Agnico has agreed on.

2 Here is a map of the site for Whale Tail during
3 operation. Please note that operation will occur from
4 2019 to 2022. As presented previously, the pit area
5 would be isolated by a dike and will be the water for
6 the development and the operation of the pit. The
7 dewatered water level will be maintained through the
8 life of the project by diverting most of the freshwater
9 to other sub-watershed area using diversion channel.
10 The contact water will be treated before discharged to
11 Mammoth Lake.

12 During operation, progressive reclamation will
13 occur by progressive non-acid generator cover placement
14 over the waste rock storage facility located here. An
15 engineer cover will be progressively placed on the
16 surface of the waste rock storage facility during
17 operation. The cover will be composed of 4 metre thick
18 non-acid generator waste rock material as presented
19 during the waste disposal and management presentation.

20 Cover design will be finalized during the detailed
21 design phase of the project and will consider
22 operational experience at other northern mine site,
23 including our Meadowbank mine. Active care,
24 maintenance, and monitoring will be required for the
25 reclaimed area over the waste rock storage facility
26 throughout the operation stage. During operation, we

1 will also continue to work with the intervenors by
2 updating our water quality modelling. Based on this
3 information, we will update our operations and closure
4 concepts.

5 Here is a map of the site following the end of
6 operation during closure stage, starting at the end of
7 2022, and that could extend to 2029, and not as 2025,
8 as indicated on this slide. During the closure stage,
9 the removal of the non-essential site infrastructures
10 will occur. To dewater Whale Tail Pit area will be
11 re-flooded as discussed previously. Active care,
12 maintenance, and monitoring will be required for the
13 decommissioned and remaining facility throughout this
14 stage.

15 Post-closure stage following the closure period
16 from 2030 and onward will commence as closure is
17 completed. Please disregard the date that's noted on
18 the presentation. Once the water in the re-flooded
19 area of the pit is suitable for direct discharge to the
20 environment, the pumping and pipeline systems will be
21 removed. The Whale Tail dike and Mammoth dike will
22 then be breached at selected locations.

23 The back-flooded area -- the flooded area will be
24 restored. The contact water management system for the
25 waste rock storage facility will be maintained during
26 the closure and the post-closure period. Once the

1 water quality is acceptable for direct release, based
2 on criteria established through the water licencing
3 process, the waste rock storage facility contact water
4 management system will be decommissioned. As
5 mentioned, the dike will not be breached until water
6 quality in the pit meets CCME, Canadian Council of
7 Minister of Environment guideline, baseline, or
8 appropriate site-specific water quality objective at
9 the discretion of the Nunavut Water Board. During the
10 post-closure stage, continued monitoring and
11 maintenance will be carried out at an adjusted
12 frequency depending on the result of the monitoring and
13 measure of success of selected -- selected for closure.

14 After the four years of mining at the Whale Tail
15 Pit, Whale Tail, as well as Meadowbank, will both enter
16 in the closure phase. The closure concept for
17 Meadowbank mine site presented in the interim closure
18 and reclamation plan for Meadowbank will remain
19 unchanged. The pit at Meadowbank will be re-flooded
20 and as presented by my colleague Michel Groleau, the
21 tailing and the waste rock storage facility at
22 Meadowbank will be covered with non-acid generator
23 material. During the operation of Whale Tail,
24 progressive closure at Meadowbank will occur. Lessons
25 learned during closure at Meadowbank will be applied
26 for the Whale Tail Project.

1 For the Meadowbank site, as part of the licence --
2 as part of the water licence Type A renewal in 2015,
3 the interim closure and reclamation plan was completed
4 in January 2014 and the security amount for the closure
5 of Meadowbank site has been agreed on. As part of the
6 application for the Whale Tail Project, the Whale Tail
7 interim closure and reclamation plan has been
8 completed, including the closure of the Whale Tail Pit
9 site and the Whale Tail haul road.

10 The Whale Tail interim closure and reclamation
11 plan adhered to INAC and Indigenous and Northern
12 Affairs Canada guidance on closure and reclamation.

13 During the planning for closure and reclamation,
14 Agnico Eagle will adhere to acid rock drainage and
15 metal-leaching monitoring plan, waste rock storage
16 facility management plan, water quality and flow
17 monitoring plan. Those plans will be updated as
18 required with the information gained during operation
19 at Whale Tail. Experience and knowledge gained through
20 operation and closure of Meadowbank facilities, such as
21 the Vault area, will continue to inform closure
22 planning for the Whale Tail Project. Progressive --
23 proactive monitoring and decision-making will ensure
24 post-closure goals are met. This will be achieved by
25 geochemical monitoring of the waste rock material,
26 thermistor installation and reading for thermal

1 monitoring, water quality in sumps and pit to update
2 the water quality forecasts, and various modelling work
3 such as thermal and water quality model.

4 As for Meadowbank, the closure concept will be in
5 continuous evaluation and planning during the
6 operation.

7 Agnico believes that closure of the Whale Tail
8 Project will be controlled through on-site monitoring,
9 as well as experience gained at Meadowbank and also
10 through adaptive management to maintain the closure
11 objective of chemical stability of waste rock and good
12 water quality.

13 Agnico Eagle has agreed on a security management
14 agreement with Kivalliq Inuit Association and
15 Indigenous and Northern Affairs Canada for the Whale
16 Tail Pit Project. The total costs for security agreed
17 on is \$26,285,926.

18 In terms of security for closure, Agnico made the
19 following commitment: Agnico Eagle agrees to the
20 treatment of post-closure seepage/runoff until water
21 meets discharge criteria required. Agnico Eagle will
22 also work cooperatively with Indigenous and Northern
23 Affairs Canada and the Kivalliq Inuit Association to
24 develop a framework for reduction in monitoring
25 requirements and associated security amounts. This
26 framework may be applied by the Nunavut Review --

1 Nunavut Water Board to reduce security requirements in
2 post-closure.

3 This completes the presentation of closure and
4 security for the Whale Tail Pit Project.

5 Mat'na.

6 THE CHAIR: Thank you.

7 So open for questions/concerns. Can I start with
8 KIA.

9 Comments by Kivalliq Inuit Association

10 MR. MANZO: Thank you, Mr. Chairman. Luis
11 Manzo, Kivalliq Inuit Association.

12 I just have one clarification on the last slide
13 regarding the framework. KIA's reviewing the framework
14 at this time, and I believe INAC also is reviewing the
15 framework. So it's very unlikely that we actually get
16 an agreement before the hearing ends.

17 Thank you, Mr. Chair.

18 THE CHAIR: Thank you.

19 INAC.

20 Indigenous and Northern Affairs Canada Questions Agnico
21 Eagle Mines Limited

22 MS. COSTELLO: Thank you, Mr. Chair and the
23 Board. My name is Karen Costello. I'm with Indigenous
24 and Northern Affairs Canada.

25 I'll verify that we have reached agreement with
26 Agnico Eagle and the Kivalliq Inuit Association on a

1 reclamation cost estimate for the project as submitted
2 in the environmental impact statement and the water
3 licence application. In their closure plan and in
4 their presentation, they have specified years related
5 to the different operational phases or the construction
6 operation closure. However, I have noted that in
7 Agnico Eagle's July quarterly report and in a public
8 publication, they have indicated that resources at
9 Whale Tail in the global Amaruq project overall seem to
10 be increasing beyond what was in the environmental
11 impact statement. This is normal. Exploration is
12 ongoing.

13 So my question is, is there -- in the event that
14 the life of mine of Whale Tail goes beyond what it
15 currently is in the EI -- environmental impact
16 statement, is there flexibility or is there room in
17 this closure plan to -- would it still apply in the
18 event that the mine life was extended?

19 THE CHAIR: Thank you.

20 Applicants.

21 MR. QUESNEL: Thank you, Mr. Chair. Jamie
22 Quesnel, Agnico.

23 Yeah, there's -- if that does occur, the closure
24 plan -- there would be flexibility based on that. It
25 would just be based on, you know, typical adaptive
26 management practices, depending if that does occur. So

1 we would make those adjustments related to that. And
2 depending what that could be, like, we're speculating
3 now, so it's hard to really define it, but we would
4 adjust that related to the existing closure plan. So,
5 yeah, there's flexibility, but we're just speculating
6 what that could look like. So it's challenging to be
7 very definitive. However, I would state that that plan
8 would be flexible to adapt to any extension if that did
9 occur within the Amaruq footprint.

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

11 And thank you, Agnico Eagle -- oh, Karen Costello
12 for Indigenous and Northern Affairs Canada.

13 Thank you, Agnico Eagle for that response. What
14 I'm also thinking about is, as part of the
15 consequential amendment to the Meadowbank water
16 licence, it's the use of the tailings facility. So in
17 the event that the Whale Tail mine life goes beyond
18 what is currently, I'm just thinking capacity for the
19 tailings. So 'cause we were kind of doing some rough
20 math here, and it seems that both the north and the
21 south cell are going to -- could be quite full after --
22 based on even the current life of mine that is the
23 subject of this licence application.

24 MR. QUESNEL: Thank you, Mr. Chair. Jamie
25 Quesnel, Agnico.

26 Yeah, I think the -- based Michel Groleau's

1 presentation, I think it's close to 2 million -- is it
2 cubic metres? -- yeah, of additional capacity at the
3 north and south cell. Just like our exploration team
4 in mining, they're drilling and looking for additional
5 resources as a typical operating year, as an operation
6 we're evaluating all these options if that does occur.
7 So we would be ready for that evaluation to see if --
8 where we could look at additional capacity for
9 tailings. So those type of things are always ongoing.
10 We're always looking at those options, but we don't
11 have anything in front of us that we're looking at
12 right now that would be tied into the whole process
13 with NIRB if that does occur with any extension to
14 Meadowbank. Hopefully that answers your questions.

15 MS. COSTELLO: Thank you, Mr. Chair; and
16 thank you, Agnico Eagle.

17 Yes. I was just curious because this information
18 kind of is out there in the public domain, and it was
19 just something that -- the thoughts kind of came
20 through our mind as we were reviewing this application
21 as to just the adaptability and the flexibility with
22 this current application should -- should you have to
23 come back with a potential amendment or further
24 consideration by the Nunavut Impact Review Board or the
25 Nunavut Water Board.

26 Thank you, Mr. Chair. That's all.

1 THE CHAIR: Thank you.

2 Next, Environment and Climate Change Canada.

3 MS. PINTO: Thank you, Mr. Chair. Melissa

4 Pinto, Environment and Climate Change Canada.

5 We have no questions at this time.

6 THE CHAIR: Thank you.

7 Next, DFO.

8 MR. D'AGUIAR: Mark D'Aguiar with Fisheries

9 and Oceans Canada. Thank you, Mr. Chair.

10 We don't have any questions at this time. Thanks.

11 THE CHAIR: Thank you.

12 Is there questions or concerns from public?

13 (OTHER LANGUAGE SPOKEN)

14 NWB staff, concerns? Questions?

15 MR. KHARATYAN: Thank you, Mr. Chair. Karen

16 Kharatyan, NWB staff.

17 No questions at this time.

18 THE CHAIR: Thank you.

19 The Panel members? Okay. None.

20 All right. Thank you.

21 You have another -- more presentations to go?

22 MR. QUESNEL: Yes.

23 MR. VANENGEN: Just three more presentations.

24 Presentation by Agnico Eagle Mines Limited (Accidents

25 and Malfunctions)

26 MR. QUESNEL: Thank you, Mr. Chair. Jamie

1 Quesnel, Agnico Eagle.

2 Next presentation is on accidents and
3 malfunctions.

4 Part of our process to evaluate a lot of the
5 procedures and -- is related to our responsible mining
6 management system. It was mentioned earlier about the
7 plan, do, check, and act. So that's a common theme for
8 adaptive management. We do our planning. We execute.
9 We check if there's areas of improvements and act on
10 those changes. Some of the key items would be related
11 to site-specific health and safety plans, operational
12 procedures, guides, and instructions. Again,
13 continuous monitoring, the adaptive management piece.
14 The mitigation, maintenance, and also response. The
15 response is related to the highly skilled emergency
16 response team that we have at Meadowbank and also for
17 Whale Tail Pit Project. If we do receive our
18 approvals, there will be a separate team located at
19 Whale Tail.

20 So health and safety is paramount at Agnico Eagle.
21 Everyone has a responsibility, and everyone can make a
22 difference related to health and safety. We identify
23 our health and safety responsibilities for all level of
24 employees. We ensure clear guidance and expectations
25 toward safety, and we adhere to all safety regulations
26 and ensure preventative measures are in place.

1 Spill contingency and response plans. We have
2 these plans as part of our water licence. It's related
3 to the collection, use, management, and reuse of water.
4 The collection, use, and management of waste, and any
5 discharges to the receiving environment. And my
6 colleagues have commented and explained, very
7 effectively, of all the plans that we have in place at
8 Meadowbank and that will be -- all that knowledge and
9 operating experience will be transferred to Whale Tail.

10 Agnico Eagle has in place a systematic adaptive
11 management approach that we've been using for ten years
12 now in Nunavut, directly related to the decision-making
13 whereby operational practices can be adapted and
14 adjusted as required to reduce or eliminate any
15 unforeseen negative impacts throughout the life of the
16 project.

17 Our emergency response team, its designated team,
18 there's one going to be at Meadow, one at Whale Tail
19 Pit Project. All members of the teams are trained and
20 familiar with emergency and spill response resources,
21 including their location and access, where the
22 resources are at the operation. The spill contingency
23 plan, they're familiar with that, and appropriate
24 emergency spill response methodologies.

25 Some of the training -- some of the highlight
26 items related to the training, related to the spill

1 response plan, the roles and responsibilities of each
2 member of the emergency response team, the nature,
3 status, and location of the fuel and chemical storage
4 facilities, where they are on the site, the on-site and
5 off-site spill response equipment and how to use it,
6 the emergency contact lists within Agnico Eagle and
7 also with our government agencies, and also desktop
8 exercises of worst-case scenarios. Just last week we
9 had one here in Baker Lake at the fuel farm. Just as
10 an exercise, if something did occur, and this is a key
11 learning where we evaluate what went well with that and
12 any areas of improvement. And, also, reviewing the
13 likely causes and possible effects of spills.

14 And that's the end of that presentation.

15 Thank you.

16 THE CHAIR: Thank you.

17 Questions or comments, concerns? Kivalliq Inuit
18 Association.

19 MR. MANZO: Thank you, Mr. Chairman. Luis
20 Manzo, Kivalliq Inuit Association.

21 No questions at this time.

22 THE CHAIR: Thank you.

23 INAC.

24 MR. PARSONS: Thank you, Mr. Chair. Ian
25 Parsons, Indigenous and Northern Affairs Canada.

26 We have no questions at this time.

1 Thank you.

2 THE CHAIR: Thank you.

3 Environment and Climate Change Canada.

4 MS. PINTO: Thank you, Mr. Chair. Melissa
5 Pinto, Environment and Climate Change Canada.

6 We have no questions at this time.

7 THE CHAIR: Thank you.

8 And DFO.

9 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
10 D'Aguiar with Fisheries and Oceans Canada.

11 We have no questions at this time.

12 Thank you.

13 THE CHAIR: Is there concerns, questions
14 from public? (OTHER LANGUAGE SPOKEN). Okay.

15 NWB staff.

16 MR. KHARATYAN: Thank you, Mr. Chair. Karen
17 Kharatyan, Water Board staff.

18 No questions at this time.

19 THE CHAIR: Thank you. And last one,

20 NWB -- Panel members. None. Thank you.

21 So next presentation.

22 Presentation by Agnico Eagle Mines Limited (Management
23 Plans and Monitoring Programs)

24 MR. VANENGEN: Mr. Chair and Board members,
25 for the next 20 minutes -- or my name's Ryan Vanengen
26 with Agnico Eagle. For the next 20 minutes, Erika and

1 I will be presenting the summary of our management
2 plans and monitoring plans. So a lot of this has
3 already been presented in the previous presentations,
4 and this is going to be, we hope, kind of a compressed
5 version of that, as well as highlight a few of the
6 specific monitoring plans related to the site
7 monitoring that Karen had brought up and also our dike
8 construction and then receiving environment monitoring.

9 So we'll touch on the -- an overview of our
10 approach to management plans. We'll -- I'll touch on
11 the water quality and flow monitoring. I'll touch on
12 the water quality monitoring and management, as well as
13 some of our hydrogeological monitoring. We'll talk
14 about our quality assurance and quality control. Erika
15 will present on our waste rock management. And then
16 we'll quickly talk also about the spill contingency
17 emergency and also closure and reclamation planning and
18 the monitoring that will go into that.

19 So really quickly, this'll be a bit clearer for
20 everybody as it's outlined also in our draft framework
21 for the Type A water licence for Whale Tail Pit. So we
22 separated our plans for Whale Tail Pit into a
23 different -- four different categories. We have
24 standalone plans that are Whale Tail Pit-specific. We
25 have Whale Tail Pit addendums. So these are -- these
26 are management plans that we had at Meadowbank and that

1 we bolted onto it elements of Whale Tail Pit. So we
2 call that an addendum. We also updated our -- some of
3 our mine plans, including the tailings storage facility
4 management plan, which Michel Groleau presented on. So
5 we updated that plan. And then we also used approved
6 Meadowbank plans, and that would include, you know,
7 spill contingency plans, quality assurance, quality
8 control, transportation plans, and maintenance and
9 surveillance plans. And the idea behind that is that
10 we don't intend to reinvent the wheel. We want to use
11 the plans that are good and work at Meadowbank; we want
12 to apply them to Whale Tail Pit as well.

