

NUNAVUT IMPACT REVIEW BOARD

PHASE 2 DEVELOPMENT PROJECT PROPOSAL - MARY RIVER IRON
ORE MINE NIRB FILE NUMBER 08MN053

HEARING

VOLUME 10

Pond Inlet, Nunavut

February 4, 2021

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1 Proceedings taken at Atakaalik Community Hall,
2 Pond Inlet, Nunavut.

3

4 NUNAVUT IMPACT REVIEW BOARD

5 K. Kaluraq Chair of Hearing

6 M. Qumuatuq Panel Member

7 C. Emrick Panel Member

8

9 NUNAVUT IMPACT REVIEW BOARD STAFF (POND INLET)

10 T. Meadows Legal Counsel

11 K. Costello Executive Director

12 K. Gillard Manager, Project Monitoring
13 and Acting Director Technical
14 Services

15 C. Barker Technical Advisor

16 P. Evalik Environmental Administrator

17 B. Beattie Environmental Technologist

18 F. Emingak Junior Technical Advisor

19

20 NUNAVUT IMPACT REVIEW BOARD STAFF (IQALUIT)

21 K. Morrison Manager, Impact Assessment

22 G. Daoust Technical Advisor

23 E. Adjun Outreach Coordinator

24 O. Evalik Senior finance Officer

25

26

1	NUNAVUT IMPACT REVIEW BOARD STAFF (BY PHONE)	
2	T. Arko	Technical Services
3	S. Amuno	Technical Advisor
4		
5	PROPONENT	
6		
7	BAFFINLAND IRON MINES CORPORATION (IQALUIT)	
8	B. Armstrong	Legal Counsel
9	C. Kowbel	Legal Counsel
10	M. Lord-Hoyle	Vice-President, Sustainable
11		Development
12	L. Kamermans	Director, Sustainable
13		Development
14	J. Tigullaraq	Head of Northern Affairs
15	A. Moore	Manager, Government Relations
16		and Public Affairs
17		
18	BAFFINLAND IRON MINES CORPORATION (POND INLET)	
19	B. Penney	President, Chief Executive
20		Officer
21	U. Hanson	Vice President, Community and
22		Strategic Development
23		
24	BAFFINLAND IRON MINES CORPORATION (REGISTERED SPEAKERS)	
25	L. Duke	Legal Counsel
26	A. McLeod	EDI Environmental Dynamics Inc.

1	E. Malcolm	Sustainability Specialist
2	C. Murray	Baffinland Iron Mines Corporation
3	C. Moore	Intrinsik
4	C. Devereaux	Baffinland Iron Mines Corporation
5	C. Merkosak	Baffinland Iron Mines Corporation
6	C. Legault	Fednav Limited
7	D. Jarrat	Stantec
8	D. Del Cardo	Genessee Wyoming Canada
9	E. Malcolm	Baffinland Iron Mines Corporation
10	F. van Biljon	Hatch Engineering
11	F. Pittman	Baffinland Iron Mines Corporation
12	J. McClintock	Wood Plc
13	J. Krizan	EDI Environmental Dynamics Inc.
14	M. Winterbottom	Golder Associates Ltd.
15	M. Clark	Baffinland Iron Mines Corporation
16	M. Austin	JASCO Applied Sciences
17	M. Settingington	EDI Environmental Dynamics Inc.
18	P. Abgrall	Golder Associates Ltd.
19	P. Osbourne	Golder Associates Ltd.
20	P. Rouget	Golder Associates Ltd.
21	R. Cook	Knight Piésold
22	S. Wallace	Stantec
23	S. Borcsok	Baffinland Iron Mines Corporation
24	S. Douville	Baffinland Iron Mines Corporation
25	T. Keane	Fednav Limited
26	T. Sewell	Baffinland Iron Mines Corporation

1	V. Corning	Stantec
2		
3	INTERVENORS	
4		
5	NUNAVUT TUNNGAVIK INCORPORATED (REGISTERED SPEAKERS)	
6	A. Yuan	Legal Counsel
7	N. Gonzalez	Legal Counsel
8	J. Eetoolook	Interim President
9	D. Lee	Wildlife Biologist
10	P. Irngaut	Director
11	B. Dean	Assistant Director
12	D. Kunuk	Chief Operating Officer
13	H. Uniugsaraq	Chief Administrative Officer
14	C. Lyall	Executive Assistant
15		
16	QIKIQTANI INUIT ASSOCIATION (REGISTERED SPEAKERS)	
17	L. Land	Legal Counsel
18	P.J. Akeeagok	President
19	J. Ottenhof	Director, Lands and Resource
20		Management
21	R. Paton	Director, IQ & Engagement
22	S. Williamson-Bathory	Special Advisor
23	L. Barnabas	Portfolio Lead
24	A. Macdonald	The Firelight Group
25	R. Olsen	The Firelight Group
26	S. Leech	The Firelight Group

1	J. Higdon	Freshwater and Marine Specialist
2	B. Stewart	Freshwater and Marine Specialist
3	J. Ash	Arktis Solutions
4	N. Jewitt	Arktis Solutions
5	M. Hemp	Qikiqtani Inuit Association
6	C. Spencer	Qikiqtani Inuit Association
7		
8	HAMLET OF POND INLET (REGISTERED SPEAKERS)	
9	J. Arreak	Mayor of Pond Inlet
10	F. Tester	Technical Advisor
11	C. Sangoya	Pond Inlet Hunters and
12		Trappers Organization
13	J. Merkosak	Resident Advisor in IQ
14	J. Aloofoo	Elder Advisor
15	L. Quassa	Community Representative
16	J. Kiyoopik	Youth Representative
17		
18	MITTIMATALIK HUNTERS AND TRAPPERS ORGANIZATION	
19	(REGISTERED SPEAKERS)	
20	E. Murphy	Legal Counsel
21	K. Julta	Legal Counsel
22	M. Bradley	Legal Counsel
23	J. Zyla	Woodward & Company
24	L. Mar	Woodward & Company
25	E. Ootoovak	President
26	E. Inuarak	Vice President

1	A. Hanson-Main	Technical Advisor
2	Dr. V. Vergara	Marine Expert
3	E. Solomon	IQ Expert
4	S. Elverum	IQ Expert
5	J. Simonee	Community-Based Monitoring Witness
6	V. L'Hereault	Community-Based Monitoring Witness
7		
8	IGLOOLIK WORKING GROUP AND IGLOOLIK HUNTERS AND	
9	TRAPPERS ASSOCIATION (REGISTERED SPEAKERS)	
10	P. Ivalu	Chairperson, Igloolik Working
11		Group
12	M. Recinos	Igloolik Working Group
13	J. Quassa	Igloolik Working Group
14	J. Malliki	Igloolik Hunters and Trappers
15		Association
16	D. Irngaut	Igloolik Hunters and Trappers
17		Association
18	P. Awa	Hamlet of Igloolik
19	N. Piugattuk	Elder Advisor
20	M. Ivalu	Community Representative
21	W. Immaroitok	Youth Representative
22		
23	HAMLET OF SANIRAJAK (REGISTERED SPEAKERS)	
24	J. Audlakiak	Mayor of Sanirajak
25	L. Primeau	Chief Administrative Officer
26	V. Curley	Hamlet of Sanirajak

1	D. Arvaluk	Hamlet of Sanirajak
2	T. Kuppaq	Hamlet of Sanirajak
3	J. Kaernerker	Community Representative
4		
5	HAMLET OF ARCTIC BAY AND IKAJUTIT HUNTERS AND TRAPPERS	
6	ASSOCIATION (REGISTERED SPEAKERS)	
7	L. Idlout	Legal Counsel
8	O. Eegeesiak	Hamlet of Arctic Bay
9	M. Koonoo	Arctic Bay Hunters and
10		Trappers Association
11	O. Naqitarvik	Elder Advisor
12		
13	HAMLET OF CLYDE RIVER AND CLYDE RIVER HUNTERS AND	
14	TRAPPERS ASSOCIATION (REGISTERED SPEAKERS)	
15	J. Natanine	Hamlet of Clyde River
16	W. Bernauer	Hamlet of Clyde River
17	S. Aipellee	Clyde River Hunters and
18		Trappers Association
19	O. Audlakiak	Clyde River QIA Women
20	S. Palituq	Elder Advisor
21	J. Palituq	Youth Community Representative
22		
23	AMARUQ HUNTERS AND TRAPPERS ASSOCIATION (REGISTERED	
24	SPEAKERS)	
25	M. Mike	Amaruq Hunters and Trappers
26		Association

1	Jeetaloo Kakee	Elder Advisor
2		
3	HAMLET OF RESOLUTE BAY (REGISTERED SPEAKERS)	
4	M. Idlout Amarualik	Resolute Bay Hunters and
5		Trappers Association
6	S. Idlout	Hamlet of Resolute Bay
7		
8	GOVERNMENT OF NUNAVUT (REGISTERED SPEAKERS)	
9	E. Stockley	Legal Counsel
10	M. Kinney	Legal Counsel
11	N. O'Grady	Avatiliriniq Coordinator
12	G. Karlik	Assistant Deputy Minister
13		Department EDT
14	J. Onalik	Deputy Minister EDT
15	S. Pinksen	Assistant Deputy Minister DOE
16	J. Elliott	Project Manager Impact Assessment
17		DOE
18	J. Ringrose	Qikiqtani Regional Wildlife
19		Biologist
20	E. Zell	Manager, Environmental Assessment
21		and Regulation EDT
22	A. Robinson	Manager, Land Use and
23		Environmental Assessment DOE
24	S. Atkinson	Wildlife Consultant
25	A. Cyr-Parent	Senior Advisor
26		

1 NORTHERN PROJECTS MANAGEMENT OFFICE (REGISTERED
2 SPEAKERS)

3 L. Dyer Director General, Northern Projects
4 Management Office

5 A. Shafi Technical Support, Northern
6 Projects Management Office

7 S. Qazi Technical Support, Northern
8 Projects Management Office

9 S. Hitchcox Northern Projects Management
10 Office

11

12 DEPARTMENT OF JUSTICE (REGISTERED SPEAKERS)

13 S. Gruda-Dolbec Legal Counsel

14

15 CROWN-INDIGENOUS RELATIONS NORTHERN AFFAIRS CANADA
16 (REGISTERED SPEAKERS)

17 S. Dewar Director, Resource Management

18 K. Henrikson Regional Director General

19 F. Ngwa Manager, Impact Assessment

20 A. Chaikine Senior Environment Assessment
21 Specialist

22 D. Abernethy Regional Socio-economic Analyst

23 M. Hopkins Director General, Natural
24 Resources and Environment

25 K. Pawley Manager, Environmental Assessment

26

1	J. Walsh	Senior Environmental
2		Assessment Analyst
3	J. Neary	Environmental Assessment Analyst
4	K. Ma	Regional Environmental
5		Assessment Coordinator
6		
7	FISHERIES AND OCEANS CANADA (REGISTERED SPEAKERS)	
8	G. Bernard-Lecaille	Senior Biologist, Fish and
9		Fish Habitat Program, Arctic
10		Region
11	A. Sorckoff	Fish and Fish Habitat Protection
12		Biologist
13	A. Beattie	Team Lead, Mining Oil and Gas
14		North
15	M. Marcoux	Marine Mammal Expert, DFO Science
16	K. Howland	Aquatic Invasive Species Expert,
17		Oceans Canada Science Group
18	T. Hoggarth	Regional Director, Aquatic
19		Ecosystems
20	C. Matthews	Research Scientist
21	J. Paulic	Science Advice Liaison
22	J. Shead	Aquatic Invasive Species Biologist
23	K. Hedges	Research Scientist
24	P. Hall	Environmental Specialist
25	S. Bailey	Research Scientist
26	S. Nudds	Physical Scientist (Oceanographer)