13 So for water quality, this is -- this is really --
14 this figure here is summarizing our water quality and
15 flow monitoring plan, and we call it site-wide
16 monitoring. So we have -- during operations, what
17 we're proposing are 15 monitoring stations all around
18 the system. So it's to look at pits and sumps in our
19 contact water. So you can see there's a station in the
20 waste rock storage facility sump. There's a station in
21 the pit where there'll be a sump as well. There's a
22 station in the attenuation pond. And all that water is
23 monitored at a station also prior to discharge into
24 Mammoth Lake.

25 We also have a station for discharging water from
26 our fuel farm, and we have a station to monitor our

1 sewage effluent into the attenuation pond. We also
2 have a series of other monitoring stations within
3 our -- on our water quality and flow plan in the
4 receiving environment, including stations in A45, as
5 well as in downstream locations. And that -- the idea
6 behind those stations is that they'll be monitored
7 generally every month. Like, there's some exceptions.
8 An exception would be these downstream areas that
9 freeze to the bottom, and also this pond here that
10 would be frozen in the winter. In addition to all of
11 this sampling around the site, you can't forget that
12 the core receiving environmental monitoring program
13 that looks at the biological parameters and stratified
14 water sampling in the south basin of Whale Tail Lake,
15 in Nemo, as well as in Mammoth.

16 This list here, Table 3-1, our monitoring program,
17 describes all the stations, the phase of construction,
18 and the monitoring parameters and the frequency, and we
19 look, again, in its -- you can see it in our draft
20 framework that we provided, that we're not looking to
21 reinvent the wheel. This is all very similar to what
22 we do at Meadowbank, and it's really, you know, an
23 extension -- our water quality and flow monitoring plan
24 is an extension of our Meadowbank monitoring, where we
25 have compliance monitoring, we have event monitoring,
26 and we have adaptive management monitoring as well.

1 And we'll discuss that a little bit further in the next
2 presentation related to the draft framework.

3 We also are proposing to use the same group of
4 parameters. They're by group number, and there's five
5 different groups. The list of parameters -- this list
6 of parameters is exactly the same as our Meadowbank
7 Type A 2AM-1525.

8 As Valerie presented in our draft framework and
9 our presentation previously, we have a list of effluent
10 quality criteria that we're proposing. We've worked
11 with Environment Canada to -- to come up with an
12 acceptable -- total mercury. So that was agreed upon,
13 and that's in the draft framework, like Valerie
14 presented. And I will note the error in this table,
15 similar to the other table; it should be two zeros, not
16 three in there. But, ultimately, the discharge limits
17 that have been reviewed and are developed and presented
18 in this table were developed in consultation with
19 Environment Canada and based on the predicted water
20 quality, these limits will be protective of the
21 receiving environment.

22 And even though we know that those -- those
23 effluent discharge limits are protective of the
24 receiving environment, we still go out and we monitor
25 the receiving environment, and we do that in the core
26 receiving environmental monitoring program, which is

1 described on this slide here, where we look at -- at a
2 basin level, we'll look at Mammoth Lake, we'll look at
3 Whale Tail South Lake, and we'll also look in the
4 summer at the downstream lakes that Valerie described
5 as well.

6 So looking at this figure here, we'll look at
7 Nemo. But we'll look at all the lakes -- there's
8 different points along here that in July, August, and
9 in September, we'll monitor the lakes downstream as
10 well. And we've collected a lot of data between 2014
11 and 2017 to understand what our baseline conditions are
12 in the receiving environment.

13 So for the core receiving and environmental
14 monitoring program, we're going to use the same methods
15 as approved under Meadowbank. We're proposing to use
16 the same thresholds and triggers which were developed
17 already in 2010 with -- with KIA or Kivalliq Inuit
18 Association, Indigenous and Northern Affairs Canada,
19 and Fisheries and Oceans. We look to use all of those
20 and apply, again, our lessons learned in receiving
21 environmental monitoring to our Whale Tail Pit Project.

22 We'll also use the lessons learned from the
23 Meadowbank east dike construction and Bay Goose dike to
24 manage and control total suspended solids. And I
25 already presented this in the earlier presentation.

26 During the construction of the Whale Tail dike,

1 we'll be monitoring -- we'll be installing turbidity
2 curtains. We already have that all planned out. We'll
3 be monitoring in the receiving environment. So in this
4 area, we have stations there, to make sure that we
5 protect, during construction, the fish and the water
6 quality in the south basin of Whale Tail.

7 We'll also be monitoring, as you can see on the
8 other -- on that other figure, we're going to monitor
9 downstream as well. And, of course, we'll be
10 monitoring our freshwater source also while we're --
11 while we're operating the camp. And that will ensure
12 that this water is protected because that's our
13 drinking water source for the camp.

14 So we touched on this earlier, and it's in many of
15 our presentations about adaptive management. So we're
16 committed to monitoring. And if, during construction
17 of the dike, we see that -- that changes are occurring,
18 that total suspended solids are increasing and that
19 perhaps our turbidity curtains aren't -- aren't
20 effective, we'll slow down our construction practices,
21 we'll increase our monitoring, and we may need to
22 install additional turbidity curtains or some other
23 adaptive management as well. And we have great
24 experience with that based on our Meadowbank
25 experience.

26 Related to hydrogeology, we -- we installed three

1 groundwater wells. So this is to evaluate the
2 groundwater. So we've talked a lot about surface
3 water. But we're also interested in understanding deep
4 under the ground what the water quality is like.

5 So in 2015, we installed three groundwater wells
6 that were drilled towards the deepest part of the lake,
7 where there's water flowing. It's called a talik.
8 Valerie presented those models earlier that showed the
9 talik. We -- we -- we drilled a number of different
10 wells, and we were unfortunate that those wells
11 weren't -- we weren't able to develop those wells, but
12 they still told us a lot about the talik underneath the
13 lake.

14 We also -- because the 2015 groundwater wells we
15 weren't able to develop, we then decided to go with a
16 very expensive but very reliable groundwater well
17 installation; it's called a Westbay groundwater well,
18 and what it tells us is that -- it's set up like this,
19 and it has -- it's located in this area here. Here's
20 where the dike is proposed, and it's located in this
21 area right towards the attenuation pond. And what
22 it -- it's a deepwater well that goes down to 500
23 metres, and there's different ports along that well.
24 So this one single well is like having multiple wells
25 to evaluate the area around the attenuation pond and
26 the groundwater underneath our site.

1 So what all that information has told us is what
2 Valerie already presented, is that within the proposed
3 pit, most of the pit is within permafrost. But as we
4 move towards the dike, there -- and get into the deeper
5 sections of the lake, there's an open connection or an
6 open talik to the groundwater. But that's why we
7 installed that groundwater -- the Westbay in this
8 location, to ensure that we're protecting the
9 groundwater related to the Whale Tail Pit site.

10 So we've talked a lot about this as well, and I'll
11 just quickly brush over this. The -- one of the
12 important points when you're monitoring is that the
13 monitoring data that you collect is reliable, and we
14 call that quality assurance and quality control. So it
15 tells us if you're collecting a sample of it, does it
16 really show -- is it -- is it an accurate
17 representation of the water in that moment in time?
18 That's what a QA -- quality assurance/quality control
19 plan does. And using water as an example, we do that
20 often. We do that in the water quality and flow
21 monitoring plan monitoring. We also do that in the
22 core receiving environmental monitoring program; we
23 also do that in our groundwater monitoring program. We
24 make sure that the samples that we're taking are
25 reliable. And we follow very strict guidelines that
26 are regulations from INAC or Indigenous and Northern

1 Affairs Canada but also Environment Canada in the
2 receiving environment.

3 Now I'll pass it to my colleague Erika to talk a
4 bit more about our waste management and waste control
5 at Whale Tail Pit.

6 MS. VOYER: Thank you, Mr. Chair, Board
7 members.

8 These following slides on the waste rock
9 management were reviewed in the previous presentation
10 for waste disposal and management presentation, the
11 Number 3 presentation. So I will not go as much in
12 detail as previously.

13 So for the waste rock management, as we had
14 reviewed previously, the main step for this management
15 are, first, the identification of the different waste
16 rock type at the baseline stage of the project; the
17 sampling and testing on-site during operation to define
18 the acid rock drainage and metal leaching potential;
19 and also the daily assessment by the geology and as
20 well as the marking in the pit of the waste rock type
21 during the operation.

22 The waste rock management plan is completed at the
23 early stage of the project and is then further
24 detailed. As we reviewed during production, the
25 engineering team review the plan on a weekly basis and
26 produce maps and clear directive on the waste rock

1 classification and deposition location as presented on
2 the two maps here.

3 The dispatch system, as you know, is an important
4 tool for the waste rock management at Meadowbank and
5 will also be for the Whale Tail Project. The dispatch
6 system and the dispatcher in charge guide the operator
7 and ensure the ore and the waste rock material are
8 transported to the appropriate location. The execution
9 of the waste rock management is a step-by-step
10 integrated process that includes different teams during
11 the whole mining process. The best practices at
12 Meadowbank in terms of waste rock management will
13 continue for the Whale Tail Project.

14 I will let my colleague Ryan Vanengen complete the
15 presentation.

16 Thank you.

17 MR. VANENGEN: Thank you, Erika.

18 So this slide is describing some of the quality
19 assurance and quality control that goes into making
20 sure that the waste rock that we say is non-potentially
21 acid generating is actually that, and it kind of falls
22 in line with what Valerie had presented.

23 So when we encounter a certain rock type that
24 Valerie described, we then collect a sample from the
25 drill hole. So while we're -- the drill holes during
26 blasting, we collect that sample, and then we send it

1 into our on-site lab, which tells us what type of
2 material it is, confirms what type of material it is.
3 And we also send, periodically, a subset of those
4 samples to an external lab, a lab in the south, that
5 tells us how good a job we're doing at identifying that
6 rock material. So that's a really important piece of
7 our -- of the monitoring and management of our waste
8 on-site.

9 We also -- related to water quality, we also have
10 qualified technicians on-site, and in our water quality
11 sampling, we also collect duplicates and send them down
12 to the lab to make sure the lab is also doing a good
13 job on -- on -- on their analysis. So it tells us a
14 lot about the accuracy of that water sample. And we
15 always use -- in our water quality, we always use the
16 third -- a third-party accredited laboratory. So that
17 means that we're not analyzing for that. An arm's
18 reach away from us is analyzing our water quality to
19 make sure it's safe.

20 And then we follow, as I kind of mentioned before,
21 we follow Environment Canada guidance on quality
22 assurance and quality control. We've developed quality
23 assurance and quality control that meets very rigorous
24 monitoring standards for our core receiving
25 environmental monitoring, and we apply all of these --
26 kind of these methods around quality assurance, quality

1 control. We apply it throughout our monitoring,
2 including air, as well as, as I mentioned, groundwater.

3 Just two more slides on the -- on our emergency
4 planning and then -- or two more topics to cover and, I
5 think, five more slides.

6 So we have our spill contingency plan, which is an
7 important plan for obviously -- obvious reasons. But
8 as I mentioned before, something like the spill
9 contingency plan and how we react to some type of
10 spill, we're proposing to use the same methods that we
11 have at Meadowbank, and on the current all-weather
12 access road we're looking to apply that same spill
13 response to the haul road and to the Whale Tail Pit
14 site.

15 We have an emergency response team that is very --
16 is very good at what they do, and they're going to be
17 based at Meadowbank, and then there's going to be a
18 smaller group also based at Whale Tail Pit. So they'll
19 be able to respond to human health concerns or
20 accidents that might happen, like Jamie described, and
21 also spills that -- that might happen. So we have --
22 we have, kind of, everything covered between those two
23 sites.

24 And the last topic is related to our closure
25 planning, and these were thoroughly covered by Erika in
26 the previous presentation. So I don't think I need to

1 touch on these. What I will just touch on, though, is
2 this: We've already agreed, based on Karen's comments,
3 one of our updated water quality and flow monitoring
4 plans has a monitoring station called STWT10 located in
5 the pit, and it's carried forward in the latest version
6 of the water quality and flow plan, it's carried
7 forward in here, and we hope that that will address
8 that question around monitoring of the pit and the
9 north basin as it relates to stratified water quality
10 monitoring.

11 Ultimately, and this is in closing, you've seen
12 this slide a few times because it applies to all of our
13 monitoring, and it relates to adaptive monitoring.
14 We're going to collect monitoring data, which we
15 already have baseline data that we've used to model.
16 We're going to plan and evaluate. And we're going to
17 adapt our infrastructure through engineering and change
18 our mine -- mining operations to adapt based on --
19 based on data, and we'll use fact-based
20 decision-making.

21 So I hope that summarizes all of our monitoring
22 plans.

23 Mat'na.

24 THE CHAIR: So that's end of the
25 presentation on that particular one?

26 MR. VANENGEN: Mr. Chair, we just have one

1 more presentation that relates to the licencing. So
2 it's a -- it'll go over the draft framework and the
3 Type A water licence amendment as well.

4 THE CHAIR: Okay. So open up for
5 questions, concerns?

6 Teresa.

7 MS. MEADOWS: Thank you, Mr. Chair. Teresa
8 Meadows, legal counsel for the Nunavut Impact -- or
9 Nunavut Water Board. Sorry.

10 Before the final presentation -- I know we're
11 going into questions right now about this presentation,
12 but before we go into the final presentation, I didn't
13 have a copy of that presentation to mark as an exhibit.
14 So before you present, I'll need to take a pause and
15 mark that as an exhibit.

16 Thank you, Mr. Chair.

17 EXHIBIT 13 - Agnico Eagle hard copy
18 PowerPoint presentations entitled
19 "Part 8 - Meadowbank Licence Amendment" and
20 "General - Annual Reporting Commitments,
21 Terms, Linkage to Other Licences"
22 (English/Inuktitut)

23 THE CHAIR: Thank you.

24 So open for questions, concerns.

25 KIA.

26 MR. MANZO: Thank you, Mr. Chairman. Luis

1 Manzo, Kivalliq Inuit Association.

2 No questions at this time.

3 Thank you.

4 THE CHAIR: Thank you.

5 INAC.

6 Indigenous and Northern Affairs Canada Questions Agnico
7 Eagle Mines Limited

8 MR. PARSONS: Thank you, Mr. Chairman. Ian
9 Parsons, Indigenous and Northern Affairs Canada.

10 Pardon me if this was covered in the NIRB process,
11 but I wasn't here. So I'm just here now.

12 As far as water quality goes, our biggest concern
13 is with the metal leaching. So I'm just wondering why
14 the 16th hole for metal leaching and only every 4th
15 hole for ARD? Or is this something that was covered in
16 the NIRB process, and it's going to be adapted for
17 Whale Tail?

18 THE CHAIR: Thank you.

19 Applicants.

20 MS. BERTRAND: Mr. Chair. This is Valerie
21 Bertrand for Agnico.

22 So this sampling plan is what's currently done at
23 Meadowbank. And it's an example of the type of things
24 that can be done at Whale Tail. We have a commitment
25 to update that plan to include things like arsenic
26 content.

1 MR. PARSONS: Okay. Thank you. So just to
2 clarify, this is not the -- the 4th and 16th is not set
3 in stone, then, for Whale Tail?

4 MS. BERTRAND: Valerie Bertrand for Agnico
5 Eagle.

6 That's correct. It's not set in proverbial stone.

7 MR. PARSONS: Thank you. No further
8 questions.

9 THE CHAIR: Thank you, INAC.
10 Environment and Climate Change Canada.
11 Environment and Climate Change Canada Questions Nunavut
12 Water Board Staff

13 MS. AUSER: Thank you, Mr. Chair. Trish
14 Auser, Environment and Climate Change Canada.

15 Environment and Climate Change Canada is seeking
16 clarification from the Water Board whether these
17 management plans and monitoring programs will be made
18 available for review and be subject to Board approval.
19 Our department, along with other intervenors, have been
20 involved in reviewing these materials, and Environment
21 and Climate Change Canada is interested in continuing
22 our engagement by reviewing future updates of plans,
23 programs, and studies.

24 Thank you.

25 THE CHAIR: Water Board.

26 MR. KHARATYAN: Thank you, Mr. Chair. Karen

1 Kharatyan, Water Board.

2 I don't really know which plan Environment and
3 Climate Change Canada means right now. Generally,
4 plans that were included within the applications, no
5 big concerns there or concerns that were raised, but
6 some of them, they are updated during the process. So
7 the Board may approve within the issuance of the
8 licence. This is the practice that the Board had
9 before.

10 However, if there are some -- I think there are
11 plans that should be updated, and I did have a very
12 quick look. They are proposing -- Agnico Eagle is
13 proposing a schedule for updated plans to be submitted
14 60 days prior to operation or 60 days after licence
15 issuance. So these plans will be made available for
16 public review, of course.

17 MS. AUSER: Trish Auser, Environment and
18 Climate Change Canada.

19 Thank you. That was what I was looking for.

20 Thank you.

21 THE CHAIR: Thank you.

22 And DFO.

23 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
24 D'Aguiar with Fisheries and Oceans Canada.

25 We don't have any questions at this time.

26 Thank you.

1 THE CHAIR: Thank you. (OTHER LANGUAGE
2 SPOKEN).

3 NWB staff, Water Board.
4 Nunavut Water Board Staff Questions Agnico Eagle Mines
5 Limited

6 MR. KHARATYAN: Thank you, Mr. Chair. Karen
7 Kharatyan, Water Board staff.

8 One clarification. If you go back to Slide 6 or
9 7, I think there are missing stations there. Or maybe
10 it's my computer.