1	S. Ferguson	Research Scientist
2	S. McLennan	Manager, Arctic Projects and
3		Governance
4	T. Seal	Junior Project Officer
5		
6	PARKS CANADA (REGISTERED SPEAKERS)	
7	A. Stoddart	Environmental Assessment
8		Scientist
9	J. Chisholm	Ecologist Team Leader
10	A. Maher	Resource Conservation Manager,
11		Nunavut Field Unit
12	J. Bastick	Environmental Assessment
13		Specialist
14	J. Boon	Field Unit Superintendant,
15		Nunavut Field Unit
16	L. Jonart	Project Manager, Tallurutiup
17		Imanga National Marine
18		Conservation Area, Nunavut
19		Field Unit
20		
21	TRANSPORT CANADA (REGISTERED SPEAKERS)	
22	J. Barker	Regional Environmental Advisor
23	A. Gudmunson	Regional Manager Environmental
24		Programs
25	J. Johar	Manager Marine Safety and Security
26	J. Cram	Manager Rail Safety Engineering

1	M. O'soup Bushie	Major Resource Development
2		Projects & Aboriginal Consultations
3		
4	ENVIRONMENT AND CLIMATE CHANGE CANADA (REGISTERED	
5	SPEAKERS)	
6	A. Graham	Environmental Coordinator
7	M. Fairbairn	Regional Director
8	B. Asher	Technical Expert, Air Quality
9	R. Holt	Technical Expert, Air Quality
10	M. Parsons	Technical Expert, Air Quality
11	C. Kabanguka	Environmental Emergencies Expert
12	J.F. Dufour	Technical Expert, Water Quality
13	K. Patel	Technical Expert, Water Quality
14	M. Tobin	Technical Expert, Water Quality
15	A. Wilson	Technical Expert, Water Quality
16	R. Ejeckam	Senior Mining Project Officer
17	N. Cote	Executive Director
18		
19	HEALTH CANADA (REGISTERED SPEAKERS)	
20	M. Gale	Regional Manager
21	K. Buset	Impact Assessment Program
22		Manager
23	W. Wilson	Impact Assessment Coordinator
24	T-T. Nguyen	Engagement Specialist
25	N. Lyrette	Environmental Specialist
26		

1 NATURAL RESOURCES CANADA (REGISTERED SPEAKERS)
2 P. Unger Senior Environmental
3 Assessment Officer
4 R. Johnstone Deputy Director, Explosives
5 Safety and Security Branch,
6 Lands and Minerals Sector
7
8 IMPACT ASSESSMENT AGENCY OF CANADA (REGISTERED
9 SPEAKERS)
10 Y. Stoimenova Policy Analyst
11 T. Frezza Manager, Legislation
12
13 NUNAVUT INDEPENDENT TELEVISION NETWORK (REGISTERED
14 SPEAKERS)
15 I. Gilles Legal Counsel
16 L. Tulugarjuk Chairperson, Executive Director
17 Z. Kunuk Founder and Director
18 C. Kunnuk Nunavut Independent Television
19 Network
20 L. Lipsett Technical Advisor
21 M. Malliki Jr. Nunavut Independent Television
22 Network
23
24 WORLD WILDLIFE FUND (REGISTERED SPEAKERS)
25 A. Dumbrille Lead Specialist, Marine Shipping
26 and Conservation

1	P. Okalik	Lead Specialist, Arctic
2	B. Laforest	Senior Specialist, Arctic
3		Species and Ecosystems
4	E. Keenan	Specialist, Eastern Arctic
5		
6	OCEANS NORTH (REGISTERED SPEAKERS)	
7	C. Debicki	Legal Counsel
8	A. Joynt	Senior Policy Advisor
9	G. MacDonald	Arctic Research Specialist
10	J. Jones	Scripps Institution of Oceanography
11		
12	INTERPRETERS/TRANSLATORS	
13	V. Dewar	Language Translator
14	R. Katsak	Language Translator
15	T. Arnajaallak	Language Translator
16	J. Peter	Language Translator
17	J. Tucktoo	Language Translator (Iqaluit)
18		
19	A. Vidal, CSR(A)	Official Court Reporter
20	S. Burns, CSR(A), RPR,	Official Court Reporter
21	CRR	
22	<hr/>	
23		
24		
25		
26		

1 (PROCEEDINGS COMMENCED AT 9:04 AM)

2 Opening Remarks

3 THE CHAIR: Good morning. I'm just
4 waiting for the Iqaluit feed to come live before we
5 begin.

6 Good morning. I'm Kaviq Kaluraq. I am the Chair
7 of the Nunavut Impact Review Board. On behalf of the
8 Board, I would like to welcome everybody back to the
9 Day 10 of the NIRB resumed public hearing associated
10 assessment, Baffinland Iron Mines Corporation's Phase 2
11 development proposal related to Mary River iron mine
12 ore -- mine project.

13 Welcome to everyone attending in Pond Inlet and
14 Iqaluit and those joining us on Zoom or the phone.

15 Before we resume our meeting, we're going to
16 have -- Peter Awa is going to open with prayer.

17 Opening Prayer

18 THE CHAIR: Thank you, Peter, for the
19 opening prayer.

20 As you're aware, due to the COVID-19 pandemic,
21 NIRB has put in place additional procedures for those
22 attending in person to keep us safe and in compliance
23 with the local public health requirements. We
24 require -- we want to comply with these extra
25 requirements like wearing a mask -- a face mask at all
26 times so that we can have -- so that we can have 80

1 people join us in Iqaluit and a hundred in Pond Inlet.

2 For those participants unable to travel to Iqaluit
3 or Pond Inlet, the Board has provided the opportunity
4 to join via video and audio links. Whoever are and
5 however you are participating in these public hearings,
6 the Board really appreciates you taking the time to
7 join us during these important meetings.

8 For all parties no matter where you are, please
9 wait for me to turn the microphone over to you as I'm
10 often giving the interpreters time to finish before our
11 AV technicians switch to your feed. When you speak,
12 please say your name and identify the organization that
13 you'll be speaking for and be mindful of our
14 interpreters as you go so that we can ensure the Board
15 has an accurate record of these proceedings.

16 Please note that simultaneous interpretation of
17 the proceedings is available throughout the meetings
18 with interpreters here in Pond Inlet and an additional
19 interpreter available in Iqaluit to assist with the
20 logistics for the designated community representatives.

21 Receivers are available from the sign-in table at
22 each in-person location, and language-specific
23 information has been provided for those participating
24 online.

25 In both Pond Inlet and Iqaluit, receivers are
26 using the following channels: Channel 0, floor;

1 Channel 1, English; and Channel 2, Inuktitut.

2 If you're attending at an in-person location or
3 are having trouble hearing the proceedings, please let
4 one of the NIRB staff know, and they'll assist you.
5 Any issues with the online feed can be communicated to
6 Keith Morrison.

7 For those attending in person in Pond Inlet and
8 Iqaluit, there are sign-in sheets at the table as you
9 come in. Please make sure you sign in if you have not
10 already done so. This will ensure the NIRB can provide
11 an accurate record of hearing participants and allow
12 for adherence to public health measures.

13 The Nunavut Impact Review Board is required to
14 gather contact information for everyone attending in
15 Iqaluit and Pond Inlet. This information will only be
16 used for contact tracing purposes. Those participating
17 through the online feed should have pre-registered to
18 receive the information, but if you did not
19 pre-register, please contact Cory Barker to indicate
20 your participation.

21 In addition to the video feed for participants on
22 Zoom, the Board is working with the Nunavut Independent
23 Television Network to arrange to broadcast the live
24 feed from Pond Inlet and Iqaluit through the Arctic
25 Co-op and Shaw Direct Channel, Uvagut TV. These
26 additional broadcasting measures are intended to enable

1 community members to view the technical sessions and
2 community roundtable of the public hearing from their
3 own homes.

4 Also, as I noted yesterday, there are several
5 media outlets including CBC, Nunatsiaq News and
6 Canadian Press all following these proceedings via Zoom
7 and in Iqaluit. For any media attending the
8 proceedings in person, the Board asks that the media
9 wear a press badge or identify yourself wherever you
10 are so that participants know which media outlet you
11 represent.

12 The Board appreciates the interest and
13 participation by the media covering these proceedings
14 and extending the proceedings to audiences within and
15 outside Nunavut. However, the Board reminds the media
16 that because the Board is engaged in a -- in a
17 decision-making process for the Phase 2 development
18 project, the Board and staff will not provide comments
19 or answer specific questions while this matter is
20 before the Board until the public hearing report is
21 issued publicly.

22 I think you all know where the washrooms are
23 located outside this room in the lobby area. The exits
24 are located through the main doors to the lobby on both
25 sides of the room. (NO ENGLISH FEED) the Panel
26 responsible for decision-making in respect of the

1 Phase 2 development project.

2 The Panel is supported in Pond Inlet, Iqaluit, and
3 on the phone by several of the Board's staff and our
4 legal counsel. In the interest of time, I won't
5 reintroduce them all to you, but if you need
6 assistance, please look for the people with the NIRB
7 badges, and they'll help you out.

8 As I mentioned on Monday afternoon, today we'll be
9 starting the presentation of evidence by the registered
10 intervenors in the order listed in the agenda. During
11 this part of the technical sessions, the registered
12 intervenors will be affirmed. This means that the
13 statements they make during their presentations and
14 during their answers to the questions asked by the
15 residents of Pond Inlet during the community roundtable
16 session on Saturday will be received as evidence on the
17 public hearing record.

18 The registered intervenors will do their
19 presentations over the next two days, and there will be
20 an evening session on Friday to complete their
21 presentations. Any questions from Baffinland or other
22 registered intervenors will be deferred and will be
23 provided in writing along with any deferred questions
24 to Baffinland.

25 On Saturday from 9 to 5 and into the evening
26 session between 6:30 and 9, a community roundtable

1 session will be held for the residents of Pond Inlet.
2 Community representatives in Iqaluit will hear directly
3 from the people of Pond Inlet as they pose their
4 questions to Baffinland and any of the registered
5 intervenors and share their comments, experience, and
6 knowledge with the Board.

7 The opportunity for the community representatives
8 from other communities who are together in Iqaluit to
9 ask questions and share their views and experience will
10 take place in Iqaluit in March when the third part of
11 the public hearing continues and the community
12 roundtable involving the seven potentially affected
13 North Baffin communities takes place.

14 Before we turn to the presentations by the
15 registered intervenors, the Board requests that
16 everyone respect the Board's directions and updated
17 procedures. I would like to remind everyone that
18 comments and actions intended to attack the views or
19 comments of other participants or simply intend to
20 disrupt the proceedings are not appropriate and won't
21 be tolerated.

22 The Board may move to strike offensive comments
23 from the public hearing record or take other actions
24 necessary to maintain order. If required, the Board
25 may impose restrictions on anyone who is unwilling to
26 be respectful of the Board's rules and modified

1 procedures, including barring them from the current and
2 future participation in the public hearing.

3 The Board recognizes that feelings may be running
4 high and participants may have very strong feelings
5 including strong disagreement with other participants,
6 but this is not an excuse to treat other participants
7 or the Board and the staff with disrespect. The wisdom
8 of the Elders who have spoken during these proceedings
9 has shown us all that it is possible to express very
10 strong views that are different from others while still
11 showing respect.

12 And now the Board begins with the presentations by
13 the registered intervenors. Legal counsel, can you
14 please affirm the individuals who will be representing
15 evidence and anyone who could be providing answers to
16 questions during the community roundtable.

17 MS. MEADOWS: Thank you, Madam Chair.

18 Teresa Meadows, legal counsel for the Nunavut Impact
19 Review Board.

20 So, Madam Chair, I have a list of the potential
21 witnesses who should be sworn or affirmed, and I will
22 list them all and then I will administer the
23 attestation, and then I just ask them to come online if
24 they are in another -- either online or here, just to
25 come on the mic, say their name, and say "I affirm",
26 assuming that they affirm.

1 So, Madam Chair, the witnesses that I have listed
2 here are Levi Barnabas, Jared Ottenhof, Richard Paton,
3 Stephen Williamson-Bathory, Alistair Macdonald, Rachel
4 Olson, Susan Leech, Jason Ash, Nick Jewitt, Jeff
5 Higdon, and Bruce Stewart. And, Madam Chair, I will
6 now administer the affirmation.

7 LEVI BARNABAS, JARED OTTENHOF, RICHARD PATON, STEPHEN
8 WILLIAMSON-BATHORY, ALISTAIR MACDONALD, RACHEL OLSON,
9 SUSAN LEECH, JASON ASH, NICK JEWITT, JEFF HIGDON, BRUCE
10 STEWART, Affirmed

11 THE CHAIR: So those are the parties from
12 the Qikiqtani Inuit Association.

13 Legal counsel, can you please advise regarding any
14 exhibits that will be filed on the public hearing
15 record for this intervenor.

16 MS. MEADOWS: Thank you, Madam Chair.
17 Teresa Meadows, legal counsel for the Nunavut Impact
18 Review Board.

19 So, Madam Chair, I have two presentations -- I
20 have two presentations to mark as the next two exhibits
21 being the presentation of the Qikiqtani Inuit
22 Association, but it is also my understanding that there
23 are three additional exhibits that the Qikiqtani Inuit
24 Association proposes to file in electronic form, and
25 Ms. Land, legal counsel for the Qikiqtani Inuit
26 Association, will speak to those exhibits. Thank you,

1 Madam Chair.

2 EXHIBIT 30 - Qikiqtani Inuit Association
3 PowerPoint presentation to the Nunavut Impact
4 Review Board regarding Baffinland Iron Mines
5 Corporation Phase 2 Development proposal
6 January 25 - February 6, 2021 (English)

7 EXHIBIT 31 - Qikiqtani Inuit Association
8 PowerPoint presentation to the Nunavut Impact
9 Review Board regarding Baffinland Iron Mines
10 Corporation Phase 2 Development proposal
11 January 25 - February 6, 2021 (Inuktitut)

12 THE CHAIR: Lorraine Land.

13 MS. LAND: Thank you, Madam Chair.

14 Lorraine Land for the Qikiqtani Inuit Association.

15 Yes. I can confirm that the Qikiqtani Inuit
16 Association has filed first an original submission of
17 its presentation for this hearing that was filed prior
18 to the commencement of the public hearing. That
19 submission has been updated and added to the registry
20 and will be presented orally today. So we were asking,
21 first of all, that those two presentation documents,
22 the original one and the updated one be marked as
23 exhibits.

24 In addition, we have filed and requested to have
25 entered as exhibits two other documents, one of which
26 has both an English and an Inuktitut version. The

1 first document is entitled "Enhancing Inuit
2 Participation". It is a document in English and in
3 Inuktitut in one document. We will not be referring to
4 this document specifically during the presentation
5 today, but we do anticipate that this document and the
6 other document I'm about to refer to will be referred
7 to during the community roundtable sessions in response
8 to questions this Saturday and in Iqaluit in March.

9 The second additional exhibit that we are asking
10 to enter is a document that is a summary of the
11 Qikiqtani Inuit Association engagement with impacted
12 communities between November 2019 and December 2020.
13 That document has been provided in English, and in
14 addition there is a separate Inuktitut translation of
15 the document, and hard copies of all of these documents
16 have been provided at each of the hubs. Thank you.

17 THE CHAIR: NIRB legal counsel.

18 MS. MEADOWS: Thank you, Madam Chair.

19 Teresa Meadows, legal counsel for the Nunavut Impact
20 Review Board.

21 So, Madam Chair, recognizing that these are
22 materials that were not previously filed with the
23 Board, our standard practice is to mark them as
24 exhibits, and then we will circulate them on the public
25 registry and give parties an opportunity for -- within
26 the next day to provide us with any indications of any

1 objections to the entrance of these materials onto the
2 public registry and into the public hearing as
3 exhibits, Madam Chair, and those are my procedural
4 matters.

5 EXHIBIT 32 - Qikiqtani Inuit Association 2020
6 Community Engagement Summary - Mary River
7 Project (English)

8 EXHIBIT 33 - Qikiqtani Inuit Association 2020
9 Community Engagement Summary - Mary River
10 Project (Inuktitut)

11 EXHIBIT 34 - Qikiqtani Inuit Association
12 PowerPoint slides, Enhancing Inuit
13 Participation (English/Inuktitut)

14 THE CHAIR: Thank you.

15 You may proceed, Qikiqtani Inuit Association. Who
16 is going to lead the presentation? Richard Paton.
17 Presentation by Qikiqtani Inuit Association Regarding
18 Baffinland Iron Mines Corporation Phase 2 Development
19 Proposal

20 MR. PATON: Good morning, Madam Chair.
21 Richard Paton on behalf of the Qikiqtani Inuit
22 Association.

23 Madam Chair, as I just noted, I am Richard Paton.
24 I am the current director, Inuit Qaujimajatuqangit and
25 engagement. For me, this project means working to
26 ensure communities have accurate and timely information

1 while incorporating Inuit Qaujima jatugangit and Inuit
2 perspectives into the work we do.

3 To the right of me is Levi Barnabas, secretary
4 treasurer for the Qikiqtani Inuit Association and
5 portfolio lead for this file.

6 To my left is Stephen Williamson-Bathory, special
7 advisor for the Qikiqtani Inuit Association, and
8 participating from Iqaluit is Jared Ottenhof, director,
9 lands and resource management as well as our technical
10 team just sworn in online. Moving to slide 2.

11 For this Nunavut Impact Board Review process --
12 (INUKTITUT SPOKEN - NO TRANSLATION) for this Nunavut
13 Impact Review Board process, the Qikiqtani Inuit
14 Association is the designated Inuit organization
15 responsible for stewardship of Inuit lands where the
16 mine is located.

17 Under the requirement of the Nunavut Agreement,
18 the Qikiqtani Inuit Association is also responsible for
19 ensuring that the rights and interests of Inuit in the
20 region are protected and respected.

21 Outside of this Nunavut Impact Review Board
22 process, the Qikiqtani Inuit Association is also
23 responsible for negotiating leases and compensation for
24 access to Inuit lands, negotiating compensation for use
25 of waters in the region through the Nunavut Water Board
26 process, and negotiating the Inuit Impact Benefit

1 Agreement for this and other development on Inuit-owned
2 lands in the Qikiqtani region.

3 In order to meet these many responsibilities, the
4 Qikiqtani Inuit Association has devoted considerable
5 time and resources to fully understanding the technical
6 issues in these proceedings, raising technical concerns
7 and working to resolve those concerns.

8 The goal of the Qikiqtani Inuit Association is to
9 ensure proper environmental management, mitigation and
10 monitoring for this project that puts Inuit in the
11 driver's seat for decisions on issues that matter most
12 to Inuit. Moving to slide 3.

13 The Qikiqtani Inuit Association has fully
14 participated in the Nunavut Impact Review Board process
15 to date and has provided constructive input to the
16 Nunavut Impact Review Board process where required.

17 The Qikiqtani Inuit Association has continued
18 throughout the entire review process to work with the
19 proponent and other intervenors to narrow the number of
20 technical issues and work towards solutions for issues
21 identified as a result of this project.

22 The Qikiqtani Inuit Association has supported the
23 communities in their submissions to the Nunavut Impact
24 Review Board and has always worked to ensure that Inuit
25 voices and concerns are heard in the technical review
26 process.

1 On Slide 4: As significant time has passed in
2 this review process, the Qikiqtani Inuit Association
3 has taken advantage of this time and has been
4 productive in resolving many issues originally found
5 with the final environmental impact statement and
6 supporting documents.

7 We also recognize that this is the first time in
8 the process, including the adjourned November 2019
9 technical and community roundtable sessions, that the
10 Qikiqtani Inuit Association is able to present to the
11 Nunavut Impact Review Board and intervenors.

12 Given this, we will give summaries of the
13 technical issues raised to date. These topics are what
14 is well understood about the project. We will also
15 focus on what is unknown or not as certain about what
16 is an original or a new type of project being proposed
17 for Nunavut and the Canadian Arctic and what's been
18 committed to by the proponent to address these areas
19 with less certainty. Moving to Slide 5.

20 The Qikiqtani Inuit Association has expressed
21 concerns in our intervention about the effect of
22 linear, or what might be considered a straight line,
23 infrastructure such as a railway that will go from one
24 coast of Baffin Island to the other. There's a
25 possibility that caribou and other wildlife will not
26 cross this railway. We have heard and seen discussion

1 that caribou can cross the railway, but will they?

2 Qikiqtani Inuit Association's goal in assessing
3 railway impacts was to gain more confidence in
4 predictions that what has been put forth by the
5 proponent and proposes plans and mitigations with real
6 Inuit input to assist in understanding these effects
7 and ensure that the railway has a minimal impact on
8 caribou in the eyes of Inuit.

9 On Slide 6: Throughout the Nunavut Impact Review
10 Board process, Qikiqtani Inuit Association's technical
11 specialists have been working with Baffinland and the
12 federal Department of Fisheries and Oceans to identify
13 areas of weakness in monitoring of the marine
14 environment and wildlife both in the current and the
15 proposed project. Our unresolved issues, which I will
16 touch on later, are focused on ballast water, invasive
17 species, and Arctic char health.