11 MR. VANENGEN: Mr. Chair, Ryan Vanengen from
12 Agnico Eagle. Yes. This is not the complete list
13 that's in your draft framework. So there are stations
14 missing in here. This was more to serve as a means of
15 an example for presentation purposes.

16 Mat'na.

17 MR. KHARATYAN: Thank you. Karen Kharatyan,
18 Water Board staff.

19 If you go next slide, Ryan, please. Next. I just
20 caught it. Within the group, second of parameters,
21 there is total cyanide included, total and free
22 cyanide. And I think even Environment and Climate
23 Change Canada suggested that it shouldn't be completed,
24 so you can -- we can delete it for the framework if
25 it's included within the framework.

26 Thank you.

1 MR. VANENGEN: Mr. Chair.

2 Thank you for that. That's an error in that
3 table. And we'll double-check if that was removed in
4 the draft framework.

5 Thanks.

6 MR. KHARATYAN: Thank you, Mr. Chair. Karen
7 Kharatyan, Water Board.

8 No more questions at this time.

9 THE CHAIR: Thank you.

10 Panel members. No?

11 Thank you.

12 Next presentation from the applicant.

13 MS. MEADOWS: Thank you, Mr. Chair. Teresa
14 Meadows, legal counsel for the Nunavut Water Board.

15 Mr. Chair, I have the presentation -- hard-copy
16 presentation materials for this presentation to mark as
17 the next exhibits in this public hearing.

18 And those are my procedural matters, sir.

19 THE CHAIR: Thank you, Teresa.

20 Go ahead.

21 Presentation by Agnico Eagle Mines Limited (Licence
22 Amendment)

23 MR. VANENGEN: Ryan Vanengen from Agnico
24 Eagle. Mr. Chair and Board members.

25 I think this is -- yeah, the 17th slide. So it
26 should be about 15 minutes presentation. We're really

1 going to get into the more administrative information
2 related to our Type A water licence amendment, as well
3 as our proposed Whale Tail Pit Type A water licence.

4 So as I mentioned earlier, especially in Michel
5 Groleau's presentation, we talk about the linkage to
6 our Meadowbank mine. We'll be mining at Whale Tail
7 Pit, which we're proposing requires a Type A water
8 licence. But we can't forget that that ore is going to
9 be shipped to the Meadowbank mill, and the ore from
10 Whale Tail Pit is going to be shipped to the Meadowbank
11 mill and then stored in our tailings storage facility.

12 So what we've requested is really just a matter of
13 just including that ore storage or the tailings storage
14 in the Meadowbank licence. And, therefore, we're
15 asking to extend that activity of our tailings within
16 our Type A 2AM-MEA1525. So just extend the activity.
17 Because it's all within an approved tailings storage
18 facility footprint anyway.

19 So just the next slide, what that means is, as
20 Jamie presented earlier, is this area here is going to
21 continue to be operated. So this is our tailings
22 storage facility at Meadowbank. And we're going to
23 continue to operate also our mill, which then sends the
24 tailings into the storage facility.

25 Oh, I forgot about these animations.

26 So the north cell raise was well described by

1 Jamie and also by Michel. So I won't get into that too
2 much.

3 This is where we'll be depositing, as Michel
4 described, 3.5 -- around 3.5 million tonnes of
5 tailings. And then the remaining approximately
6 5 million tonnes of tailings will go into an already
7 approved tailings storage facility. So that's that
8 Type A water licence.

9 But in order to mill -- in order to mill, we also
10 need water; right? So that's part of that water
11 licence amendment as well, is the water use for
12 milling.

13 So as Michel described, we have the raise that
14 we're proposing will go along the outside of the
15 tailings storage facility, and this is the raise here
16 and design. And as Michel showed as well, that raise
17 will be inside of the tailings storage facility, and
18 that will allow us to continue to operate our mill at
19 Meadowbank and allow for the deposition of the Whale
20 Tail Pit tailings into our already approved tailings
21 storage facility.

22 So the same surface water management strategies
23 will apply for -- so we'll apply everything that we've
24 done and everything that Michel described earlier,
25 we'll continue to apply that. So what that means is
26 we're going to reduce the amount of contact water

1 requiring management. We're going to divert through
2 channels on the outside. We're going to divert water.
3 And we're also going to do as much as we can to limit
4 our freshwater use. So that's just continuing our
5 Meadowbank operations.

6 And you can see in these photos, these are fairly
7 recent photos. These are the diversion channels that
8 we're talking about, that Michel presented earlier.
9 And you can see these are -- and that's diverting the
10 non-contact water away from our tailings, to make sure
11 that it stays frozen.

12 So those first few slides were really just
13 describing, like I said, the Type A water licence
14 amendment for the Meadowbank licence, and now we're
15 going to get into the details of the proposed draft
16 framework. I won't get into, like, extreme details,
17 but I'll get into -- we'll just kind of overview that.
18 So for those that -- does everybody have a copy of the
19 draft framework in front of them? Yeah. We'll just
20 quickly go through that together.

21 So this was described to our colleagues at
22 Indigenous and Northern Affairs Canada, as well as
23 Environment Canada and the Kivalliq Inuit Association.
24 We -- what we really attempted to do in this draft
25 framework was to copy, more or less, the same
26 conditions in the draft framework as we already have in

1 our Meadowbank licence so that they look very similar.
2 And what we -- what we're proposing also is that the
3 terms and conditions are also similar. So it's -- the
4 wording is identical in some cases.

5 In the left column, what you'll see here is the --
6 is kind of the description. This is the information
7 that would be in our -- in the proposed licence. And
8 in the other column here is what we have here is the
9 Agnico Eagle comments, and it's kind of an annotation
10 or it describes what we're trying to achieve in the --
11 in the left column.

12 So, you know, if we go to the second page, which
13 is part A, the scope and definitions and enforcement, a
14 lot of the wording is consistent with our Meadowbank
15 licence but describes or Whale Tail Pit Project, and
16 that description was already made by the -- by the
17 Chair in his earlier presentation and described by
18 Jamie.

19 If you look ahead to Part B, "General Conditions",
20 we have in the left column, we have Items 1 to 12. And
21 what that means is that we're looking to just adopt the
22 Meadowbank Conditions 1 to 12. We're not looking to
23 change them. They all apply to the Whale Tail Pit
24 site. For general conditions, 13, this is related to
25 monitoring plans. And what it says is we will
26 implement monitoring plans that we described in the

1 presentations, we will implement them, is what it's
2 saying.

3 If we go to the Condition Number 14, these are
4 Whale Tail Pit-specific plans as well, and this tells
5 the Board that -- and it's insurance for -- it ensures
6 that Agnico Eagle will follow those Whale Tail
7 Pit-specific plans.

8 And then Bullet Number 16 speaks to Agnico's
9 commitment to update -- to update the plans. So that's
10 in reference to Trish's comment also about the updating
11 and revising plans; that's what this condition is
12 about. And the licence goes through other standard
13 wording related to securities, and we've adjusted that.
14 And Part D, conditions applying to construction, it's
15 very standard stuff; stuff that is in our Type A water
16 licence at Meadowbank, but the wording's adjusted for
17 Whale Tail Pit. And same thing for the other sections
18 as well.

19 The one section that I want to point to for the
20 Board's understanding is Part E, "Conditions Applying
21 to Water Use and Management", and, in particular, the
22 Condition 4 related to updating our Whale Tail water
23 management report and plan, as well as the water
24 quality modelling. These are -- these are conditions
25 that we do at Meadowbank, and it's all the information
26 that Valerie presented on the modelling and how we use

1 monitoring data inform -- to inform our modelling.
2 It's all in there, and it addresses INAC's concerns, as
3 well as Environment Canada's concerns and the Kivalliq
4 Inuit Association's concerns related to the closure
5 modelling scenarios.

6 And I think that's generally -- that's it. I
7 mean, the other one maybe to note would be the EQCs on
8 page 8 of the draft framework. If you look at Part F,
9 "Conditions Applying to Waste Disposal and Management",
10 we have the new revised EQCs, and what you'll see here,
11 cadmium is the right number, and we also have an
12 agreed-upon number for mercury.

13 So I hope that helps with the Board's
14 understanding of what we're proposing here, and we
15 believe it's certainly transferrable. It's
16 transparent, and it's also enforceable as well. It's a
17 lot easier to enforce licences that have two licences
18 on two, kind of, sites that are interacting, it's much
19 better to enforce and easier on the compliance side.
20 So it's just transferrable.

21 So I hope this document helps the Nunavut Water
22 Board.

23 The one thing that was discussed over the lunch
24 break was that intervenors have requested an extension
25 on the review of the draft framework, and we're working
26 with them on the timelines for that.

1 So this is -- this is a comprehensive list, and
2 it's covered in the draft framework. So I won't get
3 into the details of this, but this is really showing
4 our commitment to -- to updating the plans and
5 ultimately adhering to these plans. So that's the same
6 slide related to that.

7 And then as Karen had mentioned about, you know,
8 our commitment is to update certain plans prior to
9 operations, and then after receiving our licence, you
10 know, 60 days after issuance of the licence, we'll
11 update other plans. And that's all in the draft
12 framework as well. And then 90 days prior to
13 construction, we'll update plans as well.

14 And then, lastly -- actually, I should go back.
15 This is related to annual reporting commitments. And
16 what we're proposing is that the Whale Tail Pit licence
17 would be just the same in terms of its annual
18 reporting, and, therefore, the Nunavut Water Board will
19 receive, you know, essentially a single
20 Report reporting on our Meadowbank licence, as well as
21 our Whale Tail Pit licence. And it would include all
22 of the things that we have reported on and discussed
23 already, related to dust suppression, related to waste
24 rock storage facility, including even the performance
25 of our thermal modelling to address some of Indigenous
26 and Northern Affairs Canada issues. You know, we'll

1 continue to adapt and report on the core receiving
2 environmental monitoring program and also, you know,
3 use our geotechnical experts like Michel to report on
4 some of our geotechnical work around Whale Tail Pit.

5 Lastly, I spoke to this already. You know,
6 certainly there's a linkage to our Meadowbank licence,
7 and that's what this draft framework demonstrates. We
8 believe there should be a linkage and that they should
9 be consistent. And within that draft framework, we've
10 also incorporated conditions of the road, the Type B
11 exploration access road. It's the BC-AEA1525. We've
12 incorporated that into here, into the draft framework.
13 And we've also, as I mentioned, extend -- requested an
14 extension for the Meadowbank licence to 2026 that Karen
15 mentioned. What's important, though, is that we want
16 to keep -- this was discussed in the prehearing
17 conference, but we would like to keep the Type BB
18 advanced exploration licence separate from this licence
19 so that we can continue to do more regional drilling
20 related to exploration on our Amaruq site, which is a
21 much bigger property than just where Whale Tail is
22 located.

23 Thank you very much. That's it.

24 THE CHAIR: Thank you.

25 Open to questions, concerns.

26 KIA.

1 Comments by Kivalliq Inuit Association

2 MR. MANZO: Thank you, Mr. Chairman. Luis
3 Manzo, Kivalliq Inuit Association.

4 In terms of the extension, I agree with INAC on
5 that. In terms of the -- of some of the general
6 concepts mentioned, we also have general intent to go
7 over those as well and -- just for clarification to the
8 Board.

9 Thank you.

10 THE CHAIR: Thank you.

11 And then INAC.

12 Indigenous and Northern Affairs Canada Questions Agnico
13 Eagle Mines Limited

14 MR. PARSONS: Thank you, Mr. Chair. Ian
15 Parsons, Indigenous and Northern Affairs Canada.

16 Just some clarification, I guess. I think you
17 guys skipped over, I guess, the slides on the proposed
18 licence terms and updated plans. I didn't see those
19 talked about, but I do see it in the written copy here:
20 (as read)

21 Whale Tail interim closure and reclamation
22 plan updated 90 days prior to construction.

23 I don't think we asked for that, and that's sort of
24 where that's coming from. Are you guys just going to
25 provide that on your own accord? Just getting some
26 clarification on that.

1 MR. VANENGEN: Mr. Chairman. Ryan Vanengen
2 from Agnico Eagle.

3 That's a leftover from the Type BC licence. So
4 that's an error on our part. Our apologies.

5 MR. PARSONS: Thank you for your
6 clarification.

7 MS. COSTELLO: Thank you, Mr. Chair. Karen
8 Costello for Indigenous and Northern Affairs Canada.

9 It is getting close to dinnertime, and I'm sorry
10 to have a couple of extra questions, but it has to do
11 with Slide 15. You were speaking to annual reporting
12 commitments, and I just am seeking clarification. I
13 may have misheard you. But I thought I heard a
14 statement that you were going to submit a single annual
15 report for both the Whale Tail licence and the
16 Meadowbank licence.

17 MR. VANENGEN: Mr. Board -- sorry.
18 Mr. Chairman. Ryan Vanengen from Agnico Eagle.

19 Yeah, I misspoke. In order to meet the Type A
20 water licence for both projects, we would submit
21 separate plans. Yeah. Thank you.

22 MS. COSTELLO: Thank you, Mr. Chair. Karen
23 Costello for Indigenous and Northern Affairs Canada.

24 Thank you for that clarification.

25 And just one more with regard to the other
26 licences that are associated with the Whale Tail/Amaruq

1 project. So the Exploration Licence 2BE, that is for
2 the drilling, but it's also -- I just want to get
3 confirmation that you also want to keep separate the B
4 licence for the underground bulk sample?

5 MR. VANENGEN: Mr. Chairman. Ryan Vanengen
6 from Agnico Eagle.

7 Those licences were combined as a Type BB. So
8 it's all -- it's under one single licence, all of the
9 activities associated with exploration on the Amaruq
10 site. So it's -- it covers the ramp and surface
11 drilling within the Amaruq property.

12 MS. COSTELLO: Thank you. Yeah, I had
13 forgotten they had been combined. So that -- Karen
14 Costello for Indigenous and Northern Affairs.
15 Apologies, Chair.

16 Right now your exploration licence only goes to
17 2018. Okay. So just want to make a statement about
18 that.

19 Thank you.

20 There's nothing further from Indigenous and
21 Northern Affairs. I just wanted -- as the -- Agnico
22 had mentioned that they wanted to retain that
23 exploration licence for ongoing work. 2018 is only --
24 is coming upon us soon.

25 Thank you. Nothing further from Indigenous and
26 Northern Affairs.

1 THE CHAIR: Thank you.

2 And then, next, Environment and Climate Change
3 Canada.

4 MS. PINTO: Thank you, Mr. Chair. Melissa
5 Pinto, Environment and Climate Change Canada.

6 We have no questions at this time.

7 THE CHAIR: Thank you.

8 And DFO.

9 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
10 D'Aguiar with Fisheries and Oceans Canada.

11 We don't have any questions.

12 Thank you.

13 THE CHAIR: Thank you.

14 From public? (OTHER LANGUAGE SPOKEN).

15 Board staff.

16 Nunavut Water Board Staff Questions Agnico Eagle Mines
17 Limited

18 MR. KHARATYAN: Thank you, Mr. Chair. Karen
19 Kharatyan, Water Board staff.

20 Just a couple clarification, and I think first one
21 is important for Nunavut Impact Review Board as well.

22 You just responded, Ryan, that separate plans will
23 be submitted. Separate plans or separate annual
24 reports?

25 MR. VANENGEN: Ryan Vanengen from Agnico
26 Eagle.

1 I misspoke again. It's separate annual reports.

2 MR. KHARATYAN: Thank you.

3 And just one very quick comment. I was just going
4 very quickly -- not going into details through this
5 framework. There may be some wrong referencing of --
6 to management plans because everything is November
7 2016; I think, for some of plans we received updated
8 versions in 2017.

9 THE CHAIR: Applicant, go ahead.

10 MR. VANENGEN: Ryan Vanengen, from Agnico
11 Eagle.

12 You're correct, Karen. In January 2017, we
13 provided those management plans, and in our rush to get
14 this out, it's a mistake. Thank you for the -- for
15 noting that, Karen.

16 MR. KHARATYAN: Thank you, Mr. Chair. Karen
17 Kharatyan, Water Board staff.

18 No more questions.

19 THE CHAIR: Thank you.

20 Panel members? No. No.

21 Okay. Need a little bit of housekeeping before we
22 continue on with the presentations if we have to, or
23 it's lunch [sic].

24 We have a community session tonight at 7:00, and
25 we're supposed to have supper. Time's getting tight.
26 So any guidance from the staff? Thank you.

1 MS. MEADOWS: Thank you, Mr. Chair. Teresa
2 Meadows, legal counsel for the Nunavut Water Board.

3 There's nothing further from staff or from me.

4 Thank you, Mr. Chair.

5 THE CHAIR: So we will continue on until
6 tomorrow morning with your presentations. How many
7 more presentations do you have to take care of? All
8 done?

9 MR. QUESNEL: Thank you, Mr. Chair. Yeah,
10 that was the last presentation by Agnico Eagle.

11 THE CHAIR: Okay. So we'll come back at
12 7:00 tonight for the community session.

13 Okay. Suppertime. Thank you.

14 (DINNER ADJOURNMENT AT 5:17 PM)

15 (PROCEEDINGS RECOMMENCED AT 7:06 PM)

16 THE CHAIR: Good evening.

17 We're starting our community session here tonight.
18 We have 7 to 10, I guess. So good evening, everyone,
19 and welcome to the community session for the Nunavut
20 Water Board's public hearing of the Type A water
21 licence application and for potential consequential
22 amendments to the Water Licence 2AM-MEA1525 issued for
23 the Meadowbank project filed by Agnico Eagle Mines
24 Limited with the Nunavut Water Board for the Whale Tail
25 Pit Project.