18 The overall effects of shipping on the marine
19 environment are not well-known. We have heard
20 arguments that there will be no lasting effects, but
21 Inuit are experiencing something different.

22 On Slide 7: For more than two years, the
23 Qikiqtani Inuit Association has worked with Baffinland
24 and other intervenors to come to a better understanding
25 of effects, monitoring, and mitigations based on what
26 we know from the final environmental impact statement

1 and supplemental information provided by Baffinland as
2 it relates to the Phase 2 project proposal.

3 I will go over our technical comments to
4 demonstrate some of the issues the Qikiqtani Inuit
5 Association raised based on this information.

6 There is much that we don't know. There has never
7 been a railway in Nunavut or even in the Canadian
8 Arctic. There has never been a project with this much
9 bulk shipping, and all of this in the middle of Inuit
10 traditional lands and waters. Baffinland must rely on
11 Inuit knowledge and expertise. The people who are
12 actually seeing the real effects of the project. Inuit
13 input must be used in developing adequate and
14 comprehensive monitoring plans and mitigation measures.
15 Baffinland must be committed to change at their project
16 if this is to go ahead.

17 The only way for this project to operate is to be
18 dynamic and adaptive, to be more protective. The
19 project must fit into Inuit lands and traditions.
20 Lands and traditions must not change to accommodate
21 this project.

22 On Slide 8: Madam Chair and to those listening,
23 Slides 8 through 18 represent key technical
24 commitments -- sorry, key technical comments to which
25 the Qikiqtani Inuit Association view as being resolved.
26 I would note, however, that all of the technical

1 comments marked with a TC number that have a star or
2 asterisk next to it are those technical comments that
3 are resolved through commitments made through the Inuit
4 Certainty Agreement and are now on the public record as
5 commitments made by Baffinland.

6 Many of these items are dependent on successful
7 implementation of the Inuit Certainty Agreement. I
8 should also note that there is extensive information
9 exchanged on these topics in our written submissions to
10 the Nunavut Impact Review Board along with Baffinland's
11 responses. These are only summarized here to
12 demonstrate some of topics we have raised on the final
13 environmental impact statement and supplemental
14 information on the record. Our technical comments
15 served as a very critical look at the project in order
16 to help the Qikiqtani Inuit Association better
17 understand what is being proposed and also to improve
18 the project should it be approved to proceed.

19 In these first few topics that we have grouped our
20 technical comments, we have supplemented with the
21 prefix "IQ". This indicates that these specific topics
22 were raised by the Qikiqtani Inuit Association through
23 the specific lens of what Inuit Qaujimajatuqangit has
24 informed us.

25 So as it relates to Technical Comments 1 and 2, as
26 I have mentioned, rail is a new concept in Nunavut. In

1 our view, we observed that some statements on the
2 impacts of caribou did not align with what communities
3 have observed on caribou. The effects of rail on
4 caribou are not well-known, and at the time the
5 wildlife crossings were not well defined.

6 For Technical Comments 3 and 4: The Qikiqtani
7 Inuit Association found that Inuit Qaujimagatugangit
8 collection methods were outdated and yielded an
9 incomplete data set for marine mammals, and there was
10 also weak consideration given to the input from the
11 Mittimatalik harvesters.

12 On Slide 9 for Technical Comment 5 and 6: It was
13 unclear how Inuit Qaujimagatugangit was integrated into
14 or informs Baffinland's monitoring mitigation and
15 management plans. We have heard from Mittimatalik and
16 other community representatives that the communities
17 feel that their voice was not heard loudly enough on
18 project alternatives such as the rail alignment or the
19 rail route.

20 On Slide 10: Through review of Technical Comments
21 7 through 12, the Qikiqtani Inuit Association took a
22 close look at how the project will impact actual Inuit
23 and our lives. Many project impact pathways end with
24 Inuit. The Qikiqtani Inuit Association found that
25 there needed to be a strong understanding of baseline
26 food security and the conditions and baseline

1 traditional land use near the project as well as how
2 the project will have true positive socio-economic
3 impacts on Inuit in communities.

4 This relates to how Inuit mitigate or Inuit
5 traditional laws and norms were considered to how dust
6 fall will impact culturally important vegetation that
7 goes beyond just blueberries.

8 On Slide 11 for the Technical Conditions 13
9 through 16: The Qikiqtani Inuit Association dug deep
10 into the effects of the railway on caribou and the
11 terrestrial wildlife. The Qikiqtani Inuit Association
12 identified that there needs to be more wildlife
13 crossings along the entire rail alignment, and that
14 different caribou group sizes need to be considered.

15 There will also be a combined or a cumulative
16 effect of having the existing tote road near the
17 railway, and that this may be seen as wildlife -- or by
18 wildlife as one large road to pass. There are also the
19 effects of actually operating the train to be
20 protective of caribou that may be on or near the
21 tracks. The Qikiqtani Inuit Association also discussed
22 wind turbines being proposed for the project. The
23 proponent removed this concept from the proposal in the
24 early stages of the review process.

25 On Slide 12 for Technical Comments 18 through 22:
26 In addition to hearing that community voices were not

1 heard on route selection, the Qikiqtani Inuit
2 Association also found that there were issues regarding
3 water bodies of significance along the rail alignment.
4 There was also a lack of clarity surrounding predicted
5 changes to water quality, quantity, and flow in the
6 construction, operation, and closure phases of the
7 project. The tote road has also never been constructed
8 to the approved specifications, which has resulted in
9 exceeding criteria in the project water licence.

10 On Slide 13 for Technical Comments 25 through 30:
11 There is no current detailed design information on the
12 railway embankment, although this is not expected
13 within the impact assessment process.

14 In the final environmental impact statement, it
15 was not known where potentially acid-generating rock
16 would be placed once it was removed or how thick the
17 covering for it was going to be. Qikiqtani Inuit
18 Association also needed more information. Feeding into
19 more recent discussions, Qikiqtani Inuit Association
20 identified deficiencies in the adaptive management plan
21 and subplans.

22 On Slide 14 for Technical Comments 32 to 35: The
23 Qikiqtani Inuit Association requires large amounts of
24 data to ensure that Inuit are properly benefitting from
25 employment opportunities. The data we had access to
26 did not allow us to adequately assess positive effects

1 from employment training initiatives. We also found
2 that the Inuit human resource strategy and career path
3 development for Inuit employees were not well enough
4 developed.

5 On Slide 15 for Technical Comments 36 through 39:
6 In a continuation of the themes of previous slides, the
7 Qikiqtani Inuit Association worked to improve clarity
8 on what jobs will be available to Inuit if Phase 2 is
9 approved to proceed, and we identified that more effort
10 on the proponent's part is required to ensure that
11 Inuit benefit from the jobs at the project.

12 On Slide 16: Qikiqtani Inuit Association was
13 concerned regarding the climate strategy -- sorry, the
14 climate change strategy put forward by the proponent.
15 The railway will impede or restrict the crossing of
16 juvenile fish such as Arctic char. We're also seeing
17 the same issues with the tote road and the cumulative
18 effect of where the tote road and the railway are in
19 close proximity. Additional baseline data gathering
20 was requested. There are also current Nunavut Impact
21 Review Board terms and conditions which need to be
22 adhered to also requiring strict post-construction
23 monitoring in the operation phase to ensure that these
24 measures are working.

25 On Slide 17 for Technical Comments 43 through 47:
26 The Qikiqtani Inuit Association understands that the

1 marine environment is a sensitive issue, and very
2 serious. What we present here does not mean that the
3 Qikiqtani Inuit Association is simply accepting the
4 impacts of the project in the marine environment.
5 There have been extensive conversations that have led
6 to commitments to address specific aspects of effects
7 identified, so the Qikiqtani Inuit Association raised
8 concerns over dust settling into water bodies or land
9 and washing into the marine environment.

10 Qikiqtani Inuit Association has also had
11 significant and lengthy discussions with the proponent
12 on ballast water sampling and discharge of ballast
13 water into Qinnua and icebreaking and ice management
14 at the start and end of the shipping season.

15 On Slide 18 for Technical Comments 48, 49, 50, and
16 52: When assessing impacts to wildlife, there are
17 thresholds for prescribed mitigation actions. The
18 Qikiqtani Inuit Association did not agree with the
19 thresholds set out in the final environmental impact
20 statement.

21 In a comment directed to the Nunavut Impact Review
22 Board, the Qikiqtani Inuit Association also believes
23 that the study areas for the project is too small to
24 capture the effects from the project. This becomes
25 apparent when you consider the effects on migratory
26 animals such as the narwhal.

1 On Slide 19: Through our review of materials
2 provided by Baffinland, the Qikiqtani Inuit Association
3 raised Technical Comments 23, 24, 26, and 31 as initial
4 issues. After further discussion with Baffinland, it
5 was mutually decided on that the details required for
6 resolution are beyond the scope of this impact
7 assessment process and are better addressed through the
8 regulatory process with the Nunavut Water Board.

9 On Slide 20: We still have unresolved technical
10 problems with this proposal. The Qikiqtani Inuit
11 Association is still actively working with Baffinland,
12 the Department of Fisheries and Oceans, and other
13 intervenors to resolve these issues. For some of them,
14 we have a path forward.

15 For Technical Comment 41, the Qikiqtani Inuit
16 Association remains concerned about the effects of dust
17 settlement and exceedances.

18 For Technical Comment 45, invasive species has
19 been a common concern amongst Inuit. The Qikiqtani
20 Inuit Association is waiting on a Department of
21 Fisheries and Oceans draft study plan for invasive
22 species.

23 On Technical Comment 48 related to icebreaking and
24 freeze-up timing, it has been marked as resolved but
25 deferred to the community of Pond Inlet.

26 For Technical Comment 51 related to underwater

1 noise from vessels, the Qikiqtani Inuit Association
2 sees a path forward, but some of the details remain to
3 be resolved.

4 While Technical Comment 35 on cumulative and
5 transboundary effects has been marked as resolved in
6 some of the lists, it remains unresolved in others.
7 Qikiqtani Inuit Association remains of the position
8 that the current cumulative effects assessment is not
9 adequate for this project. More detailed information
10 can be found in our past written submissions and will
11 be discussed again in our final written submission
12 prior to the close of the public record.

13 Qikiqtani Inuit Association and Baffinland have
14 agreed on commitments to the Qikiqtani Inuit
15 Association and Inuit on performing a new cumulative
16 effects assessment if the project ever expands further.

17 On Slides 21 and 22: We recognize that given all
18 that Baffinland puts into the Marine Environmental
19 Working Group and the terrestrial environmental working
20 group, it is very clear that change is needed to ensure
21 that these groups become functional.

22 For those that believe they are functional, change
23 is still needed, given the number and magnitude of
24 additional responsibilities that Phase 2 will place on
25 these working groups.

26 We have heard many responsibilities and responses

1 from Baffinland that things will be taken care of in
2 the future by the Marine Environmental Working Group
3 and the terrestrial environmental working group and now
4 a new freshwater environmental working group. For the
5 three, as part of this presentation, I'm going to refer
6 to them as "the working groups".

7 We have also heard how much this project will rely
8 on the knowledge and decisions of the Inuit committee
9 and the Inuit social oversight committee. That is a
10 lot. With the working groups and Inuit committees
11 looking at some of the same information and evaluating
12 the need for change of the same monitoring and
13 management plans including the adaptive management
14 plan, how will this operate smoothly while minimizing
15 conflict? How will working groups with members who do
16 not believe their voices are being heard or that the
17 groups are effective to be able to accommodate all of
18 the things related to Phase 2 when they don't work for
19 the current project? How can working group members who
20 are charged with the responsibility to provide
21 refutable [sic] input for change can be assured that
22 change will be made at the project when the meetings
23 are chaired by the same body that is creating the
24 impacts? A major change to the working groups is
25 clearly needed.

26 The Qikiqtani Inuit Association has a proposal,

1 and that proposal is something that we've already
2 shared with the impacted communities, the Government of
3 Canada, and even the Nunavut Impact Review Board staff.
4 It involves Inuit in decision-making and allows for
5 Inuit to be the drivers of this process.

6 The Qikiqtani Inuit Association proposes that once
7 the Inuit committee is formed and operational, they
8 appoint individuals from within the committee to chair
9 each of the working groups. This will ensure that
10 Inuit concerns are at the forefront of discussion.
11 With this connection to the working groups, western
12 science will still be discussed as it is currently
13 within the working groups.

14 The working groups will still make recommendations
15 for change based on project monitoring and new science.
16 However, through this newly made connection, the
17 recommendations will then flow through the chairperson
18 into the Inuit committee. The Inuit committee will
19 then evaluate and consider proposals through a truly
20 Inuit lens ensuring that those proposals are clearly
21 and comprehensively incorporated with Inuit
22 Qaujimajatuqangit.

23 Moving to Slide 23: What is depicted in this
24 slide is a view of what an Inuit-led, Inuit-driven
25 approach to the adaptive management of the Mary River
26 Project will be should Phase 2 go ahead.

1 During our technical review of Phase 2, the
2 Qikiqtani Inuit Association identified the lack of a
3 monitoring and adaptive management process with
4 meaningful Inuit participation that is responsive to
5 Inuit concerns as a major gap in their proposal.

6 Inuit were not previously asked about their
7 perspectives. Perspectives on the significance of
8 impacts, especially impacts to Inuit culture, land use,
9 or that of harvesting resources from the environment.
10 And yet Inuit are the stewards of the land and its
11 resources, and Inuit are best suited to see firsthand
12 the effects of the proposed rail route, particularly at
13 Kanatjuk, on Inuit travel, harvest, and cultural
14 continuity.

15 The Qikiqtani Inuit Association raised concerns
16 that the final environmental impact statement for
17 Phase 2 underestimated impacts on culture, resources,
18 and land use as Baffinland's findings has not
19 corresponded with Inuit observations to date, and that
20 raised concerns for the future.

21 The Qikiqtani Inuit Association determined that a
22 new assessment process in relation to Phase 2 is
23 required to address this issue. Baffinland
24 subsequently committed to fund and engage this process,
25 which is still ongoing.

26 Outlined in commitments made by Baffinland to the

1 Qikiqtani Inuit Association, the Inuit Stewardship Plan
2 will give Inuit greater control over both monitoring
3 and project management. The Inuit Stewardship Plan is
4 a new, completely Inuit-led system that will allow
5 Inuit to extensively monitor impacts from the Mary
6 River Project on top of what Baffinland and other
7 regulatory monitoring requirements that are already in
8 place.

9 The Inuit Stewardship Plan monitoring will be in
10 two different streams: One on the land, and one in
11 communities, that is each overseen by a community --
12 community committee of Inuit appointed by the impacted
13 communities.

14 The Inuit committees will decide what should be
15 monitored and how and will ensure that Inuit
16 Qaujimaqatugangit is a key part of monitoring. Inuit
17 will be hired to monitor and report on social,
18 environmental, and cultural impacts.

19 As a result of the Inuit Stewardship Plan,
20 Baffinland is now committed to fund for the life of the
21 mine an Inuit-led system to measure changes to Inuit
22 harvesting and land use caused by impacts from the
23 project.

24 This system is called the "Culture, Resource, and
25 Land Use Monitoring Program". It will collect
26 information related to the health and abundance of

1 wildlife, land and waters, and the ability of Inuit to
2 continue to live in harmony with the land. Monitoring
3 will be through Inuit monitors including
4 community-based monitors, Qikiqtani Inuit Association
5 on-site monitors, and now Tusaqtavut. They will all be
6 employed to collect information about the terrestrial
7 and marine environment. This information collected
8 will be submitted to the Inuit committee under the
9 Inuit Stewardship Plan.

10 In addition, as discussed earlier, the Inuit
11 committee will lead the environmental working groups to
12 develop positions and recommendations that consider
13 input from western science but presented through an
14 Inuit lens.

15 The Inuit committee once having reviewed the
16 recommendations will identify thresholds and responses
17 to go into the adaptive management plan. Inuit will be
18 the ones to identify different levels of thresholds
19 that includes potential changes that could be minimal
20 with no risk to the Inuit way of life to changes that
21 are high-risk and unacceptable to Inuit. Each
22 threshold will be tied to a response, a response which
23 may include ongoing monitoring, changes to project
24 activity levels, or compensation.

25 The adaptive management plan will be subject to
26 joint approvals by the Qikiqtani Inuit Association and

1 Baffinland, and we see this as ensuring greater Inuit
2 control over project management. This is a brand new,
3 more Inuit-engaged approach to managing the project
4 that would see monitoring and management by Inuit for
5 Inuit.

6 The Qikiqtani Inuit Association is committed to
7 working with Inuit communities to complete the terms of
8 reference for both the Inuit committee and the Inuit
9 social oversight committee within two months following
10 the close of the final hearings.

11 To better understand potential impacts of Phase 2,
12 an Inuit-led culture, resource, and land-use assessment
13 of recent data collection is scheduled to be completed
14 this spring followed by an analysis, drafting, and
15 verification by Inuit in the communities of the
16 findings of the initial assessment by the summer of
17 2021.

18 This is not a one-time process. The culture,
19 resource, and land-use monitoring program will be in
20 place for the life of the project, and Baffinland needs
21 to commit resources to ensure ongoing monitoring and
22 Inuit input into the assessment are completed on an
23 ongoing basis with updating of the adaptive management
24 plan processes where change indicates such a need. The
25 Qikiqtani Inuit Association will also request that
26 these commitments by Baffinland be built into updated

1 project certificate conditions.

2 On Slide 24: The photo that you see on this slide
3 was done through Inuit input. It was done through a
4 culture, resource, and land-use assessment around
5 Pond Inlet. There is much to see in this picture, and
6 there are similar ones for each of the five impacted
7 communities. This picture represents one of many such
8 pictures that are part of the Tusaqtavut culture,
9 resource, and land-use assessment.

10 The Qikiqtani Inuit Association has worked hard
11 throughout this environmental assessment to highlight
12 the lack of integration of Inuit Qaujimajatuqangit and
13 Inuit perspectives from the impacted communities into
14 project monitoring and management systems to date.

15 I would like to be clear. The Qikiqtani Inuit
16 Association recognizes that Inuit Qaujimajatuqangit
17 contains Inuit oral history, what has been passed down
18 verbally over centuries of Inuit knowledge. Inuit
19 Qaujimajatuqangit encompasses both the past and the
20 present. It cannot be separated from within Inuit
21 society. It is part of our Inuit identity.

22 Inuit Qaujimajatuqangit is Inuit knowledge that is
23 both living and adapting and very much part of our
24 present day and present day life. It is how Inuit live
25 and see the world. It is distinct and specific to the
26 Arctic environment. It cannot be duplicated anywhere

1 else, nor can it be interpreted or represented by
2 non-Inuit without consent from those Inuit to whom that
3 knowledge is gained.

4 Inuit Qaujimajatuqangit is verified by Inuit for
5 Inuit. This has not been the case in past proponent
6 reports where Inuit knowledge has been subject to
7 interpretation outside of the Inuit cultural context.
8 This is the one reason why the Qikiqtani Inuit
9 Association supports a project certificate condition
10 requiring that Inuit have sign-off on any IQ management
11 framework for the project. Inuit Qaujimajatuqangit can
12 only be interpreted by Inuit.

13 Inuit-led independent studies like the one you see
14 on the slide for culture, resource, and land use are
15 critical where Inuit using traditional knowledge can
16 identify impacts to those key objectives identified in
17 the cultural, resource, and land-use stream.

18 The Qikiqtani Inuit Association with funding from
19 Baffinland has already worked with Inuit committees --
20 or Inuit communities to gather more data through
21 additional Tusaqtavut studies. We have done a recent
22 study on freshwater and Inuit knowledge in Pond Inlet,
23 and we will continue to look to have future studies on
24 cumulative effects as they relate to culture, resource,
25 and land use.

26 Following the completion of these studies, the

1 Qikiqtani Inuit Association would work with the Inuit
2 communities to identify the significance of those
3 impacts and how they would need to be managed to
4 protect Inuit and the resources they rely on.

5 Through commitments made by the proponent, we are
6 now confident that should those commitments be fully
7 and properly implemented should the project proceed,
8 the Mary River Project will have a proper Inuit-led
9 process for integration of Inuit Qaujimajatuqangit, and
10 Inuit values and perspectives will be reflected in all
11 aspects of project planning, monitoring, and
12 management, including adaptive management ensuring
13 community members are actively engaged.

14 The Qikiqtani Inuit Association also feels that
15 the bulk of those commitments and obligations should be
16 built into project certificate conditions to ensure
17 that they will be subject to proper implementation and
18 compliance for the life of the project.

19 On Slide 25: The Qikiqtani Inuit Association has
20 listened to communities who have stated repeatedly they
21 want to see tangible improvements in communities.
22 Communities have stated they want to be in control of
23 decisions regarding how benefits are used. Communities
24 have also stated the level of benefits must align with
25 the type and number of impacts being experienced. The
26 Qikiqtani Inuit Association understands that financial

1 benefits are not the primary factor in Inuit
2 decision-making. The Qikiqtani Inuit Association has
3 been consistent in advancing Inuit interests related to
4 environmental and social impacts as matters of our
5 highest priority.

6 These points of direction were the basis from
7 which the Qikiqtani Inuit Association negotiated
8 improvements to financial benefits. The overall value
9 of benefits has increased, and the type of benefits
10 have grown, and there is a commitment to create a
11 community benefits policy.

12 Real on-the-ground benefits are confirmed. These
13 benefits are contingent upon the Phase 2 proposal
14 proceeding. The Qikiqtani Inuit Association has shared
15 detailed information regarding the value and type of
16 financial benefits with impacted communities.

17 To be clear, the Qikiqtani Inuit Association's
18 community benefits policy does not yet exist. There
19 are two reasons for this. First, the Qikiqtani Inuit
20 Association decided to first complete the formal
21 environmental assessment, and the Qikiqtani Inuit
22 Association is committed to developing this policy with
23 impacted communities.