26 My name is Lootie Toomasie, and I am the Chair of

1 the Nunavut Water Board and the hearing Chair for this
2 public hearing.

3 Before we proceed with tonight's session, let us
4 begin with a prayer. Let us stand and have opening
5 prayer.

6 (OPENING PRAYER)

7 Opening Remarks by the Chair

8 THE CHAIR: So for those of you who were
9 not here this morning when we started the public
10 hearing, I have a few brief housekeeping and
11 introductory remarks, and then I will turn the
12 microphone over to the executive director and staff of
13 the Nunavut Water Board, the applicant, and the
14 intervenors.

15 Before I do, please note that there's
16 interpretation available throughout the hearing and
17 earpieces are available from the table located -- it's
18 out there, yeah, by the entrance area. And English
19 will be -- it's on Channel 1, and Inuktitut is on
20 Channel 2.

21 I also want to remind everyone to sign in on the
22 sign-in sheet located at the table just as you came in.
23 Your signing in is part of the record of this hearing.
24 In other words, the Board's decision report will
25 include the sign-in sheets indicating all those that
26 attended. That is why the Board's appreciating your

1 help, just making sure it is complete.

2 The washrooms are located just outside the hall
3 door, outside the hall door here, in -- by the area.
4 Exits are located just where you came in, and there's
5 another one over there and in the back here.

6 And there will be coffee, tea, and snacks located
7 at the table. It's out there on the side. During
8 break, please help yourself to refreshments and snacks.

9 There are agendas for the hearing available at the
10 table as you came in. Please pick one and follow
11 along.

12 Now I would like to introduce all the Board and
13 staff before we proceed with the presentation on the
14 agenda.

15 I am chairing this Panel, and with me today as the
16 members of the Panel are Board members Ross Mrazek on
17 my right and to my left is Alex Ningark.

18 Several staff members who have contributed to the
19 NWB's administration and technical review of the
20 application are present along with the legal counsel to
21 the NWB, and I will introduce the individuals attending
22 today. When I say your name, please wave so that
23 people will -- people know who you are: Stephanie
24 Autut, executive director. Ben Kogvik, director of
25 Board communication and in-house interpreter to the
26 Board. He's at the back, by the screen, by the

1 windshield. Karen Kharatyan. I'm sorry. I won't
2 pronounce it properly anyway. He's the senior
3 technical advisor working on this file. Richard Dwyer,
4 licencing administrator, at the back. And Teresa
5 Meadows, legal counsel to the Board.

6 We have two interpreters available for
7 simultaneous translation: Ben Kogvik from the Board and
8 Alexander Alooq, who is from Baker Lake.

9 For audio support, we have with us William Nicoll
10 from Nunavut Impact Review Board that kindly made its
11 equipment and services available for NWB's hearing. If
12 you experience any difficulties with your headsets,
13 William will be able to provide you assistance.

14 To ensure an accurate record of the proceeding is
15 kept, we have with us a court reporter: Sara Anderson.
16 No? Yeah, I said it this morning. Sorry.

17 Legal.

18 MS. MEADOWS: Thank you, Mr. Chair. Teresa
19 Meadows, legal counsel for the Nunavut Water Board.

20 Sorry, Mr. Chair. Your remarks are not updated.
21 Elizabeth Royal is our court reporter. Thank you,
22 Mr. Chair.

23 THE CHAIR: Yeah, thank you. From Dicta
24 Court Reporting Incorporated.

25 Okay. In our staff listing, I forgot to mention
26 David Hohnstein. Sorry about that. He's not here on

1 the staff; forgot about it on my note. He's director
2 of technical services.

3 Okay. I ask that all parties please state their
4 name every time prior to speaking.

5 We will start tonight's session with a
6 presentation by the Nunavut Water Board's technical
7 staff and then a presentation by the applicant, Agnico
8 Eagle Mines Limited. Following that, we will have
9 presentations by the following intervenors: Kivalliq
10 Inuit Association, Indigenous and Northern Affairs
11 Canada, Environment and Climate Change Canada, and
12 Fisheries and Oceans Canada.

13 Following these presentations, I will invite
14 anyone who wishes to ask questions or provide the Panel
15 with their comments to step up to the microphone and
16 speak on the record. If you are an elder, you can
17 raise your hand and one of our staff members will
18 provide assistance. There's a microphone available to
19 hand out.

20 I encourage everyone with questions or comments to
21 please step up to the microphone and speak. You can
22 direct your questions to the staff of the Nunavut Water
23 Board; the applicant, Agnico Eagle; and the
24 intervenors -- the Kivalliq Inuit Association,
25 Indigenous and Northern Affairs Canada, Environment and
26 Climate Change Canada, Fisheries and Oceans Canada.

1 Note that we need the public hearing records to be
2 complete and accurate. We also need to assist our
3 court reporter and interpreters. To do that, please
4 wait until you have a microphone available to speak;
5 then state your name and speak directly, clearly, and
6 slowly into the microphone. Please be mindful of the
7 interpreters as you go and avoid the use of acronyms
8 and abbreviations, if you can.

9 We appreciate your participation and assistance in
10 making sure we are heard and understood in this
11 hearing. I will now turn the microphone to the
12 executive director and the Board technical staff to
13 walk you through how this application has progressed to
14 this point.

15 Staff, proceed. Go ahead.

16 MR. HOHNSTEIN: Thank you, Mr. Chair. David
17 Hohnstein here.

18 Karen is just going to load our presentation up on
19 the laptop there; so it'll take about a minute. And
20 then we'll get on with our presentation.

21 THE CHAIR: Go ahead.

22 MS. MEADOWS: Thank you, Mr. Chair. Teresa
23 Meadows, legal counsel for the Nunavut Water Board.

24 Mr. Chair, it's my understanding that the
25 presentation -- there is a hard copy of presentation
26 materials at the back for people who would like to

1 follow along. However, Karen has advised me that he
2 has provided some updated slides to reflect the
3 conversations that have gone on and some of the
4 resolution of issues and so -- and to update the
5 information that is in the hard copy presentation, and
6 so we will be filing the electronic copy of the exhibit
7 as it will be the most up-to-date information. So,
8 Mr. Chair, I'll be filing that as the next exhibit in
9 this public hearing.

10 MS. KOWBEL: Excuse me, Mr. Chair.

11 THE CHAIR: Go ahead.

12 MS. KOWBEL: Thank you. Christine Kowbel
13 for Agnico Eagle.

14 Teresa, can you please just clarify what you just
15 stated. I think we're not clear on what presentation
16 you're referring to.

17 MS. MEADOWS: Thank you, Mr. Chair. Teresa
18 Meadows, legal counsel for the Nunavut Water Board.

19 I'm not 100 percent sure what changes there are on
20 this presentation versus the hard copy. Just a couple
21 of minor updates is what I'm told. So we will be
22 filing the electronic version rather than the hard copy
23 presentation so that it's the most up to date.

24 Thank you, Mr. Chair.

25 EXHIBIT 14 - Nunavut Water Board electronic
26 copy PowerPoint community presentation

1 regarding an application for new Type A water
2 licence: 2AM-WTP--- (English/Inuktitut)

3 THE CHAIR: Thank you.

4 So is the staff getting ready?

5 Presentation by Nunavut Water Board Staff

6 MR. KHARATYAN: Thank you, Mr. Chair. Karen
7 Kharatyan, Nunavut Water Board staff.

8 Yes, changes are very minor, like some small dates
9 about presentation, et cetera. You will see.

10 So we are here today to speak about the Type A
11 water licence application for Whale Tail Pit
12 development and also potential amendments to existing
13 Type A Licence 2AM-MEA1525.

14 So just to clarify for everyone, this presentation
15 is not about the project but about the licencing
16 process for the project. So the applicant will be
17 speaking more in detail about the project, I think,
18 after our presentation.

19 So the following topics will be covered through
20 the presentation: background information about the
21 Nunavut Water Board, authorizations the Water Board may
22 issue, Type A licencing process, scope of the
23 application, application procedural history, intervenor
24 participation, public participation, next steps in the
25 process for the Type A application, staff contact
26 information, questions/comments.

1 So as you may know, the Nunavut Water Board is an
2 institution of public government established under
3 Article 13 of the Nunavut Agreement. It has
4 responsibilities and powers over the regulation, use,
5 and management of freshwater in the Nunavut settlement
6 area. Nunavut Water Board's objects are to provide for
7 the conservation and utilization of waters in Nunavut,
8 except in a national park; to provide maximum benefit
9 from these waters for Nunavut residents and Canadians
10 in general.

11 Based on its mandate and Nunavut Waters
12 Regulations, the Nunavut Water Board may issue any of
13 the following authorizations for the use of water and
14 deposit of waste for undertakings in Nunavut settlement
15 area: so authorization without licence for less than
16 50 cubic metres per day water or water use, Type B
17 water licence to authorize water use between 50 cubic
18 metres and 299 cubic metres per day, Type A water
19 licence for more than 300 metre cubic [sic] per day.
20 So this week's public hearing is for a Type A water
21 licence application based on criteria set out in
22 Schedule 2 and 3 of water regulations.

23 This slide shows the licencing process or
24 beginning of licencing process for Type A water
25 licence. So once Nunavut Water Board receives
26 application and confirms classification of undertaking

1 and type of licence required as a Type A licence, the
2 Board conducts initial technical review or concordance
3 review and issues a notice of application, requesting
4 full technical review from any interested party and,
5 generally, giving 30 days for relevant comments. I
6 should say that at this -- even at the initial stage,
7 the applicant may be asked to provide additional
8 information, clarification, et cetera.

9 So after general 30 days of technical review
10 stage, parties or agencies, any interested person
11 submit their representation or their written comments.
12 And the next stage will be having a technical
13 meeting/prehearing conference.

14 For this application, I should ask -- I should
15 clarify that we did have a joint technical meeting and
16 prehearing conference with the Nunavut Impact Review
17 Board, as the applicant requested a coordinated review
18 of project proposal and licence application.

19 After technical meeting/prehearing conference, the
20 Board issues a prehearing conference decision -- so we
21 did have this decision issued, again, jointly with the
22 Nunavut Impact Review Board -- and issues a public
23 hearing notice at least 60 days prior to having the
24 public hearing. Again, even at this stage, the
25 applicant may be asked to provide additional
26 information, clarification, et cetera.

1 During 60 days of -- 60 days prior to public
2 hearing, so parties and applicant may exchange written
3 intervention and prepare for public hearing. Then
4 public hearing is happening. We are at this stage of
5 having a public hearing now. Generally, after public
6 hearing, the Board may issue a decision to approve the
7 application or not approve the application. And for a
8 lot of cases, we may have two decisions coming from --
9 two potential decisions coming from Minister.

10 For this specific application, we have to wait for
11 NIRB consideration. So we will go -- or the Board will
12 issue its decision once NIRB and Minister accept or not
13 accept the project proposal. "Accept the project
14 proposal", I should say. If it's not accepted, no
15 Board decision will be issued.

16 The next few slides include the main items
17 included within the scope of the application. So these
18 numbers are about water use requested by applicant.
19 Water use requested from Whale Tail and Nemo Lakes for
20 construction/operation from 2018 to 2022: up -- '21,
21 '22, I would say: up to 191,000 cubic metres per year.
22 At closure phase, water will be taken from Whale Tail
23 Lake for flooding of Whale Tail Pit and Whale Tail Lake
24 north basin, and closure phase starting from 2022. And
25 you'll see that the number of water use is very high at
26 closure because number of water required for flooding

1 is a little higher than for operation. And we have
2 this last number from 2021-2028: 17,520 cubic metres
3 per year for camp domestic use.

4 So this application is for the development of a
5 mine and request -- or requires construction and
6 operation of mine-related infrastructure, like listed
7 in the slide: camp accommodation buildings, storage
8 area, crusher, power plant, explosive magazine, one
9 open pit to be developed, ore stockpiles, waste rock
10 and overburden storage facility, landfill.

11 Also, the applicant is asking to make Amaruq
12 exploration access road a little wider to accommodate
13 the traffic of haul trucks. Fuel storage facility is
14 also requested on-site for 500,000 litres of fuel.
15 Development of quarries and borrow pits and development
16 of water management infrastructure like collection
17 ponds, retention dikes, diversion channels, and
18 culverts. Also, water treatment plants to be
19 operating, including for domestic water and sewage
20 treatment plant.

21 Ore: The applicant is requesting to have all ore
22 processed in -- at Meadowbank site. Meadowbank is
23 licenced separately. They have a valid licence with
24 the Board. So all ore will be trucking to Meadowbank
25 site. And they require water supply for ore
26 processing.

1 Tailings storage facility will be involved with
2 the storage -- or the disposal of additional tailings.
3 Baker Lake marshalling area and Baker Lake all-weather
4 access road will be utilized and also airstrip and camp
5 facilities.

6 Next few slides include very basic or, I would
7 say, main items of procedural history.

8 You may know that Water Board received the
9 application on July 8th, received formal on July 8th.
10 Applicant at that time requested already the Nunavut
11 Impact Review Board and Water Board to conduct
12 coordinated review of application and project proposal.

13 On August 18, the Nunavut Impact Review Board
14 determined that Whale Tail Pit Proposal wasn't assessed
15 within the Meadowbank Gold Mine project proposal and,
16 also, related to location, a little bit far from
17 Meadowbank site. Nunavut Impact Review Board decided
18 that a separate review will be required for this
19 project under the terms of, I would say, Nunavut
20 Agreement and Nunavut Planning and Project Assessment
21 Act.

22 On October 3rd, Water Board started its formal
23 processing of application and did ask the applicant
24 whether they agree with having a separate Type A
25 application for this project. On October 15, the Board
26 was provided a response that applicant agreed with this

1 approach.

2 MR. HOHNSTEIN: So those dates should be 2016;
3 right?

4 MR. KHARATYAN: Oh.

5 MR. HOHNSTEIN: Just noticed that.

6 MR. KHARATYAN: Yes. There is a mistake. I
7 am sorry. Yes. These dates should be 2016. I was
8 thinking back in -- with the Meadowbank site, maybe.

9 On November 3rd, the Board received completeness
10 comments and initial technical assessment from
11 Fisheries and Oceans Canada, Environment and Climate
12 Change Canada, and Indigenous and Northern Affairs
13 Canada; and on December 7th and on January 26th, 2017,
14 the applicant provided additional information and
15 responses to comments.

16 On January 27, the Nunavut Impact Review Board and
17 Nunavut Water Board jointly distributed the Whale Tail
18 Pit Project Proposal and water licence application for
19 full technical review; and on March 13, 2017, Water
20 Board and Nunavut Impact Review Board distributed a
21 technical meeting and prehearing conference draft
22 agenda.

23 March 28th, Water Board received technical review
24 comments related to licence application from Fisheries
25 and Oceans Canada, Environment and Climate Change
26 Canada, Indigenous and Northern Affairs, and Kivalliq

1 Inuit Association. On April 7, 2017, company Agnico
2 Eagle Mines Limited provided its preliminary responses
3 to technical review comments.

4 April 21-25, the Board received proponent's and
5 intervenors' presentation for technical meeting. April
6 24th, Nunavut Impact Review Board and Nunavut Water
7 Board released jointly final agenda for technical
8 meeting and prehearing conference. April 28-29 and May
9 1-2, we conducted -- or Board conducted with Nunavut
10 Impact Review Board joint technical meeting/prehearing
11 conference, again in Baker Lake; and on June 8th, 2017,
12 NIRB and Water Board jointly released technical meeting
13 prehearing conference decision report. Between June 8,
14 July 14, company provided its commitment submissions.

15 Notice for public hearing for this public hearing
16 was issued on July 17, 2017.

17 In August 14-15, received comments from Fisheries
18 and Oceans Canada, Environment and Climate Change, and
19 Indigenous and Northern Affairs Canada, and Kivalliq
20 Inuit Association and, on August 28th, final
21 submissions from company.

22 September 5 to 25, Water Board received copies of
23 the presentations from Fisheries and Oceans,
24 Environment and Climate Change, Indigenous and Northern
25 Affairs, Kivalliq Inuit Association, and the company.

26 September 8, 2017, Board distributed a public

1 hearing agenda, and we are here for the public hearing
2 now.

3 So I should note that applicant/all parties'
4 contribution was very valuable. Parties I should state
5 separately maybe: Fisheries and Oceans Canada,
6 Environment and Climate Change Canada, Indigenous and
7 Northern Affairs Canada, and Kivalliq Inuit Association
8 all provided their valuable contribution for the
9 process and participated in formal and informal
10 discussion to resolve different issues and provided
11 very valuable technical information.

12 The Board is looking at public as well, and the
13 public is encouraged to participate in the public
14 hearing and community session now. I should note that,
15 if anybody is interested to provide any information,
16 any questions, they can contact Water Board staff. We
17 also have all documents, it was stated, on our FTP
18 site. That is stated in the -- on the bottom of the
19 slide; it is the FTP site.

20 Like Water Board Chair mentioned, today's or
21 tomorrow's public hearing is chaired by the Board Panel
22 and led by the Board Chair. The Water Board Panel is
23 here to consider the evidence provided during the
24 hearing before issuing its decision in about 30-45 days
25 after the project accepted by Nunavut Impact Review
26 Board and Minister. And once a decision is issued, the

1 public will be informed. So it's very -- and also
2 public will be informed with the subsequent Minister
3 decision after the Board decision.

4 These are contact information for all Nunavut
5 Water Board staff present right now at the public
6 hearing. So anyone wishing to provide even questions
7 after the hearing, they can just take the email
8 addresses and send an email.

9 This was the end of presentation, Mr. Chair. And
10 I will take any questions now.

11 Thank you. Mat'na.

12 THE CHAIR: Thank you.

13 Anyone have any questions related to the Nunavut
14 Water Board's licencing process, please state your name
15 before asking the questions. So anyone?

16 Go ahead. Go ahead, INAC.

17 Indigenous and Northern Affairs Canada Questions
18 Nunavut Water Board Staff

19 MS. COSTELLO: Thank you, Mr. Chair. Karen
20 Costello for Indigenous and Northern Affairs Canada.

21 I didn't want to take away questions from an
22 opportunity for the public. So that's why I just
23 waited to put up my hand.

24 I just had a question on process.

25 On Slide 26, it indicates that the Nunavut Water
26 Board Panel would be issuing a decision in

1 approximately 30 to 45 days after acceptance of the
2 project proposal by the NIRB, should that happen, and
3 the Minister's decision -- and the Minister.

4 So just to confirm process timelines, does this
5 mean that the Nunavut Water Board will not be --
6 Panel -- will not be issuing a decision on this licence
7 application until after the Minister and the other
8 responsible ministers have issued a response to the
9 NIRB decision?

10 Thank you.

11 THE CHAIR: Thank you.

12 Legal counsel.

13 MS. MEADOWS: Thank you, Mr. Chair. Teresa
14 Meadows, legal counsel for the Nunavut Water Board.

15 So the process -- just a slight correction to the
16 slide. The process will be that, as you know, the
17 Nunavut Impact Review Board will be issuing a decision
18 following the close of their hearing to the Minister as
19 to whether or not the project proposal can go ahead.

20 In the event that the Nunavut Impact Review
21 Board's decision is a positive one and they recommend
22 that the project be allowed to proceed to licencing,
23 the Minister will then consider that report and
24 recommendation and have the opportunity to decide
25 whether or not the Minister agrees and accepts that
26 report. Once the Minister has -- the responsible

1 ministers have made their decision, then the record
2 will close, actually, with the Nunavut Water Board.

3 So there will be some time for the Board and for
4 the parties to consider whether additional information
5 needs to be provided following the Minister's decision,
6 and then the record will close. So the public hearing
7 record for this will not close until after the Minister
8 has issued their decision.

9 If the project is approved to go ahead, then the
10 Nunavut Water Board would go ahead, receive the final
11 submissions, close the record; and within 30 to 45 days
12 of closing the record, the Nunavut Water Board will be
13 providing a written decision as with respect to the
14 licence.

15 In the event that the Nunavut Impact Review
16 Board's decision is a negative decision and the project
17 is not approved to proceed and the Minister also agrees
18 to that and the project does not proceed, there will be
19 no decision rendered in respect of the licence by the
20 Nunavut Water Board.

21 THE CHAIR: Thank you.

22 Continue, INAC.

23 MS. COSTELLO: Karen Costello for Indigenous
24 and Northern Affairs Canada. Thank you, Mr. Chair.

25 I appreciate the clarification on process.

26 I was just also trying to visualize timelines.

1 The NIRB, the Nunavut Impact Review Board, is
2 estimating that it will deliver its decision on or
3 about November 6, plus or minus a day. So under the
4 Nunavut Project Planning Assessment Act, the Minister
5 has -- the responsible ministers have up to 90 days, if
6 they're going to reject, to notify/to send it back to
7 the Nunavut Impact Review Board or up to 150 days to
8 provide a response.

9 So I'm just trying to map out potential timelines
10 as to when, assuming a positive recommendation from the
11 Nunavut Impact Review Board and acceptance by the
12 responsible ministers, when we can -- potentially might
13 anticipate a closing of the record on that.

14 So I appreciate this for clarification.

15 Thank you.

16 THE CHAIR: Teresa.

17 MS. MEADOWS: Thank you, Mr. Chair. Teresa
18 Meadows, legal counsel for the Nunavut Water Board.

19 So the question in terms of how long the record
20 needs to remain open after the Minister's decision is
21 very much dependent on what additional information the
22 Nunavut Water Board is waiting for. And if the parties
23 have already submitted everything and nothing further
24 is required, then the Water Board would consider
25 closing the record almost immediately after the
26 Minister has made her decision. If, on the other hand,

1 there are a number of things that are waiting and the
2 Water Board needs to keep the record open for, you
3 know, more time in order to be able to allow the
4 parties to get their information in, then it would be a
5 longer timeline.

6 But, obviously, the preference is the Water Board
7 would like to close the record as soon as they possibly
8 can and remit the matter to decision-making, because
9 the matter would not be remitted to the Panel until the
10 Minister's decision is -- and if it's an affirmative
11 decision -- is received from the Water Board.

12 MS. COSTELLO: Thank you, Mr. Chair. Karen
13 Costello for Indigenous and Northern Affairs Canada.

14 I appreciate that clarification from the Water
15 Board's legal counsel. I have no further comments.

16 Thank you.

17 THE CHAIR: Thank you.

18 Is there any more comments to the presentation?
19 Comments, concerns?

20 I don't see hands. So where do we move from here?

21 Applicants.

22 Presentation by Agnico Eagle Mines Limited

23 MR. QUESNEL: All right. Thank you,

24 Mr. Chair. Jamie Quesnel, Agnico Eagle.

25 I just want to introduce the team.

26 From Agnico Eagle, we have Michel Julien, the vice

1 president, environment; Ryan Vanengen, Whale Tail
2 Project lead; Erika Voyer, general supervisor,
3 environment; Michel Groleau, geotechnical coordinator;
4 Candace Ramcharan, community affairs coordinator. From
5 Golder Associates, we have Valerie Bertrand and Colleen
6 Prather. And from Lawson Lundell, our legal counsel,
7 we have Christine Kowbel.

8 Just before I get into the presentation, I just
9 wanted to say it's -- we're happy to be here in
10 Baker Lake and having another conversation with the
11 community. We believe that the process between the
12 Nunavut Impact Review Board, the Nunavut Water Board
13 that was established for the Whale Tail Pit Project has
14 given us the opportunity to undertake a comprehensive
15 review of the issues relating to water and waste. And
16 I also would like to thank all the parties for the work
17 that they've done over the past one-and-a-half years to
18 help Agnico Eagle improve the proposed Whale Tail Pit
19 Project. There's been a lot of work done by all the
20 parties, lots of community engagement; and this has led
21 us to a better proposal. We thank the parties for the
22 comments and recommendations that were submitted.

23 So just to ensure we stay on track, on time, we
24 have the handout of the presentation. At the back, we
25 have a paper copy. Also, we have a lot of posters.

26 Okay.

1 THE CHAIR: Go ahead.

2 MS. MEADOWS: Thank you, Mr. Chair. Teresa
3 Meadows, legal counsel for the Nunavut Water Board.

4 I'm sorry to interrupt, but I would like to mark
5 the presentation material, seeing as you were referring
6 to them, as the next exhibit in the public hearing.

7 Thank you, Mr. Chair. Those are my matters.

8 EXHIBIT 15 - Agnico Eagle hard copy
9 PowerPoint presentation of introduction and
10 overview for community information session

11 THE CHAIR: Thank you.

12 Go ahead, applicant.

13 Resumed Presentation by Agnico Eagle Mines Limited

14 MR. QUESNEL: Thank you, Mr. Chair. Jamie
15 Quesnel, Agnico.

16 Yeah, so we have the handouts at the back by the
17 front entrance; and, also, we have posters on the back
18 wall. Plus we have a 3-D model of the Whale Tail Pit
19 Project that everyone can take a look at and ask any
20 questions. So we have the handout, but we'll go
21 through the presentation and cover some of the key
22 items.

23 So, overall, we just want to comment on our
24 activities in Nunavut and why Nunavut: politically
25 attractive and stable jurisdiction, enormous geological
26 potential. And, also, our success at Meadowbank and

1 the infrastructure we have should be leveraged in the
2 north. And, also, the operating experience on
3 Inuit-owned land establishes a good foundation for
4 continued activities in Nunavut.

5 So this highlights the locations. Meadowbank.
6 Whale Tail Pit Project's within the Amaruq footprint.
7 Also, we have the Meliadine project under construction
8 just north of Rankin Inlet with commercial production
9 starting in September 2019.

10 This slide just shows the Whale Tail Pit Project
11 footprint with the activities that's there now. This
12 is Whale Tail Lake. This is Mammoth Lake. Our pit,
13 our proposed pit, is located here. The existing
14 infrastructure we have there now would be the actual
15 exploration camp. And our access road ties in from
16 Vault pit at the Meadowbank operation to the Whale Tail
17 location, approximately here. And we connected -- now
18 we're connected by road, and that happened about two
19 weeks ago.

20 So Agnico's Indigenous People engagement
21 commitment, which is part of the discussion tonight:
22 Agnico Eagle Mines will work in partnership with
23 Indigenous People to establish a mutually beneficial,
24 cooperative, and productive relationship. Our approach
25 will be characterized by effective two-way
26 communication, consultation, and partnering.

1 So a key part -- I was mentioning the haul road
2 between Whale Tail and the Vault pit location at
3 Meadowbank. We're looking at having heavy haulers, 18
4 trucks, to move the ore from Whale Tail to Meadowbank.
5 We're looking at operating 24 hours a day. It's about
6 two-and-a-half cycles per day or five trips per day per
7 truck. And, also, there's lighter traffic on the haul
8 road.

9 But these are the two new trucks that we're
10 looking at to pilot on the road before we make a
11 decision. The top truck, the photo at the top, is one
12 truck that we're looking at. It's a six by -- six
13 wheels by six wheels, all-wheel drive, so three axles
14 powering the front end of the truck to pull the ore.
15 In the box of the truck, it's 150 tonnes. The photo
16 just below that is another truck that we're looking at,
17 and that's ten wheels by ten wheels, all-wheel drive.
18 So there's five axles that's powering the truck, and
19 the payload is still 150 tonnes. And the length of the
20 truck and the trailer is about 84 feet.

21 And some of the new jobs -- we're looking at 150
22 new jobs, if the project is approved; and a good
23 portion of these jobs are related to driving these new
24 trucks.

25 So just dealing with the haul road that's now
26 connected between Vault -- so Meadowbank Vault pit is

1 located here; and Whale Tail, within the Amaruq
2 property, is located here. The red colours here are
3 Inuit-owned land. In the centre, we have Crown land.
4 So that's the alignment of the road between Vault at
5 Meadowbank operation to Whale Tail.

6 We're going to show a short video. It just
7 highlights the predevelopment, the operational phase of
8 Whale Tail, and also the closure phase of the project.
9 So it just gives you an indication of what it should
10 look like.

11 So this is predevelopment. So right here, this
12 waterbody that I'm pointing to is the Whale Tail Lake.
13 It flows through the Mammoth channel towards Mammoth
14 Lake. So that's the natural flow of water right now.
15 That flow of water will change based on the pit
16 development and also the attenuation pond.

17 So the next -- that's just looking at the
18 landscape.

19 So for the operations, this is Whale Tail Lake
20 south basin. The water will now go to the south into
21 Mammoth Lake. This is the Mammoth -- Whale Tail dike,
22 attenuation pond, Mammoth dike, Whale Tail Pit, and our
23 waste rock storage facility. So the 3-D model shows
24 this operational phase. So that's at the back of the
25 room that people can take a look at.

26 And at closure, once we meet the water quality

1 objectives, the criteria for the re-flood, these dikes
2 will be breached. That's the Whale Tail dike and also
3 the Mammoth dikes. So the water will be breached, and
4 the water will flow again naturally from Whale Tail
5 north basin through the Mammoth dike -- Mammoth channel
6 through the dike to Mammoth Lake.

7 And the waste rock storage facility, as we've been
8 discussing, will be covered with, like, 4 metres of
9 rock. So that's from the floor to the piping at the
10 ceiling, about that thickness of rock as a thermal
11 cover.

12 So we're just going to advance to Slide 16. Maybe
13 not. Yeah, this slide just shows the operational phase
14 of the Whale Tail Pit Project. It shows some of the
15 infrastructure. So, again, as a video, we have the
16 pit. We have the Whale Tail Lake south basin. And
17 this is Mammoth Lake, the waste rock storage facility.
18 We have a collection pond there also. Whale Tail dike,
19 Mammoth dike. We have the Whale Tail camp, the new
20 camp for the employees at that location. We have
21 some -- the ore stockpiles, overburden storage for
22 closure. We're pulling freshwater from Nemo Lake,
23 which is up here, to the site. And, again, the haul
24 road -- this is the connection to Whale Tail. So now
25 you can drive from Vault all the way to Whale Tail.

26 Just going to show -- this is based on the

1 existing infrastructure of Meadowbank that we're going
2 to use. This is all based on approvals for permits.
3 But Q3 2018, basically the three pits plus our Vault
4 pit, we will not be extracting any more ore at that
5 time, and that's why it's so important for the
6 application -- the approval of the Whale Tail Pit
7 Project, to continue the activities at Meadowbank.

8 But the existing infrastructure that will be used
9 at Meadowbank would be the tailings facility. So we
10 have the tailings facility located here. We have our
11 airstrip located right here. We have our camp, our
12 existing camp; and also the process facility where we
13 crush the rock and extract the product, the gold, that
14 we're after. And, also, the road to Whale Tail is
15 located here. It's not on this photo, but that's the
16 connection at the Vault location. So that's using --
17 that just highlights the existing infrastructure at
18 Meadowbank.

19 So I'm just going to pass this over to my
20 colleague Ryan to make a few comments about the
21 environmental monitoring and mitigation.

22 MR. VANENGEN: Ryan Vanengen from Agnico
23 Eagle.

24 So for the next three or four slides, I'm just
25 going to present an overview of our environmental
26 monitoring.

1 So our environmental monitoring covers all of the
2 areas, including the air; so we monitor the quality of
3 the air of our site. We monitor the terrestrial
4 environment -- so the caribou, the siksiks, the birds,
5 but also the vegetation that the animals -- that the
6 wildlife survive on; we monitor those.

7 We monitor around our mine site extensively,
8 especially as it relates to water quality monitoring.
9 We monitor around the ore stockpiles, and we monitor in
10 our pit. And if we treat water, we also monitor to
11 make sure that that treatment is effective. And then
12 we discharge into the environment, so the nearby lakes.
13 And we also monitor the water quality in the lakes, as
14 well as the fish food, the habitat that the fish
15 survive on, and also the fish themselves. So we
16 monitor all of the water elements or the aquatic
17 environment.

18 As part of -- as my colleague Jamie presented,
19 there's an area to the north of Whale Tail Lake, and
20 it's called the north basin. As a result of mining at
21 Whale Tail, we'll be required to do a fish-out as well.
22 So we'll be moving fish from the north basin into the
23 south basin before dewatering that basin.

24 Before we began designing the Whale Tail Pit
25 Project and also the monitoring programs and our
26 baseline studies, we hosted Inuit Qaujimagatungit

1 workshops and collected data throughout, already
2 beginning in 2014. And those traditional knowledge
3 workshops informed our project design in the early
4 phases. So it informed the road route. It also
5 informed our biologists and scientists that went out in
6 the field in 2015 to collect baseline data.

7 Many of the participants, including some of the
8 Baker Lake HTO members and some other local people,
9 were also hired in the field. So that was one way how
10 we integrated the Inuit Qaujimajatuqangit into our
11 design as well as our field studies.

12 Our field studies, as I mentioned, were primarily
13 in 2015, but we continued those in 2016, and we
14 continue to collect baseline data in 2017 as well to
15 inform our project and inform decisions.

16 Throughout the process, we've integrated Inuit
17 Qaujimajatuqangit; and as I mentioned, it's informed
18 our design around infrastructure, including water
19 management and including waste and road alignments.

20 MR. QUESNEL: Thank you, Mr. Chair. Jamie
21 Quesnel, Agnico.

22 Just about five slides to go over the future of
23 the Meadowbank mine, which is the Whale Tail Pit
24 Project.

25 We know the Meadowbank operation will exhaust all
26 the resources the third quarter 2018. So the Whale

1 Tail satellite operation will extend the life of the
2 Meadowbank mine. That's very important for the
3 continuity of employment, to ensure we pass on all the
4 key learnings in the -- with that continuity. And this
5 project relies on the use of the existing main
6 infrastructures of Meadowbank -- the main
7 infrastructures of Meadowbank; and, therefore, the team
8 in place works to advance and put in place a plan to
9 develop the new discovery as a satellite site. So
10 there's a lot of activity.

11 This represents, like I was saying, the continuity
12 of the current jobs at Meadowbank, over 800 people,
13 also, with -- if we do receive the approvals, adding
14 over 150 new jobs related to the full production phase
15 of Whale Tail. And that could be up to, you know, 75,
16 80 Inuit jobs and create many opportunities for Inuit
17 to benefit through training, jobs, and contracts. So
18 that's a very important piece.

19 We signed the Whale Tail Pit Inuit Impact Benefit
20 Agreement. It was signed June 15th, 2017, in this room
21 between Agnico and the Kivalliq Inuit Association.
22 This ensures Inuit benefit from the development of the
23 project through training, jobs, and contracts. Our
24 target is 50 percent Inuit employment.