24 We are prepared to develop the Qikiqtani Inuit
25 Association community benefits policy as a priority
26 should the Phase 2 project receive a positive decision

1 from the Minister of Northern Affairs. As further
2 evidenced by these hearings, the Qikiqtani Inuit
3 Association believes further attention on other topics
4 is required prior to undertaking this work.

5 The Qikiqtani Inuit Association as a designated
6 Inuit organization must operate according to specific
7 legal and financial requirements. These requirements
8 mean that direct payments to individual Inuit from the
9 Qikiqtani Inuit Association are not possible. The
10 Qikiqtani Inuit Association is focused on delivering
11 financial benefits to communities, and we are committed
12 to ensuring communities will make decisions on how
13 those monies are used.

14 Finally, on Slide 26: The Mary River Project is
15 on Inuit lands. Inuit are the stewards of these lands
16 and must be meaningfully and actively involved as full
17 partners in environmental management for the life of
18 the project. Again, as I stated earlier, the project
19 must fit into Inuit lands and traditions. Inuit lands
20 and traditions must not change to accommodate this
21 project.

22 Qujannamiik, Madam Chair. This concludes
23 Qikiqtani Inuit Association's presentation.

24 THE CHAIR: Right now it's 10:35. Let's
25 take a 15-minute break.

26 (ADJOURNMENT)

1 THE CHAIR: Welcome back, everyone.

2 Continuing on the agenda, presentation from
3 Nunavut Tunngavik Incorporated. Legal counsel, can you
4 please affirm the individuals who will be presenting
5 evidence and anyone who could be providing answers to
6 questions during the community roundtable.

7 MS. MEADOWS: Thank you, Madam Chair.

8 Teresa Meadows, legal counsel for the Nunavut Impact
9 Review Board.

10 So, Madam Chair, I will state the names of the
11 individuals who are going to be affirmed, and then I
12 will administer the affirmation and ask that each
13 individual state their name and whether or not they
14 affirm.

15 The first is James Eetoolook, David Kunuk, Paul
16 Irngaut, David Lee, and Carson Gillis.

17 JAMES EETOOLOOK, DAVID KUNUK, PAUL IRNGAUT, DAVID LEE,
18 CARSON GILLIS, Affirmed

19 THE CHAIR: Okay. Legal counsel, can you
20 please advise regarding any exhibits that will be filed
21 on the public hearing record for this intervenor?

22 MS. MEADOWS: Thank you, Madam Chair.

23 So I have two copies of speaking notes, one in
24 English and one in Inuktitut, that were filed on the
25 public registry previously. I propose to mark those as
26 the next two exhibits, but it is also my understanding

1 that NTI wishes to file an additional submission, and I
2 would request that Neida Gonzalez, legal counsel for
3 Nunavut Tunngavik Incorporated, walk us through what
4 that document is. Thank you.

5 THE CHAIR: Neida Gonzalez.

6 MS. GONZALEZ: Thank you, Madam Chair. Neida
7 Gonzalez with Nunavut Tunngavik.

8 Nunavut Tunngavik submitted its main presentation
9 electronically on January 29th and today has submitted
10 an addendum to that main presentation regarding
11 narwhal. We are asking that that additional addendum
12 be accepted as an exhibit for the record. Thank you.
13 Thank you, Madam Chair.

14 THE CHAIR: NIRB legal counsel.

15 MS. MEADOWS: Thank you, Madam Chair.
16 Teresa Meadows, legal counsel for the Nunavut Impact
17 Review Board.

18 So, Madam Chair, the Board will circulate the
19 additional document. We will mark but not yet enter
20 that as a potential exhibit and invite any parties to
21 provide comment as to whether or not they object to the
22 exhibit by 3:00 Eastern tomorrow afternoon. So we will
23 provide those instructions in the -- when the exhibit
24 is circulated on the public registry. Thank you, Madam
25 Chair. Those are my procedural matters.

26 EXHIBIT 37 - Speaking notes for the Nunavut

1 Tunngavik Incorporated presentation to the
2 Nunavut Impact Review Board public hearing on
3 the Mary River Phase 2 proposal (English)
4 EXHIBIT 38 - Speaking notes for the Nunavut
5 Tunngavik Incorporated Presentation to the
6 Nunavut Impact Review Board public hearing on
7 the Mary River Phase 2 proposal (Inuktitut)
8 EXHIBIT 39 - Nunavut Tunngavik Incorporated's
9 submission on the narwhal and Inuit harvest
10 data presented by Baffinland (English)

11 THE CHAIR: James Eetoolook, Nunavut
12 Tunngavik Incorporated.
13 Presentation by Nunavut Tunngavik Incorporated
14 Regarding Baffinland Iron Mines Corporation Phase 2
15 Development Proposal

16 MR. EETOOLOOK: Thank you, Madam Chair. David
17 Lee will speak first. Thank you.

18 THE CHAIR: David Lee.

19 MR. LEE: Thank you, Madam Chair. David
20 Lee for Nunavut Tunngavik Incorporated.

21 Inuit Tunngavik is making this submission on
22 narwhal and Inuit harvest data submitted by the
23 proponent to ensure that the data is interpreted
24 considering the context of the management system and
25 the impact that quotas have had on Inuit harvesting of
26 narwhal.

1 In 1971, the Government of Canada enacted the
2 narwhal protection regulations that established a
3 narwhal annual catch quota for individual Inuit
4 hunters. This was replaced in 1977 by quotas assigned
5 to specific communities or settlements. Because of the
6 limited biological information available to estimate
7 sustainable harvest levels, quotas were based on
8 historic local catch records. The quota level for Pond
9 Inlet was set at 100 animals and not based on stock
10 size.

11 Inuit were not permitted to harvest above this
12 level. In 1999, the Nunavut Wildlife Management Board
13 instituted a trial community-based management system
14 for a few years which resulted in an increase of the
15 harvest until Fisheries and Oceans reinstituted quotas
16 at a level of about 130 for the community of Pond
17 Inlet.

18 In 2013, the Nunavut Wildlife Management Board
19 established a total allowable harvest of 242 animals
20 for the Eclipse Sound stock based on the best available
21 science and Inuit Qaujimagajatuqangit. The stock was
22 estimated at approximately 20,000 animals based on an
23 aerial survey conducted by Fisheries and Oceans in
24 2004.

25 Any increase in harvest observed through this
26 period is because of an increase in the quota primarily

1 and especially in 2013 because of the implementation of
2 Article 5 of the Nunavut Agreement. No evidence has
3 been presented suggesting that increased harvest
4 indicate anything than the presence of narwhal in
5 Eclipse Sound. Trends on narwhal population dynamics
6 cannot be reliably inferred from harvest data alone.
7 Further, we have evidence from Inuit and Fisheries and
8 Oceans that inform us on the current status of the
9 Eclipse Sound narwhal stock.

10 The lines of evidence that have been discussed
11 include Inuit Qaujimajatuqangit regarding impacts on
12 narwhal health and harvesting, a published
13 peer-reviewed academic study indicating stress has
14 increased, a change in narwhal numbers or distribution
15 in Eclipse Sound in 2018, and a change in the stock
16 size from about 20,000 animals in 2004 to about 12,000
17 animals in 2016 that is used to establish total
18 allowable harvest.

19 Based on the most recent stock estimate, DFO
20 science has now recommended in their science document
21 published and available online that the current total
22 allowable landed catch of 242 animals be reduced to
23 117 based on the precautionary framework. This will
24 result in a reduction of 125 animals or approximately
25 half of the current allowable landed catch.

26 THE CHAIR: David Lee, if you can please

1 slow down for the interpreter. You may proceed.

2 MR. LEE: My apologies.

3 This will result in the reduction of 125 animals
4 or approximately half of the current allowable landed
5 catch. If the impacts can be appropriately mitigated,
6 evidence points to the need for increased monitoring
7 and effective thresholds, including adaptive management
8 responses to mitigate these impacts through explicit
9 terms and conditions. Thank you, Madam Chair. I turn
10 back to Mr. James Eetoolook.

11 THE CHAIR: James Eetoolook.

12 MR. EETOOLOOK: Thank you, Iksivauta. Thank
13 you. James Eetoolook.

14 This is very important in -- during the public
15 hearings, and we thank the Inuit in Nunavut and also
16 NIRB, Mary River for looking -- for the reviewing of
17 the Phase 2 and assessing the proposal, and we have to
18 protect the impacts of the wildlife in this area and
19 for the betterment of the Inuit in the community.

20 We thank the people of Inuit and women that are
21 here during the roundtable, the meetings, and they know
22 exactly what they are doing in their communities, and
23 also there's many requests and the reports they do and
24 comments during the meetings and looking at -- and
25 they -- what they've seen in their environment and
26 their concerns if the Phase 2 -- if -- Phase 2 is not

1 going to go forward if you don't involve the Inuit in
2 this process, so for this request and to protect the
3 Inuit culture and traditions and their wildlife and
4 also their Inuit rights.

5 I want to thank the Nunavut Impact Review Board,
6 and you have a lot of work to do and difficult work
7 concerning the request for the Phase 2, and NTI have
8 felt and feel in the work you're going to do for the
9 future and on the -- and for the implementation of this
10 possibly for Phase 2 following the land claims
11 agreement in Nunavut, and it would help the Inuit and
12 for -- to rectify some of the concerns by the Inuit
13 involved and for the enhancement of the future and
14 the -- and the -- their rights and also for the
15 wildlife concerns in the environment, in their
16 traditions, in their community, and for the
17 opportunities.

18 The Inuit have agreed -- land claims agreement
19 between the Inuit and the other groups of the federal
20 government and to come back to process include the
21 cultures of the Inuit and throughout globally. So they
22 want to work with you for the adequate and mitigation
23 measures and achieve related to Inuit stewardship as
24 well economic and implements and the Inuit benefits
25 through the --

26 THE INTERPRETER: I'm lost here.

1 THE CHAIR: James. James Eetoolook. We
2 are behind.

3 THE INTERPRETER: I lost the context with his
4 reading.

5 THE CHAIR: We're trying to find out where
6 you are starting off.

7 MR. EETOOLOOK: Sorry. Sorry. I was too
8 fast. I'll be a little bit slower.

9 NTI is here to support Inuit in addressing issues
10 that are of concern to all Inuit, including the
11 promotion of Inuit culture and safeguard of Nunavut's
12 wildlife, environment, culture. Nunavut Inuit entered
13 into negotiations for the land claims agreement with --
14 in terms of -- that these agreements specifically
15 includes this. So whereas part is half negotiated
16 this -- this land claims agreement based on reflecting
17 the following objectives for certainty and clarity of
18 rights to ownership and use of lands and resources of
19 the right for Inuit to participate in decision-making
20 for the concern and use of management and conservation
21 of land, water, and resources, including the offshore,
22 to provide Inuit with financial compensation and means
23 of participating in economic opportunities, and to
24 encourage self-reliance and culture and social
25 well-being of Inuit.

26 As we have said before -- for the culture and

1 social well-being of Inuit, as we have said before, the
2 stakes are extremely high for Inuit in this review
3 process. There are a number of opportunities for Inuit
4 if adequate mitigation measures related to Inuit
5 stewardship as well as economic and employment
6 benefits.