25 Also part of that Inuit Impact Benefit Agreement:
26 to maintain a minimum of \$3.6 million to spend on

1 training plus one -- additional \$1 million per year on
2 initiatives to achieve the employment target; again,
3 the business opportunities with the registered
4 companies; additional studies on Inuit workforce
5 barriers; and also additional studies on socioeconomic
6 impact and benefits.

7 And a big part of our success is providing the
8 jobs, the local jobs. And also trades are
9 transferrable across Canada. And couple examples are
10 related to the Red Seal, related to mechanics,
11 carpenters, cooks. And these trades are transferrable.
12 They can come back to the community in Nunavut and
13 continue with that trade or elsewhere in Canada. So
14 Meadowbank is that location where people can be trained
15 and have that certification to utilize it for the rest
16 of their lives.

17 Devon is from Baker Lake. He graduated as a
18 journeyman heavy-duty equipment technician in April.
19 He joined Meadowbank in 2011.

20 At the end of 2016, there were 12 apprentices.
21 And that's plumbing -- for plumbers; carpenters; again,
22 heavy-duty equipment technicians; mechanics;
23 millwrights. Those trades are important not just here
24 but across Canada. Those are very important jobs.
25 And, also, Agnico Eagle is one of Nunavut's largest
26 employers for Inuit apprentices.

1 As mentioned earlier today, Agnico Eagle wants to
2 be in Nunavut for decades. We're developing platforms.
3 We have Meadowbank as a platform, also Meliadine as a
4 platform -- which can be a cornerstone for Agnico Eagle
5 activities for several decades.

6 Also, Meadowbank's lessons, the ten years we've
7 been operating in the north and success -- and this
8 success can be leveraged in new Agnico projects in
9 Nunavut; and we mentioned that many times with our
10 discussion of the Whale Tail Pit Project. The key
11 learnings, the people, the systems -- that's going to
12 be passed on to Whale Tail but also is being passed on
13 to Meliadine, our new project north of Rankin.

14 And the Whale Tail Pit Project will extend the
15 life of Meadowbank. And in Amaruq, the exploration
16 footprint where Whale Tail is part of that is the
17 future of the Meadowbank division.

18 And, also, like I stated, having our mines managed
19 by Inuit is our vision.

20 And that's our presentation.

21 Thank you.

22 THE CHAIR: Thank you, applicant.

23 Is there questions or comments from public?

24 Either from other participants?

25 Go ahead. There's a microphone available. Just
26 raise your hand.

1 Comments by the Public

2 TIMOTHY EVVIUK: Dewatering the part of Amarug
3 project, before it is dewatered, these fishes that are
4 being removed from that lake that are going to be
5 transferred to that lake, it's something to think
6 about. Maybe somebody that is not too young that has a
7 good knowledge on how to handle fish, somebody that is
8 well-trained. I was -- I grew up on -- I grew up on
9 the land. When Kiggavik was opened 2016, I started
10 working there. I started working with fish and the
11 water. And to the bottom of the lake, I also pulled
12 out some fish from there. Those fish have to be very
13 well cared for -- or be careful with the fish.

14 Some that are too young, that are being --
15 working, yes, it is joy that the young people are
16 working. But for me, it is not too okay when they are
17 going to handle the fish. How -- it has to stay -- the
18 fish have to stay alive and survive. And when they are
19 going to be transferred to another lake, I've seen them
20 being suffer and I noticed and watched them, how they
21 do it; therefore, somebody that is well-trained on how
22 to handle -- to transfer fish. When they are going to
23 handle the fish and transfer them to the other lake, I
24 have noticed. I now know that they -- fish can survive
25 after being handled.

26 I just wanted to put this out to you when they are

1 going to dewater the Amaruq site.

2 Thank you.

3 MR. VANENGEN: Ryan Vanengen from Agnico
4 Eagle.

5 Thank you very much for the comments, and they're
6 very useful. And we've also had the same experience
7 working with the Hunting and Trapping Organization,
8 where they've provided very good advice as well during
9 our fish-outs at Meadowbank in the past. And we look
10 to apply the same transfer procedures. We have also
11 trained people that are -- that have worked for us
12 based out of Baker Lake and also trained biologists as
13 well that will be conducting the fish-out to ensure
14 that the fish from the north basin are transferred
15 effectively and are protected and then released into
16 the south basin of Whale Tail Lake.

17 Mat'na.

18 THE CHAIR: Thank you.

19 Any more questions? (OTHER LANGUAGE SPOKEN). Any
20 more questions? Okay. Thank you. There's no more.

21 Okay. Now moving on to intervenors. Can I start
22 with the KIA.

23 Go ahead.

24 MS. MEADOWS: Thank you, Mr. Chair. Teresa
25 Meadows, legal counsel for the Nunavut Water Board.

26 Mr. Chair, as this is the first evidence that's

1 being presented to the Board by the intervenors, I will
2 need to affirm them or swear them in.

3 And as well I believe that we have a presentation
4 that I will be marking as the next exhibit in the
5 public hearing.

6 LOUIS MANZO, ALAN SEXTON, Affirmed

7 MS. MEADOWS: Teresa Meadows, legal counsel
8 for the Nunavut Water Board.

9 Thank you, Mr. Chair. Those are all my procedural
10 matters.

11 THE CHAIR: Thank you.

12 You may proceed with your presentation, QIA --
13 sorry -- KIA. I came from -- I come from QIA. Sorry
14 about that.

15 Presentation by Kivalliq Inuit Association

16 MR. MANZO: Thank you, Mr. Chairman.

17 For the purpose of time, I will explain our
18 technical presentation, and our technical report was
19 submitted as one single document. We stated in our
20 technical document that we worked with the proponent
21 and Climate Change Canada and Indigenous and Northern
22 Affairs Canada and Fisheries and Oceans on all the
23 issues in their mandates and also the responsibility
24 the KIA has for the proposal of the Water Board
25 hearing. So I will move very quickly. I will start my
26 presentation.

1 KIA represents Inuit, administers and monitors
2 certain provisions of the Nunavut final agreement in
3 the Kivalliq Region. KIA's mission is to represent
4 Inuit in a fair and democratic manner in the
5 development, protection, administration, and
6 advancement of their rights and benefits and to promote
7 economic, social, political, and cultural well-being.

8 For these joint submissions, the purpose of the
9 technical review was to ensure that the potential
10 impacts and benefits were comprehensively assessed
11 through scientific, socioeconomic, and impact
12 assessment best practices and to ensure that Inuit
13 traditional knowledge were incorporated into the impact
14 determination, mitigation, project design, and
15 monitoring.

16 A technical review was presented on August 11,
17 2017. At that point when we present the technical
18 review, six issues was remained and related to caribou
19 and one issue was remained that related to arsenic
20 content in the waste rock storage facility. Those
21 issues now are being resolved.

22 And for the purpose of the Water Board hearings,
23 KIA, after the -- before the presentation of the
24 technical reviews, we have several meetings with the
25 proponent, Environment Canada, and DFO on different
26 issues: site-specific water quality objectives, pit

1 lake and water quality monitoring, post-closure Whale
2 Tail Lake and water quality, waste rock storage
3 facility, all related to water components. And those
4 are being resolved.

5 Also, with Indigenous and Northern Affairs Canada,
6 we assessed a security deposit in the total amount of
7 \$26,285,926, the total amount of security deposit. We
8 also work out the security management agreement, who
9 will actually divide this total amount. And
10 practically half of that will be for Indigenous and
11 Northern Affairs Canada, and the other half will be for
12 KIA. The security agreement ensures that the parties
13 will come up to the table to review security, as
14 needed; and, also, in any event of any other
15 eventuality, we can come back to the table with the
16 full total amount of security. And that is being
17 signed by the Kivalliq Inuit Association.

18 The other uncertainty is water compensation. Over
19 the course of these two weeks, Kivalliq Inuit
20 Association has been -- go back into the table for the
21 numbers for the water compensation -- because we hear
22 different numbers, different dates of closure, and
23 different values in different lakes. So we came back
24 to the Board, and we prepared to -- before this hearing
25 is closed -- to have a final compensation agreement for
26 the Board in a future date.

1 And with that, I am finished with my presentation,
2 if anyone have any questions.

3 Thank you, Mr. Chairman.

4 THE CHAIR: Thank you, KIA.

5 Any comments from public? Comments, concerns,
6 questions? (OTHER LANGUAGE SPOKEN). Okay. There's
7 none.

8 Thank you for your presentation.

9 I'll ask INAC to have a public presentation, and
10 you may also want to be sworn in or affirmed with the
11 legal counsel.

12 KAREN COSTELLO, Affirmed

13 MS. MEADOWS: Thank you, Mr. Chair. Teresa
14 Meadows, legal counsel for the Nunavut Water Board.

15 Ms. Costello, it's my understanding that you have
16 presentation materials that you'll be filing in advance
17 of your presentation, and I believe I have three
18 versions -- in French, English, and Inuktitut; is that
19 correct?

20 MS. COSTELLO: Karen Costello for Indigenous
21 and Northern Affairs Canada.

22 Yes. I can confirm we have three community
23 presentations.

24 MS. MEADOWS: Thank you, Mr. Chair. Teresa
25 Meadows, legal counsel for the Nunavut Water Board.

26 So, Mr. Chair, for the record, we will be marking

1 those as the next three exhibits in this public
2 hearing.

3 Those are my procedural matters, Mr. Chair.

4 EXHIBIT 16 - Indigenous and Northern Affairs
5 Canada hard copy PowerPoint for community
6 presentation (English)

7 EXHIBIT 17 - Indigenous and Northern Affairs
8 Canada hard copy PowerPoint for community
9 presentation (Inuktitut)

10 EXHIBIT 18 - Indigenous and Northern Affairs
11 Canada hard copy PowerPoint for community
12 presentation (French)

13 THE CHAIR: Thank you.

14 You may proceed with your presentation, INAC.

15 MS. COSTELLO: Thank you, Mr. Chair and Panel
16 members.

17 Excuse me a second. I have to say hello to the
18 community members. I feel bad that I have my back
19 towards them.

20 My name is Karen Costello, and I'm the director of
21 resource management with the Nunavut regional office of
22 Indigenous and Northern Affairs Canada. I'm joined
23 here today by Ian Parsons, who is the regional
24 coordinator with the water resources division in the
25 Nunavut office, and he is the project lead.

26 I'd like to thank the Nunavut Water Board for

1 providing this opportunity to speak to the community
2 representatives of Baker Lake. We appreciate their
3 hospitality and participation in this process and
4 giving up their community hall for the second week in a
5 row. So thank you to you.

6 I'd like to talk to the community members about
7 Indigenous and Northern Affairs Canada's participation
8 in the Nunavut Water Board's review of Agnico Eagle's
9 Type A water licence application for the Whale Tail Pit
10 Project. Our name is somewhat convoluted, "Indigenous
11 and Northern Affairs Canada"; so I'm going to shorten
12 it as I speak to you and just refer to us as "the
13 department".

14 So why is Indigenous and Northern Affairs involved
15 in the Nunavut Water Board licencing process?

16 The Minister has a decision-making role under the
17 Nunavut Land Claims Agreement. She also has a role
18 under the Nunavut Project Assessment Act and the
19 Nunavut Waters and Nunavut Surface Rights Tribunal Act.

20 The department is also an intervenor, and we
21 provide expert advice at meetings and hearings, such as
22 this one. We participate through written submissions
23 and provide technical advice and feedback to both the
24 Nunavut Water Board and applicants, such as Agnico
25 Eagle.

26 Finally, the department has a role in the

1 regulation and enforcement of activities that take
2 place on federal land or activities that occur under
3 water licences. So if a water licence is issued for
4 this project, it will be the responsibility of
5 Indigenous and Northern Affairs Canada inspectors to
6 inspect the project and make sure the conditions of the
7 water licence are being followed.

8 For Agnico Eagle's application as well as their
9 amendment application to the Meadowbank licence, the
10 department has participated in scoping of the initial
11 applications. We have made information requests to
12 Agnico Eagle. We participated in the technical meeting
13 and the prehearing conference that was held here in
14 Baker Lake in May. And we have made technical review
15 comment submissions as well as a final technical
16 submission in August.

17 The department's final written submission on
18 August 14th identified three concerns related to water
19 quality under the new Whale Tail Pit water licence
20 application. On August 14th, they were considered
21 outstanding. I'd like to tell the community members
22 about these issues along with some specific
23 recommendations related to the potential issuance of a
24 water licence. Our final written submission also
25 included two comments with regard to the amendment
26 application for the Meadowbank water licence.

1 Since August 14th, the department and Agnico Eagle
2 have continued discussions and the department's issues
3 have been satisfied with commitments and agreement on
4 proposed licence requirements which have been presented
5 or will be presented tomorrow during the rest of our
6 technical presentation to the Board for their
7 consideration.

8 I'm going to take a few minutes to touch on the
9 comments that I mentioned in our final written
10 submission.

11 This is just an aerial shot looking at the north
12 end of the Whale Tail Lake, and at the very kind of top
13 end of the picture is the actual kind of Whale Tail,
14 and that would be where the open pit would be.

15 So as I said, our August 14th had three comments
16 about water quality.

17 The first concern had to do with the waste rock
18 storage facility -- so, basically, the big rock pile
19 that's going to be left. This rock pile will be where
20 waste rock from the mined pit will be stored, and it
21 will need to be covered with rock that does not have
22 the potential to leach metals once the site is closed.
23 The rock that covers the waste rock pile is an
24 extremely important part of the overall design of the
25 waste rock storage facility.

26 While the department accepts that Agnico Eagle

1 will be careful about making sure the rock used in this
2 cover does not have the potential to leach metals, we
3 feel it will be difficult to make sure that the cover
4 is 100 percent non-metal leaching. The department was
5 concerned that, if some metal-leaching rocks -- rock
6 makes it into the waste rock storage facility cover,
7 then seepage -- so basically water that's going to seep
8 through the rock pile -- may need to be treated on a
9 long-term basis.

10 The second concern also relates to the cover
11 that's going on top of the rock pile. The final design
12 for the cover will include decisions about how the
13 freeze-thaw zone in the rock pile is expected to be and
14 therefore how thick the cover needs to be. The
15 department has recommended that Agnico Eagle continue
16 to refine their analysis related to this final design,
17 incorporating additional data from the Meadowbank waste
18 rock storage facility as well as data from operations
19 at Whale Tail once they have begun.

20 Our third concern focuses on the direction of
21 groundwater flow around the Whale Tail Pit. If
22 groundwater flows into the pit, arsenic may diffuse
23 from the surrounding rock, increasing arsenic levels
24 above recommended guidelines in the flooded pit after
25 operations. The department has recommended to Agnico
26 Eagle that they can do more hydrogeological studies

1 before dewatering the pit so they can confirm the
2 direction of groundwater flow.

3 Through our discussions and through some
4 commitments which we have worked on, Agnico Eagle has
5 agreed to some recommendations and we work with them on
6 some proposed licence terms and conditions that we will
7 be presenting to the Board in our technical
8 presentation tomorrow. So, basically, our three
9 concerns with regard to water quality have been
10 satisfied by commitments by Agnico Eagle.

11 When we met in May, the department had two
12 concerns that we were able to resolve prior to our
13 August 14 submission.

14 The first concern was whether there would be
15 enough rock material at the site to cover the waste
16 rock storage facility. Through some conversations and
17 exchange of information with Agnico Eagle, the
18 department is satisfied that there is sufficient
19 material.

20 A second concern we had was how Agnico Eagle had
21 calculated ammonia and nitrate concentrations in runoff
22 from their blasting activities. Agnico Eagle and the
23 department held some meetings and discussed their
24 analysis, and the department has accepted the analysis
25 as previously presented by Agnico Eagle. So we have no
26 further concerns with this issue.

1 The final two issues that we commented on had to
2 do with the consequential amendments to the Meadowbank
3 mine -- Meadowbank mine water licence. The first
4 concern in the comment raised by the department was to
5 ensure that the modifications Agnico Eagle is planning
6 to their Meadowbank tailings storage facility were
7 reviewed by the Nunavut Water Board. The second issue
8 was that the amendments to the Meadowbank licence
9 should include a change in the term, and we had
10 recommended that the water licence term should be
11 modified. Instead of extending in 2025, we recommended
12 that it go to 2026. Agnico Eagle has accepted these
13 recommendations.

14 The water licence application document and all of
15 its supporting plans is a very detailed document. In
16 general, we found the information, the analysis, and
17 the presentation of all this documentation was
18 complete. We discussed and reached agreement with
19 Agnico Eagle on some additional monitoring to address
20 uncertainties related to long-term and post-closure
21 water quality that were based on their models that they
22 presented. The department recommended that Agnico
23 Eagle undertake additional modelling as information
24 becomes available and a more intensive monitoring
25 program for the site to better understand the remaining
26 uncertainties and provide more confidence to predicted

1 outcomes. Up-to-date modelling and monitoring during
2 operations and closure may show that the site
3 conditions match the predicted outcomes. However,
4 outcomes that deviate from predictions could result in
5 unintended impacts requiring mitigation.

6 A requirement of a water licence, as you have
7 heard, is that a reclamation cost estimate must be
8 developed. The department, Kivalliq Inuit Association,
9 and Agnico Eagle have reached agreement on a
10 reclamation cost estimate. They have also entered into
11 agreement. It's called a security management agreement
12 where it is -- Kivalliq Inuit Association and
13 Indigenous and Northern Affairs would equally hold
14 security. So if the total amount, which is
15 approximately 26.3 million, as per the agreement,
16 Kivalliq Inuit Association and Indigenous and Northern
17 Affairs would each hold 50 percent of that. And
18 because of that security management agreement, the
19 department is recommending to the Board, should they
20 issue this licence, that 50 percent of the agreed-upon
21 reclamation cost estimate be required as financial
22 assurance under the licence.