7 I would like to raise that there are a number of
8 outstanding issues, including the inadequate
9 recognition of Inuit Qaujimajatuqangit and from what
10 they know about animals and also about icebreaking;
11 impacts on terrestrial environment, including caribou;
12 and socio-economic impacts.

13 Nunavut Tunngavik has not received royalties by
14 anyone, although in this public hearing, there are
15 statements made about the economic opportunities from
16 this project and royalties to Nunavut Tunngavik from
17 the Mary River Project. If you look at 17.1.1 section,
18 the agreement states: (as read)

19 The primary purpose of Inuit-owned lands
20 shall be able to provide Inuit with rights in
21 the land that promote economic
22 self-sufficiency of Inuit through time in a
23 manner consistent with Inuit social and
24 cultural needs and aspirations [and for the
25 future].

26 Baffinland is mining from Deposit Number 1 on

1 Inuit-owned lands where NTI holds the mineral title.
2 Baffinland's lease was signed before Nunavut was
3 created, something called the "grandfathered federal
4 mineral lease". With this type of lease, companies,
5 including Baffinland, can deduct costs related to
6 exploration for the construction, operation, and
7 maintenance of the mine.

8 Before paying a royalty, the lease is administered
9 by the Government of Canada. The projected figures on
10 royalties are based on the best-case scenario, and
11 there are many uncertainties that can negatively affect
12 the continuation of a mine.

13 Baffinland has estimated royalty payments over the
14 life of the mine to be in the range of one -- 14.1 [sic]
15 billion. Assuming that there are no additional capital
16 costs, Baffinland projects the first royalty payment in
17 about 2030.

18 Baffin declared commercial production in 2014 and
19 shipped its first product in the summer of 2015.

20 Nunavut Tunngavik has not approved, and it's been
21 16 years of operation with 3 million metric tonnes to
22 6 million of iron ore produced annually. Now we are
23 advised that Baffinland is not viable without Phase 2.

24 Phase 2 will increase Baffinland's capital costs,
25 delaying the payment of a royalty. Given this history,
26 Nunavut Tunngavik cannot reasonably predict when a

1 royalty will be paid and what value it will have.

2 Nunavut Government will make Inuit liable for a
3 tax on Phase 2. In addition with the recent
4 introduction of Bill 55, an act to amend the Property
5 and Assessment and Taxation Act, the Government of
6 Nunavut will make -- NTI's organizations will make --
7 will make Inuit organizations liable for the property
8 tax owned by the mining company.

9 Baffinland's Phase 2, if approved, will
10 dramatically increase the amount of infrastructure at
11 Mary River by over 1 billion. The additional
12 infrastructure will increase the associated property
13 tax significantly. We see no legal or principle-based
14 justification for this unprecedented regime created by
15 the Government of Nunavut.

16 It would be inconceivable for the Government of
17 Nunavut to hold Inuit organizations and their assets as
18 an additional collecting tool or to plan to seize the
19 assets of Inuit organizations to pay for property tax
20 or arrears owed by mining companies. No other
21 provincial or territorial governments in Canada
22 maintains this additional collection tool or makes the
23 landowners responsible for collecting mining taxes for
24 government or for paying for them.

25 The purpose of the Inuit-owned lands is to promote
26 economic self-reliance and self-sufficiency for Inuit,

1 not to attract millions of dollars in tax liabilities
2 of which other landowners in Canada are not
3 responsible.

4 In other words, Inuit-owned land ownership is
5 supposed to give Inuit a leg up on economic development
6 to offset the historical disadvantages. Instead Inuit
7 would receive a burden in the millions of dollars in
8 tax liabilities before they receive any revenue from a
9 mining development. Such an unnecessary burden would
10 be contrary to the intent of the Nunavut Agreement.

11 I will switch to English. (NO ENGLISH FEED) NTI
12 has given the responsibility of holding mineral title
13 to ensure all -- pardon me. Inuit of Nunavut share in
14 mineral resources of revenues and benefits regardless
15 of which community is near the mine or which region
16 it's located. This is an important principle
17 established by the negotiators, Nunavut Agreement. At
18 the same time that the Phase 2 project represents
19 economic opportunities, including employment and
20 contracting, which can be realized through the Inuit
21 Impact Benefits Agreement, for example. Based on the
22 set up of Nunavut Agreement, the economic
23 opportunities, unlike how royalties are structured, are
24 intended to benefit local communities affected by
25 the -- by the mine.

26 Phase 2 proposal is presented and will likely

1 result in some level of impact to terrestrial, marine
2 wildlife that Inuit rely on for harvesting. Cultural
3 practices and critical sources of food, it remains
4 unclear what are -- and how these impacts can be
5 mitigated. For example, as stated, there are
6 outstanding concerns regarding impacts from shipping
7 and icebreaking.

8 NTI has carefully reviewed the submissions to
9 Nunavut Impact Review Board for the public hearing and
10 has been listening closely to the presentations,
11 questions, and answers, and finds that there are still
12 significant technical issues that are unresolved that
13 has been raised by Qikiqtani Inuit Association,
14 community representatives, and other parties.

15 Inuit are reporting that they are experiencing
16 impacts from the existing project, and, understandably,
17 they are concerned about more impacts.

18 For example, we continue to hear that hunters are
19 reporting declining narwhal numbers and that narwhal
20 and seal harvested are skinny and without much body
21 fat. It is critical that the terms and conditions
22 requiring monitoring be fully met to the current
23 project and the same conditions for monitoring be
24 improved and strengthened should this proposal proceed.

25 The public hearing should facilitate full and fair
26 discussions of all remaining technical issues

1 associated with the Phase 2 proposal in a manner that
2 respects Inuit participation and consultation rights in
3 the Nunavut Agreement.

4 We agree with the community representatives that
5 it is not optimal, that we cannot have a full in-person
6 public hearing for such a significant proposal that may
7 impact Inuit for generations, and it is vital that the
8 Nunavut Impact Review Board increase and facilitate
9 Inuit participation in this project.

10 As indicated by Nunavut Impact Review Board, the
11 Government of Canada is relying on Nunavut Impact
12 Review Board process to meet its duty to consult with
13 Inuit on this project.

14 Meeting the duty to consult requires deep
15 consultation with Inuit as Inuit harvesting rights may
16 be significantly impacted by the proposal. To meet the
17 objectives of Nunavut Agreement, deep consultation
18 requirements should -- Inuit should receive
19 satisfactory answers to the questions by the end of
20 this public hearing.

21 There should be shared understanding between Inuit
22 and the other parties of the potential impacts of
23 Phase 2 proposal on culture, lands, environment,
24 wildlife, and Inuit rights and how these impacts will
25 be satisfactorily addressed.

26 Addressing Inuit concern on the impact of Inuit

1 rights from the Phase 2 proposal is the priority in
2 this process, and it's a key to Nunavut Impact Review
3 Board's task of assessing whether the Phase 2 proposal
4 enhances and protects the existing and future
5 well-being of Inuit residents and communities of
6 Nunavut settlement area.

7 It is critical that Inuit are fully engaged in
8 this process and that the outcome of this process
9 results in Inuit rights being respected and
10 accommodated.

11 Nunavut Tunngavik will continue to listen
12 carefully to the submissions at this public hearing and
13 Inuit knowledge and views about the proposal.

14 THE CHAIR: Moving on to the next
15 intervenor presentation from the Government of Nunavut.

16 Legal counsel, can you please affirm the
17 individuals that will be presenting evidence and also
18 anyone who could be providing answers to questions
19 during the community roundtable.

20 MS. MEADOWS: Thank you, Madam Chair.

21 Teresa Meadows, legal counsel for the Nunavut Impact
22 Review Board.

23 Madam Chair, there are four individuals who need
24 to be affirmed. Jimi Onalik, Natalie O'Grady, John
25 Ringrose, and Steven Atkinson, and when I administer
26 the affirmation, I will ask that those parties state

1 their name and whether or not they affirm.

2 JIMI ONALIK, NATALIE O'GRADY, JOHN RINGROSE, STEVEN
3 ATKINSON, Affirmed

4 THE CHAIR: Okay. Legal counsel, can you
5 please advise regarding any exhibits that will be filed
6 on the public hearing record for this intervenor?

7 MS. MEADOWS: Thank you, Madam Chair.
8 Teresa Meadows, legal counsel for the Nunavut Impact
9 Review Board.

10 Madam Chair, I have two copies of the presentation
11 about to be presented by the Government of Nunavut, one
12 in English and one in Inuktitut. Thank you, Madam
13 Chair.

14 EXHIBIT 40 - Government of Nunavut's
15 PowerPoint presentation, Nunavut Impact
16 Review Board final hearing Baffinland Iron
17 Mines Corporation's Phase 2 Development
18 Project proposal (English)

19 EXHIBIT 41 - Government of Nunavut's
20 PowerPoint presentation, Nunavut Impact
21 Review Board final hearing Baffinland Iron
22 Mines Corporation's Phase 2 Development
23 Project proposal (Inuktitut)

24 THE CHAIR: Government of Nunavut, who is
25 going to present? Natalie O'Grady.

26 MS. O'GRADY: Thank you, Madam Chair.

1 Natalie O'Grady, Government of Nunavut.

2 I'm the Avatiliriniq coordinator with the GN. I
3 chair the environmental assessment review team. I also
4 chair the sustainable development advisory group, and I
5 report to and provide secretarial support to the deputy
6 ministers of the sustainable development committee.

7 For the basis of our reviews, ultimately the
8 Government of Nunavut's reviews of development projects
9 are guided by our mandate, policies, legislation, and
10 what we've heard from Nunavummiut during these public
11 forums. Many Government of Nunavut departments have
12 informed our review of Phase 2, most notably, the
13 department of environment, department of economic
14 development and transportation, health, finance, and
15 culture and heritage. Our submissions and comments
16 reflect a coordinated effort by multiple departments
17 and committees that form a unified government position
18 on these matters.

19 During this assessment, some parties have
20 questioned how the GN participates in this process and
21 how we develop our recommendations to the Board. I
22 previously described for you the three main committees
23 concerned with decision-making on these files. The
24 Government of Nunavut takes a whole of government
25 approach to informing and supporting the impact
26 assessment process. The Government of Nunavut

1 recommendations to the Board are prepared by a broad
2 team of in-house experts, scientists, and consultants.

3 Our comments and recommendations are approved
4 through a consensus-based interdepartmental sustainable
5 development committee structure. Concerning our role
6 in this process, the recommendation to approve or not
7 approve the Mary River Phase 2 development proposal
8 resides with the Nunavut Impact Review Board, and the
9 final decision resides with the Government of Nunavut.

10 To be clear, the Government of Nunavut is not an
11 approval authority. Our role is to support and inform
12 the Nunavut Impact Review Board.

13 Our mandate is to support responsible resource
14 development and career opportunities for Nunavummiut.
15 Responsible development means industry must manage and
16 monitor their environmental impacts. We make
17 recommendations to proponents and the Nunavut Impact
18 Review Board with this goal in mind.