23 So that concludes the presentation, and I'm happy
24 to take any questions.

25 And for those of you who might not know what gold
26 looks like in its natural state, this is a picture of

1 some of the gold in the rock that hosts the Whale Tail
2 deposit.

3 Thank you, Mr. Chair.

4 THE CHAIR: Thank you, INAC, for your
5 presentation.

6 Questions, comments, concerns from public? (OTHER
7 LANGUAGE SPOKEN). Okay. I take that there's none.

8 Thank you. Thank you for your presentation.

9 Next intervenor I'd like to call is Environment
10 and Climate Change Canada. You may as well affirm
11 witnesses with the legal counsel.

12 MELISSA PINTO, TRISH AUUSER, Affirmed

13 MS. MEADOWS: Teresa Meadows, legal counsel
14 for the Nunavut Water Board.

15 Mr. Chair, I have one presentation, one copy of
16 this presentation, in English and Inuktitut; and I
17 propose to file that as the next exhibit in these final
18 hearings.

19 And those are my procedural matters.

20 EXHIBIT 19 - Environment and Climate Change
21 Canada hard copy PowerPoint presentation for
22 community session (English/Inuktitut)

23 THE CHAIR: Thank you.

24 Okay. You may proceed with your presentation.

25 Presentation by Environment and Climate Change Canada

26 MS. PINTO: Good evening, Mr. Chair, Board

1 members, elders, community members, Board staff, and
2 other parties that have joined us here tonight. My
3 name is Melissa Pinto, and I'm the senior environmental
4 assessment coordinator with Environment and Climate
5 Change Canada. With me today, on my left, I have Trish
6 Auser, our water quality expert.

7 To start off, I will go through Environment and
8 Climate Change Canada's mandate, briefly touch upon the
9 relevant acts and legislation under the department's
10 responsibility. I will then outline the department's
11 participation in this water licence process and,
12 finally, discuss the department's final written
13 submission to the Nunavut Impact Review Board --
14 sorry -- the Nunavut Water Board. For each
15 recommendation, we will indicate whether or not the
16 issue has been resolved or still remains outstanding
17 along with any commitments made by the proponent.

18 Summarized, Environment and Climate Change
19 Canada's mandate is to conserve and protect Canada's
20 water resources; forecast daily weather conditions and
21 warnings; coordinate environmental policies and
22 programs for the federal government; and, continued on,
23 to preserve and enhance the quality of the natural
24 environment, including air, water, soil, flora, and
25 fauna; and enforce rules relating to boundary waters.

26 Environment and Climate Change Canada's mandate is

1 governed by the Department of the Environment Act, the
2 Canadian Environmental Protection Act, the pollution
3 prevention provisions of the Fisheries Act, the
4 Migratory Birds Convention Act, and the Species at Risk
5 Act.

6 Environment and Climate Change Canada provides
7 scientific expertise within the department's mandate to
8 the Nunavut Water Board and the Nunavut Impact Review
9 Board, particularly in regards to air quality,
10 wildlife -- specifically migratory birds and species at
11 risk -- and water and sediment quality.

12 Environment and Climate Change Canada has
13 participated in all phases of the coordinated review
14 process so far for the Whale Tail Pit Project by
15 submitting information requests; technical comments;
16 and, most recently, a final written submission. The
17 department looks forward to continuing its
18 participation in the regulatory process should the
19 project proceed.

20 This presentation summarizes the department's
21 recommendations outlined in its final written
22 submission for consideration by the Nunavut Impact --
23 apologies -- Nunavut Water Board.

24 I will now hand it over to Trish to continue the
25 presentation.

26 MS. AUSER: For water quality, there was

1 some issues brought forward at the technical session
2 that were resolved prior to final written submissions.
3 The proponent proposed an updated site-specific water
4 quality objective for arsenic and updated treatment
5 objectives for arsenic and phosphorous. Environment
6 and Climate Change Canada is supportive of these
7 updated objectives that are more protective of the
8 environment.

9 The first water quality issue that the department
10 brought forward in its final written submission was in
11 regards to the north wall pushback. The proponent is
12 proposing to remove additional rock that has the
13 potential to release arsenic and would encapsulate this
14 rock in the waste rock storage facility. It is
15 important to Environment and Climate Change Canada that
16 the proponent determine and understand risks and
17 benefits this pushback has on the environment, and the
18 department anticipates that information gained during
19 operation will help to refine predictions and
20 management actions for the pushback.

21 The second water quality concern Environment and
22 Climate Change Canada brought forward in its final
23 written submission was regarding water quality
24 modelling and having updated management plans to
25 address any potential issues should conditions not be
26 as predicted. The proponent agreed with the

1 recommendation put forward by the department, and thus
2 Environment and Climate Change Canada considers this
3 issue resolved.

4 The third water quality concern by the
5 department -- that the department brought forward was
6 regarding water quality criteria for discharges to the
7 environment from the site. Through discussions with
8 the proponent, criteria for water quality parameters
9 have been determined.

10 The next water quality issue brought forward in
11 Environment and Climate Change Canada's final written
12 submission was regarding the placement of sludge or
13 waste from the water treatment plant. The proponent
14 agreed to place the sludge in the waste rock storage
15 facility, and thus the department considers this issue
16 resolved.

17 The proponent also agreed to conduct a separate
18 mercury study to address uncertainties related to
19 flooding in an Arctic environment, and the proponent
20 will use this information to update their management
21 plans as necessary. Environment and Climate Change
22 Canada considers this issue resolved as well.

23 Finally, the department had concerns regarding the
24 testing of sediment core samples. However, the
25 proponent has clarified that they will continue to
26 analyze a full set of parameters in their sediment

1 tests, and this issue is also considered resolved.

2 In summary, Environment and Climate Change Canada
3 is generally satisfied with the information provided by
4 the proponent and looks forward to continuing its
5 participation and reviewing information as it becomes
6 available in the ongoing regulatory process should the
7 project proceed.

8 Thank you.

9 THE CHAIR: Thank you for your
10 presentation.

11 Open up for questions, comments, concerns from
12 public. Okay. I take there's no questions or
13 concerns.

14 Thank you for your presentation, Environment and
15 Climate Change Canada.

16 Next intervenor I'd like to call upon is
17 Department of Fisheries and Oceans Canada. You will
18 also have to affirm or -- for witnesses, swear or
19 affirm with legal counsel.

20 MARK D'AGUIAR, LAURA WATKINSON, Affirmed

21 MS. MEADOWS: Teresa Meadows, legal counsel
22 for the Nunavut Water Board.

23 Mr. Chair, it's my understanding that there are
24 three copies of this presentation, being English and
25 Inuktitut and -- oh, actually, two copies of this
26 presentation -- English and Inuktitut, and French as

1 well. So they will be marked as the next two exhibits
2 in this public hearing.

3 Thank you, Mr. Chair.

4 EXHIBIT 20 - Fisheries and Oceans Canada hard
5 copy PowerPoint presentation for the Nunavut
6 Water Board community roundtable session
7 (English/Inuktitut)

8 EXHIBIT 21 - Fisheries and Oceans Canada hard
9 copy PowerPoint presentation for the Nunavut
10 Water Board community roundtable session
11 (French)

12 THE CHAIR: Thank you.

13 You may go ahead with your presentation.

14 Presentation by Fisheries and Oceans Canada

15 MR. D'AGUIAR: Thank you, Mr. Chair.

16 Good evening, Mr. Chair, members and staff of the
17 Board, the community of Baker Lake, and other community
18 members joining us here this week. I will do my best
19 to speak really slowly for the translators and try to
20 explain and define some of the more complex terms.

21 My name is Mark D'Aguiar, and I am a senior
22 fisheries protection biologist with Fisheries and
23 Oceans Canada; and I am accompanied by my support
24 staff, Laura Watkinson, who is a fisheries protection
25 biologist, also with Fisheries and Oceans Canada.

26 I would like to thank the Nunavut Water Board for

1 providing us with the opportunity to present our
2 technical comments and recommendations from our final
3 written submission at this community roundtable.

4 In this presentation, I will provide an overview
5 of Fisheries and Ocean's mandate. I'll briefly touch
6 on our applicable legislation and some policies. Fun
7 stuff. I will also provide an overview of our
8 technical comments that we provided to the Nunavut
9 Water Board in our final written submission. The final
10 technical comments will touch on habitat loss, valued
11 components, habitat alteration, changes to the lake
12 ecosystem productivity, and the water quality and flow
13 monitoring plan.

14 I would like to note, due to limited time, we will
15 just bring to the attention only some key points,
16 recognizing that the final written submission includes
17 a more complete discussion of all those issues.

18 We also note that Agnico has agreed to most of our
19 requests and we have been engaging with Agnico even
20 since the Nunavut Impact Review Board hearing to
21 further some of our discussions. And they have also
22 agreed to further the discussions to finalize the fish
23 and fish habitat gains/loss accountings and associated
24 offsetting plans as well as the monitoring plans.

25 So the mandate of Fisheries and Oceans Canada
26 fisheries protection program is to maintain the

1 sustainability and the ongoing productivity of
2 commercial, recreational, and Aboriginal fisheries.
3 The fisheries protection program is responsible for
4 ensuring that projects in or near water are undertaken
5 following the requirements of the Fisheries Act and the
6 Species at Risk Act. The fisheries protection program
7 provides guidance to proponents on how to avoid,
8 mitigate, or offset impacts to fish and fish habitat.
9 The fisheries protection program is also the main
10 program of Fisheries and Oceans Canada that is involved
11 in the environmental assessment process defined by the
12 Nunavut Land Claim Agreement.

13 So the fisheries protection program is guided by
14 two policies. The fisheries protection policy
15 statement provides guidance on the application of the
16 fisheries protection provisions of the Fisheries Act.
17 And we have the Fisheries Productivity Investment
18 Policy: a Proponent's Guide to Offsetting, which
19 provides guidance on undertaking effective measures to
20 offset impacts and serious harm to fish. Offsetting
21 measures are actions taken after avoidance and
22 mitigation measures are implemented, and they are
23 basically intended to provide conservation outcomes for
24 fish and fish habitat that may reasonably be expected
25 to counterbalance the loss of fish and fish habitat
26 productivity as a result of negative impacts of the

1 project.

2 So the first technical comment that Fisheries and
3 Oceans Canada presented related to habitat losses.
4 Fisheries and Oceans Canada requested that Agnico Eagle
5 provide -- requested illustrations as agreed to by
6 Agnico, which Fisheries and Oceans Canada would like to
7 receive prior to the commencement of the regulatory
8 phase, specifically the authorization. Agnico has
9 agreed to fulfill our requests.

10 The second request under habitat loss, Fisheries
11 and Oceans Canada notes that Agnico had not adequately
12 demonstrated the evaluation of sustainable of water
13 quality and habitat suitability for fish in the
14 post-closure. Fisheries and Oceans Canada had concerns
15 respecting how Agnico would effectively evaluate and
16 monitor the mixing or non-mixing in the re-flooded pit.
17 DFO is also concerned that water quality from the pit
18 could negatively affect the remainder of the lake and
19 fish habitat.

20 Fisheries and Oceans Canada therefore requested
21 that Agnico provide additional details outlining how
22 they intend to evaluate the question of potential
23 mixing or non-mixing of water in the pit portion of
24 Whale Tail Lake. If the additional details cannot be
25 provided, additional offsetting options located outside
26 of the Whale Tail Lake basin would need to be

1 developed.

2 Fisheries and Oceans Canada does acknowledge that
3 Agnico has committed in their final submission
4 responses to evaluate the mixing and non-mixing of the
5 pit through the depth profile, limnological monitoring,
6 and depth-integrated sampling which will aid in
7 assessing the potential for end pit lakes to support
8 self-sustaining fish populations.

9 Fisheries and Oceans Canada requested that Agnico
10 provide additional and updated information on the
11 evaluation of end pit lake scenarios with references to
12 address Fisheries and Oceans Canada's concern regarding
13 end pit lakes. In our final submission with respect to
14 habitat losses, Fisheries and Oceans expressed concern
15 that fish would not be able to return to the north
16 basin of Whale Tail Lake post-closure due to several
17 concerns with the long-term water quality and physical
18 aspects of an end pit lake.

19 DFO acknowledges the efforts by Agnico to address
20 uncertainty respecting the successful creation of an
21 end pit lake that can support healthy, self-sustaining
22 fish populations. However, sufficient information to
23 support consideration of this post-closure pit as fish
24 habitat is not yet available. So, as such, additional
25 offsetting measures should also be explored.

26 Fisheries and Oceans will work with Agnico, the

1 Kivalliq Inuit Association, the Hunters and Trappers
2 Associations during this regulatory phase to ensure
3 that all losses to fish and fish habitat are accounted
4 for and fully offset.

5 Again, I'd like to note that DFO also notes that
6 Agnico has recently met with DFO since the conclusion
7 of the NIRB hearing to further resolve and discuss
8 these issues.

9 Our next comment is related to valued components.
10 So Fisheries and Oceans Canada notes that, evaluating
11 potential fisheries loss and gains, all fishes should
12 be weighted equally. Fisheries and Oceans requested
13 that Agnico give equal weights to species based on the
14 presence or absence of those species in their
15 calculations. Agnico has agreed to our recommendation.

16 The next comment is in regard to habitat
17 alteration. This refers to the alteration that will
18 occur due to proposed flooding activities. DFO
19 acknowledges that Agnico has provided additional
20 clarification in their final submission response. DFO
21 will work with Agnico and KivIA during the regulatory
22 phase to ensure all losses to fish and fish habitat are
23 accounted for and fully offset.

24 In our final written submission, Fisheries and
25 Oceans Canada requested that Agnico provide further
26 rationale and information regarding the calculation of

1 habitat losses and gains associated with all phases of
2 the project, including the temporary flooding
3 activities. The temporary alteration of streams due to
4 flooding may have negative effects on fish productivity
5 due to a loss of stream habitat. Fisheries and Oceans
6 Canada also does not believe that temporary flooding
7 activities will result in an overall positive change in
8 fish productivity.

9 Fisheries and Oceans acknowledges that Agnico has
10 agreed to provide raw data during the authorization
11 phase and has agreed to work together at that time to
12 finalize an offsetting plan. We do note that Fisheries
13 and Oceans Canada will require additional
14 rationalization on other calculated fish habitat losses
15 and gains associated with the proposed offsetting plan.
16 DFO will continue to work with Agnico and the Kivalliq
17 Inuit Association, the Hunters and Trappers to ensure
18 that all losses to fish and fish habitat are accounted
19 for and fully offset should the project be approved to
20 proceed.

21 The next request regarding habitat alteration was
22 with respect to the proposed plan by Agnico in which a
23 portion of the Mammoth dike will be altered to provide
24 a connection between Whale Tail Lake and Mammoth Lake
25 which is intended to permanently raise the water level
26 of Whale Tail Lake by .5 metres. In our final

1 submission, Fisheries and Oceans Canada requested that
2 Agnico provide more information regarding their plan to
3 permanently flood Whale Tail Lake by raising that water
4 level by .5 metres, including the rationale and the
5 ability to sustain this condition so as to provide
6 measurable increases in fish productivity.

7 It was unclear how Agnico will ensure that the
8 lake will remain at this increased water level
9 long-term, and DFO requires more information on those
10 plans to make this permanent increase happen.
11 Fisheries and Oceans Canada is not confident that this
12 type of water level increase and associated increase in
13 the surface area of the lake will result in
14 productivity gains. As such, additional measures to
15 offset the loss of fish and fish habitat may be
16 required. But Fisheries and Oceans Canada will
17 continue to work with Agnico Eagle, the Kivalliq Inuit
18 Association, and the Hunters and Trappers to ensure all
19 losses to fish and fish habitat are accounted for and
20 fully offset should the project be approved to proceed.

21 The next set of technical comments that Fisheries
22 and Oceans Canada had presented was in regard to
23 changes in lake ecosystem productivity.

24 The first request relates to the potential
25 proposed change to the lake trophic status of
26 Mammoth Lake, so the nutrients in the lake. Fisheries

1 and Oceans requested clarification on whether the newly
2 proposed changes to the project, which involved the
3 phosphorous treatment plant, would still result in a
4 change to the trophic status of the lake. Again,
5 trophic status is nutrient status in the lake, to be
6 simplified.

7 In their final submission, Agnico had clarified
8 that the worst-case scenario would see a change from
9 oligotrophic, which means very little nutrients/
10 microscopic plants; to mesotrophic, which has a bit
11 more microscopic plants and algae; rather than the
12 eutrophic, which was heavily neutrified. So we do
13 consider this issue resolved.

14 Fisheries and Oceans Canada had also requested
15 that losses caused by this trophic change in lake
16 ecosystem from nutrient overloading be considered as
17 losses in their calculations for offsetting. However,
18 in their final submission, Agnico had confirmed that
19 that smaller change was predicted to occur.

20 So given that a trophic change is still predicted
21 to occur, Fisheries and Oceans Canada was unclear how
22 this predicted change in trophic status will impact
23 fish productivity and requested that Agnico conduct an
24 appropriate analysis. And this can be provided prior
25 to the authorization phase, and we've been working with
26 Agnico and discussing for future studies on this.

1 Fisheries and Oceans' third request in relation to
2 the change in the trophic status was in regards to
3 proposed research study evaluating the change from very
4 low nutrients, oligotrophic, to a eutrophic lake and
5 back again. We had previously requested that Agnico
6 undertake a detailed research study to evaluate
7 fisheries productivity losses when altering waterbodies
8 in such a way.

9 Fisheries and Oceans is unclear since the
10 discussion of this phosphorous treatment whether Agnico
11 was still planning to complete the proposed study.
12 Agnico responded and explained that the study on the
13 change to eutrophic would no longer be completed since
14 the lake will not change to eutrophic status. However,
15 they did propose additional monitoring and adaptive
16 management to track changes to the downstream
17 environments. So DFO does acknowledge Agnico's
18 response and recommends that, in addition to monitoring
19 and proposed adaptive management, additional studies be
20 conducted to assess the impacts of predicted trophic
21 change on fish productivity. Fisheries and Oceans
22 Canada acknowledges and notes that this was part of the
23 discussions we've had with Agnico on Sunday.

24 And the last set of comments that Fisheries and
25 Oceans presented in our final written submission
26 discusses our concerns with the water quality and flow

1 monitoring plans.

2 In discussing plan monitoring stations, Fisheries
3 and Oceans Canada noted that Agnico has referred -- or
4 referenced the core receiving environmental monitoring
5 plan in addition to the water quality and flow
6 management plan. These two plans are different plans,
7 focused on measuring different parameters. Thus
8 Fisheries and Oceans Canada was concerned that data
9 generated from each of these plans may not be directly
10 comparable or complementary. It's important to
11 addressing future offsetting requirements that
12 appropriate monitoring stations that are consistent and
13 comparable are captured in any monitoring plan intended
14 to address the requirements of a Fisheries Act
15 authorization should the project be approved to
16 proceed. DFO will work with Agnico to ensure that
17 monitoring supports any research proposed as
18 complementary measures to offset serious harm to fish.

19 The second request under water quality and flow
20 monitoring plan is in regard to reference stations.
21 Fisheries and Oceans had requested that Agnico include
22 at least two control lake monitoring stations or
23 reference lakes in their water quality and flow
24 monitoring plan and include a rationale to why these
25 reference lakes used for Meadowbank project are
26 appropriate when the reference lakes are not in the

1 Whale Tail watershed. Agnico has agreed to provide the
2 requested rationale.

3 And the third request for water quality and flow
4 monitoring plan is in regard to consistency in sampling
5 frequency. Fisheries and Oceans Canada was concerned
6 about consistency in the amount of sampling that will
7 occur throughout operations, closure, and post-closure
8 at monitoring stations and requested that a consistent
9 and increased amount of sampling be considered at all
10 sampling stations throughout the project to acquire
11 appropriate, comparable data to inform future studies
12 as committed.

13 Fisheries and Oceans Canada acknowledges that
14 Agnico had agreed to our requests respecting monitoring
15 in the final submission responses, including ensuring
16 consistency and sampling locations and sampling
17 frequency. DFO will continue to work with Agnico to
18 ensure that monitoring frequency and locations support
19 any research proposed as complementary measures to
20 offset serious harm to fish.

21 So, in conclusion, Mr. Chair, DFO believes that it
22 is possible to offset the impacts to fish and fish
23 habitat that will result from the Whale Tail Project.
24 Fisheries and Oceans will continue to work with Agnico,
25 the Kivalliq Inuit Association, and the Hunters and
26 Trappers to address our concerns with proposed

1 offsetting plans, and this includes ensuring that all
2 losses to fish and fish habitat are fully accounted for
3 and fully offset.

4 Fisheries and Oceans believes that a robust
5 monitoring program is necessary to be able to verify
6 the proponent's impact predictions and detect any
7 unforeseen changes to the aquatic environment.
8 Therefore, we will continue to work cooperatively with
9 Agnico, the Kivalliq Inuit Association, and the Hunters
10 and Trappers, and the potentially impacted communities
11 to ensure that appropriate mitigation, monitoring, and
12 robust follow-up programs are implemented. We'll also
13 be working with Environment and Climate Change Canada
14 and INAC to ensure those monitoring programs are
15 robust.

16 So Fisheries and Oceans Canada thanks the Nunavut
17 Water Board, the community of Baker Lake, and the other
18 attending community members for this opportunity to
19 present our comments and recommendations regarding the
20 Whale Tail Pit.

21 Thank you.

22 THE CHAIR: Thank you, DFO, for your
23 presentation.

24 Now open for questions and comments from public or
25 the participants.

26 The Public Questions Fisheries and Oceans Canada

1 TIMOTHY EVVIUK: That guy, when it's starting
2 to cold and it's starting to freeze up, and my question
3 is or my thought is when they are going to dewater the
4 lake and it's starting frozen, before the fish run out,
5 I would like to know when you are going to take the
6 fish out.

7 And the other one is, in the lake, when the lake
8 is frozen, they used to do some drilling in the Amaruq
9 area and the Meadowbank, right in the lake. First they
10 drill through the ice, and then they would -- they
11 continued on into the water. And I'm wondering if the
12 fish were touched, those saw things or something. They
13 use some sort of substance.

14 This is what I wanted to ask.

15 THE CHAIR: (OOTHER LANGUAGE SPOKEN)

16 MR. D'AGUIAR: Mark D'Aguiar, Fisheries and
17 Oceans Canada.

18 Thank you for your question. I will pass this
19 question on to Agnico to talk about how they do the
20 drilling to ensure that fish are not impacted and what
21 substances they use. Is that okay? As well as when
22 the fish-out is and when they're going to do the
23 fish-out.

24 MR. VANENGEN: Mr. Chair, it's Ryan Vanengen
25 from Agnico Eagle.

26 So the first question that was asked to DFO is

1 related to the fish-out, and our plan right now is to
2 fish out the north basin of Whale Tail Lake in the
3 open-water season of 2018. So that allows us July,
4 August, and a part of September to fish that entire
5 basin out. And based on our experience, those three
6 months is enough time to remove the fish, all of the
7 fish, and carefully transfer them into the south basin.
8 So that was the first question. And that would allow
9 us to do it before the lake freezes.

10 The second question was related to our drilling
11 practices, and this is related to exploration drilling.
12 And when we drill through the ice, the community
13 members comment about augering. We auger many holes to
14 allow for our drill casings to go from our drill
15 platform through the ice, down into the bottom of the
16 lake, and those are called "drill casings". So within
17 those casings is where our drills' bits go. So they
18 contact then the sediment in the bottom of the lake.
19 And in order to keep things from freezing, we typically
20 circulate heated water, and we circulate the lake water
21 through our piping to prevent freezing, and that's a
22 continual thing. So we're recycling that water to keep
23 things frozen [sic].

24 The question was around whether or not the fish
25 would be impacted by that, and there's been a number of
26 studies not related to fish but more related to the

1 benthic invertebrate communities, related to -- so the
2 food that the fish eat; there's been some studies on
3 the impacts of drilling. And typically there's not a
4 significant effect, if I recall. So the effects of
5 drilling directly on fish are unlikely and then limited
6 effects on the food that the fish survive on.

7 Mat'na.

8 THE CHAIR: Thank you.

9 Any more comments, questions, concerns to the
10 presentation of DFO?

11 TIMOTHY EVVIUK: Thank you for the information
12 that you have given to me. Thank you.

13 BASIL KAYAVINIK: Thank you, Mr. Chair. My name
14 is Basil Kayavinik from Baker Lake. I have a question
15 to the Department of Fisheries and Oceans.

16 Those fish that are being -- going to be moved and
17 transferred or into a different body of water, are they
18 going to be using fishnets? And how many fishnets are
19 you going to use? When you are going to transfer the
20 fish from that lake, do they affect the fish? Or do
21 they -- I am wondering how they affect the fish from
22 the nets. Some fish do get stinky when they live long,
23 and they cannot live long when they are trapped in the
24 nets. How many fishnets are -- do you guys use when
25 you are transferring fish from one lake to another?

26 And that is the only question that I have.

1 THE CHAIR: DFO.

2 MR. D'AGUIAR: Mark D'Aguiar, Fisheries and
3 Oceans Canada.

4 I will speak to the first part of this question,
5 and then I will pass it on to Agnico for a bit more
6 formal discussion on what their fish-out plan will be.

7 DFO has a fisheries -- a fish-out protocol that
8 requires a specific amount of nets in a consistent
9 manner to fish out a lake. That's so that we can get
10 very scientific data from those -- from those catches
11 in the nets. Now, the timing of how long the fish are
12 going to be in the net for are going to be determined
13 in the regulatory phase, should the project be
14 approved. We'll have discussions and consultations
15 with community members. It'll be a part of Agnico's
16 authorization, which we'll discuss the fish-out plan
17 itself, how long the nets will be set for, which will
18 include how long the fish will be stuck in those nets.
19 Those details I do not believe have been determined
20 yet, but it will be part of consultation discussions.

21 I'll pass on to you.

22 THE CHAIR: Applicant, go ahead.

23 MR. VANENGEN: Mr. Chair, Ryan Vanengen from
24 Agnico Eagle.

25 So just to add to what Mark has shared with the
26 community, he's absolutely correct. The exact number

1 of nets and some of those details around the timing of
2 the sets of net haven't been determined, but we have
3 some great experience fishing out other lakes, and we
4 have a really -- we've worked really closely,
5 especially in the last fish-out, with the Baker Lake
6 Hunting and Trapping Organization, where they really
7 were effective -- they provided very effective advice
8 on the timing of the nets. And so we'll continue to
9 work with them along with Fisheries and Oceans to
10 finalize those plans.

11 But what we do know is that, typically, based on
12 previous experience, we'll have likely two boats on the
13 lake checking nets, and both teams -- both boats will
14 have about four nets in the water. And we typically
15 don't leave those nets in longer for two hours, which
16 allows the fish to get caught, and that allows us to
17 safely transfer those fish with minimal mortality. And
18 that's based on our experience.

19 The other thing that is really important to
20 note -- so we follow Fisheries and Oceans' protocols,
21 but we also try to maximize our fishing time in the
22 early part of the season, when the water is coldest, so
23 in July; and that will allow us to transfer as many
24 fish safely from the north basin to the south basin.

25 Mat'na.

26 THE CHAIR:

Thank you.

1 Any more questions, comments, concerns from
2 public? There's hands raised up. Pass it on.

3 JEFF TULUGAK: I would like to ask, when they
4 are going to remove the fish, they're going to go see
5 the fishnets -- wouldn't they catch lots of fishing on
6 the nets? I'm sorry. Did I make any sense?

7 I'm sorry. I was just wondering if DFO was going
8 to do some monitoring during the fish-out while the
9 fish-out is happening at the Whale Tail Lake.

10 MR. D'AGUIAR: Mark D'Aguiar, Fisheries and
11 Oceans. Thank you for that.

12 Typically Fisheries and Oceans has been able to go
13 on-site to observe the fish-out and to check how
14 they're doing their nets and sets. Whether we go or
15 not is not a guarantee, but we have typically gone.
16 Does that answer your question? Yeah.

17 THE CHAIR: Thank you.

18 There's another person at the back with raised
19 hands.

20 CRAIG SIMAILAK: Thank you.

21 Just a quick question on the size of the lake
22 you're going to be transporting the fish to. Is the
23 lake big enough so that it can sustain the extra fish
24 being transported into there? It won't be
25 overpopulated with fish in that one lake?

26 THE CHAIR: DFO.

1 MR. D'AGUIAR: Thank you, Mr. Chair. Mark
2 D'Aguiar, Fisheries and Oceans Canada.

3 I'll pass this over to Agnico in a moment. But my
4 understanding, the plan has not been finalized yet, but
5 I think the conceptual plan is still just to transfer
6 the fish from the north part of Whale Tail Lake after
7 it's diked just to the south part, so within the same
8 lake.

9 I will pass this to Agnico now to comment.

10 THE CHAIR: Go ahead, applicant.

11 MR. VANENGEN: Ryan Vanengen from Agnico
12 Eagle.

13 That's a very good question, and we are -- have
14 been asked that in the past as well with the fish-outs
15 that we've conducted at Meadowbank. And in our -- with
16 the plan at Whale Tail Pit, right now we believe that
17 the waterbody will be able to sustain the fish moved
18 over because the south water -- or the basin -- the
19 Whale Tail Pit south basin will increase by 40 percent
20 in surface area and therefore the volume -- I don't
21 know the exact calculation of the volume of that, but
22 we believe by transferring the fish from the north into
23 what will be a raised waterbody will act as a reservoir
24 for those fish. So we believe that those -- the
25 waterbody that they're being transferred into will be
26 able to sustain the fish that have been moved.

1 Mat'na.

2 CRAIG SIMAILAK: Thank you.

3 THE CHAIR: Any more questions or
4 comments, concerns from public? There's one hand
5 raised up again.

6 SHAWN ATTUNGALA: Thank you.

7 At the Whale Tail -- the lake there, do you guys
8 sort of know how many fish is in there, the population
9 is, right now?

10 THE CHAIR: DFO.

11 MR. D'AGUIAR: Fisheries and Oceans Canada,
12 Mark D'Aguiar.

13 I believe Agnico has done some baseline studies
14 and they have a good idea in their baseline studies,
15 what the population estimate will be. I don't have the
16 number offhand.

17 THE CHAIR: Applicant, go ahead.

18 MR. VANENGEN: Ryan Vanengen from Agnico
19 Eagle.

20 Based on the -- as I explained the previous
21 fish-outs and the volume of the water and area of Whale
22 Tail Lake, our estimate is that there will be 3,346
23 fish -- predominantly lake trout, a few Arctic char,
24 and a few whitefish, and then a lot of smaller-bodied
25 fish as well.

26 Mat'na.

1 THE CHAIR: Thank you. Any further
2 questions or comments, concerns? Okay. There's no
3 more questions, comments.

4 So we'll move on to in our agenda, move on to -- I
5 think we are pretty well done now. So I'm about to
6 move to closing remarks for tonight.

7 Closing Remarks by the Chair

8 THE CHAIR: Thank you, everyone, for
9 attending tonight's community session at the Baker Lake
10 Community Hall. Your questions and comments about
11 Agnico Eagle Mines Limited's water licence application
12 for the Whale Tail Pit Project were appreciated by
13 myself, the NWB Panel members -- Ross Mrazek on my
14 right and Alex Ningark on my left -- and staff.

15 Please remember that we still have a full day
16 tomorrow of the public hearing tomorrow. The hearing
17 will start at 9:30 because the -- I believe that the
18 INAC and applicant need -- are requesting a little bit
19 of time before we proceed for second day. So we will
20 start at 9:30 AM.

21 And I encourage you to continue attending the
22 hearing. As well, please let other members of the
23 community know and attend the last day of the public
24 hearing.

25 On behalf of the Nunavut Water Board, I would like
26 to thank the applicants and the intervenors for their

1 presentations and answers to questions from members of
2 the public here tonight.

3 Special thanks to all the elders, youth, and
4 community members of Baker Lake for sharing their
5 views, stories, and information with the Panel and the
6 participants and contributing to a productive and
7 respectful community session.

8 The community session is now adjourned, and we
9 will proceed with the continuation of the public
10 hearing tomorrow morning at 9:30 AM here at the
11 Baker Lake Community Hall.

12 Let us stand for closing prayer.

13 (CLOSING PRAYER)

14 THE CHAIR: Thank you.

15 _____

16 PROCEEDINGS ADJOURNED UNTIL 9:30 AM, SEPTEMBER 27, 2017

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1 CERTIFICATE OF TRANSCRIPT:

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3 I, Elizabeth Royal, 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
7 skill and ability.

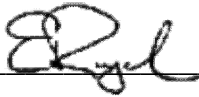
8 Dated at the City of Calgary, Province of Alberta,
9 this 16th day of October 2017.

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14 Elizabeth Royal, CSR(A)

15 Official Court Reporter

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1	EXHIBITS ENTERED	
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7	PowerPoint presentation entitled	
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3	"Part 5 - Abandonment, Reclamation,	
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12	PowerPoint presentation entitled	
13	"Part 7 - Management Plans and Monitoring	
14	Programs" (English/Inuktitut)	
15		
16	EXHIBIT 8 - Agnico Eagle hard copy	30
17	correspondence dated May 25, 2017, to	
18	K. Kharatyan (NWB) and copied to	
19	S. Granchinho (NIRB) entitled "The NWB	
20	Consideration of Agnico Eagle Mines	
21	Limited Whale Tail Pit Project Proposal	
22	and Revised Water Licence Applications"	
23	(English)	
24		
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26		

1	EXHIBIT 9 - Agnico Eagle hard copy	30
2	proposed Whale Tail Pit Project Type A	
3	water licence framework for Water Licence	
4	Number 2AM-WTP--- (English)	
5		
6	EXHIBIT 10 - Agnico Eagle hard copy	31
7	meeting notes between Indigenous and	
8	Northern Affairs Canada, Agnico Eagle, and	
9	Golder Associates Limited dated September	
10	14, 2017 (English)	
11		
12	EXHIBIT 11 - Indigenous and Northern	31
13	Affairs Canada hard copy reclaim estimate	
14	for Whale Tail Pit Project, Revision 6,	
15	dated September 11, 2017 (English)	
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17	EXHIBIT 12 - Indigenous and Northern	32
18	Affairs Canada hard copy Whale Tail	
19	security management agreement, final,	
20	September 5, 2017, between the Kivalliq	
21	Inuit Association, Agnico Eagle, and Her	
22	Majesty the Queen in Right of Canada as	
23	represented by the Minister of Indigenous	
24	and Northern Affairs (English)	
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