19 We would like to thank the Nunavut Impact Review
20 Board for their hard work in facilitating these
21 hearings, including providing many opportunities for
22 public discussion and community consultation. The
23 Government of Nunavut staff have attended numerous
24 Nunavut Impact Review Board and Baffinland
25 consultations, and we've heard that communities want
26 our experts to be present and more readily available.

1 So for this hearing, we have our full team of experts,
2 including our regional biologist participating in these
3 proceedings as a result.

4 We have also heard that more Inuit
5 Qaujimagatuqangit and local knowledge needs to be
6 included in the design of Phase 2. To that end, we
7 negotiated a commitment to ensure the railway
8 crossings, designs, and locations are informed by
9 Inuit, specifically the Mittimatalik Hunters and
10 Trappers Organization.

11 Baffinland has also committed to engaging the
12 terrestrial environment working group on its railway
13 design and crossing locations prior to construction.

14 All intervenors have provided their expertise in
15 the review of Phase 2 and have recommended
16 improvements. The GN has contributed scientific
17 expertise, and community groups have shared invaluable
18 Inuit Qaujimagatuqangit throughout this process. These
19 different knowledge systems complement each other and
20 allow for a complete assessment.

21 Guided by our mandate and legislation, our
22 recommendations for Phase 2 have focused on a few key
23 topics. First, we focused on reducing potential
24 negative impacts to Baffin Island caribou by
25 recommending the railway be built in a manner that will
26 hopefully make it easier for caribou to cross. Similar

1 to our comanagement partners and communities, we do not
2 want Phase 2 to hinder the rebound of the Baffin Island
3 caribou, which is presently at historic low numbers.

4 Working with Baffinland, we agreed on a
5 precautionary railway design to be further informed by
6 the territory's caribou scientists and Inuit
7 Qaujimajatuqangit knowledge holders. Baffinland has
8 committed to locating and designing its crossings in
9 consultation with the Mittimatalik Hunters and Trappers
10 Organization and other terrestrial environment working
11 group members.

12 We have also evaluated Baffinland's human health
13 assessment along with other agencies such as Health
14 Canada, and we have examined the cultural and
15 socio-economic impacts from Phase 2, and we note that
16 Phase 2 is anticipated to result in the creation of
17 500 construction jobs over the course of six years.

18 This slide represents the progress we've made with
19 the proponent over the course of this assessment
20 beginning with 86 information requests down to
21 1 remaining issue. However, we want to acknowledge
22 that our resolved concerns about Phase 2 do not
23 invalidate the issues raised by community groups -- do
24 not invalidate the issues raised by community groups,
25 individuals, or other intervenors. We trust the
26 Nunavut Impact Review Board will consider and weigh all

1 perspectives and voices they have heard on this
2 proposal.

3 Concerning one remaining issue, the GN maintains
4 it disagrees with Baffinland's conclusion that Phase 2
5 will have a low impact on Baffin Island caribou.
6 Baffinland has not presented sufficient evidence to
7 support this conclusion because there is a lack of data
8 available to Baffinland in general. We know the Baffin
9 Island caribou herd is at a historically low population
10 level, and we have plans in place to enhance our
11 research efforts on this herd.

12 To address this uncertainty and fill these
13 knowledge gaps between project-specific and regional
14 monitoring, the Government of Nunavut and Baffinland
15 have committed to collaborative research and monitoring
16 efforts. We've had positive talks with the proponent
17 to reach an agreement on -- an agreement in principle.
18 Wildlife research and monitoring will continue whether
19 or not an agreement is reached, and we look forward to
20 updating the Board and other intervenors on that
21 progress in these proceedings.

22 Additional Government of Nunavut caribou research
23 in North Baffin does not hinge on a contribution
24 agreement with Baffinland. We will continue to work
25 with our comanagement partners, communities, and
26 hunters and trappers organizations and the Nunavut

1 Wildlife Management Board to research and manage the
2 Baffin Island herd.

3 To illustrate how this approach can be successful,
4 in the Kivalliq, the Government of Nunavut has led
5 research to investigate project effects on the mainland
6 herds. This work occurred at our discretion because we
7 knew there was public interest and support for that
8 research. This research in the Kivalliq was successful
9 because it represents collaboration and mutual interest
10 with industry, the most impacted hunters and trappers
11 organization, and the Kivalliq Inuit association. The
12 GN is always open to working with and will continue to
13 work with Qikiqtani comanagement partners and
14 Baffinland on similar research in the North Baffin.

15 We're confident that by working together we can
16 fill present knowledge gaps by pursuing new research
17 that's informed by Inuit Qaujimaqatuqangit and local
18 knowledge. Again, though the Government of Nunavut has
19 resolved the majority of its issues, we recognize that
20 other groups have unresolved concerns. We trust and
21 expect the Board to weigh and meaningfully consider the
22 concerns of all intervenors.

23 The GN is not an approval authority for Phase 2.
24 Our role is to support and inform the Board, and the
25 final decision for the Phase 2 development proposal
26 will reside with the federal minister responsible.

1 Should Phase 2 proceed, we will continue to provide the
2 best information possible to the Board to enable an
3 effective monitoring and adaptive management.

4 Effective adaptive management relies on the
5 functionality of the marine, terrestrial, and new
6 freshwater working groups, and the Inuit committees.

7 This is why the Government of Nunavut had taken
8 the lead in reviewing the terms of reference for the
9 marine and terrestrial environment working groups. Our
10 latest feedback regarding those terms of reference were
11 sent to Baffinland in December. We're confident that
12 parties can reach agreement regarding how best to share
13 information and inform adaptive management decisions.

14 However, these working groups cannot replace other
15 regulatory mechanisms. All parties must have a
16 willingness to work together throughout the life of the
17 project, and we remain committed to and supportive of
18 the Nunavut Impact Review Board's important work, and
19 we'd like to thank the Board and all intervenors for
20 their efforts and participation in this impact
21 assessment process.

22 THE CHAIR: Okay. Recognizing that it's
23 almost 5:00 -- I mean, 12:00, we're going to break for
24 lunch until 1:15 and then start with a presentation
25 from Crown-Indigenous Relations and Northern Affairs
26 Canada.

1 _____
2 PROCEEDINGS ADJOURNED UNTIL 1:15 PM

3 _____
4 (PROCEEDINGS COMMENCED AT 1:23 PM)

5 THE CHAIR: Welcome back, everyone.
6 Continuing with presentations. Presentation from
7 Crown-Indigenous Relations and Northern Affairs Canada
8 joined by the northern projects management office.
9 NIRB legal counsel.

10 MS. MEADOWS: Thank you, Madam Chair.
11 Teresa Meadows, legal counsel for the Nunavut Impact
12 Review Board.

13 Madam Chair, I have a list of names for -- who
14 require affirmation before they make their presentation
15 for Crown-Indigenous Relations and Northern Affairs
16 Canada. I will state their names, and then I will give
17 the affirmation, and if I can have the parties state
18 their name and then affirm their evidence, that would
19 be helpful.

20 And, in addition, I will add in the potential
21 witness for the northern projects management office as
22 well. So, Madam Chair, Mark Hopkins, Spencer Dewar,
23 Felexce Ngwa, Alexandre Chaikine, and David Abernethy,
24 and I apologize in advance for anybody's names that
25 have -- I have mispronounced.

26 MARK HOPKINS, FELEXCE NGWA, ALEXANDRE CHAIKINE, DAVID

1 ABERNETHY, LISA DYER, Affirmed

2 SPENCER DEWAR, Sworn

3 THE CHAIR: Legal counsel, can you please
4 advise regarding any exhibits that will be filed on the
5 public hearing record for this intervenor.

6 THE CHAIR: Thank you, Madam Chair.

7 Teresa Meadows, legal counsel for the Nunavut Impact
8 Review Board.

9 Madam Chair, I have exhibits to be marked that
10 consist of the presentation materials that are about to
11 be presented by this intervenor. Thank you, Madam
12 Chair.

13 EXHIBIT 45 - Presentation materials by
14 Crown-Indigenous Relations and Northern
15 Affairs Canada, Nunavut Impact Review Board
16 final hearing, Pond Inlet, Iqaluit, Ottawa,
17 January 25 - February 6, 2021 (English)

18 EXHIBIT 46 - Presentation materials by
19 Crown-Indigenous Relations and Northern
20 Affairs Canada, Nunavut Impact Review Board
21 final hearing, Pond Inlet, Iqaluit, Ottawa,
22 January 25 - February 6, 2021 (Inuktitut)

23 THE CHAIR: Crown-Indigenous Relations and
24 Northern Affairs Canada, who will be presenting your
25 presentation?

26 MR. DEWAR: Qujannamiik, Madam Chair.

1 Spencer Dewar. Should I begin?

2 THE CHAIR: Yes, you may proceed.

3 Presentation by Crown-Indigenous Relations and Northern
4 Affairs Canada Regarding Baffinland Iron Mines
5 Corporation Phase 2 Development Proposal

6 MR. DEWAR: Qujannamiik, Madam Chair.

7 My name is Spencer Dewar. I'm the director of
8 resource management with the Nunavut regional office of
9 Crown-Indigenous Relations and Northern Affairs Canada.

10 Thank you, Chair, and the Nunavut Impact Review
11 Board board members and along with your team for giving
12 us this opportunity to present here today.

13 I'd also like to thank the Hamlet of Mittimatalik,
14 community reps, and fellow intervenors and Baffinland
15 for participating with us in this review. Next slide.

16 I will briefly outline Crown-Indigenous Relations
17 and Northern Affairs Canada's role in this Board's
18 review for the Mary River Phase 2 project amendment.
19 The Minister of Northern Affairs is the responsible
20 minister in the review of the project and along with
21 other responsible ministers will be making the decision
22 on the proposed project amendment based on a
23 recommendation from the Nunavut Impact Review Board.

24 For the Mary River Phase 2, the responsible
25 ministers of -- the responsible ministers are the
26 Ministers of Northern Affairs, Environment and Climate

1 Change Canada, Fisheries and Oceans, Natural Resources
2 Canada, and Transport Canada.

3 As an intervenor during the environmental
4 assessment process, Crown-Indigenous Relations and
5 Northern Affairs Canada provides expert advice to the
6 Board on topics that fall within our mandate. If the
7 proposed project amendment is authorized to proceed,
8 Crown-Indigenous Relations and Northern Affairs Canada
9 will have a regulatory role -- have regulatory roles of
10 participating in the Nunavut Water Board licencing
11 process and issuing authorizations under the
12 Territorial Lands Act and Regulations.

13 Crown-Indigenous Relations and Northern Affairs
14 Canada will also conduct inspections for compliance to
15 the Nunavut Impact Review Board's project certificate,
16 water licences, and authorizations issued under the
17 Territorial Lands Act and Regulations.

18 The Mary River Phase 2 proposal will require a
19 decision by responsible ministers before it proceeds.
20 Prior to this decision, responsible ministers must
21 consult with Inuit. This is often referred to as the
22 "duty to consult". Next slide, please.

23 I would like to speak briefly to the consultation
24 and the Nunavut Impact Review Board process. It has
25 been well established that responsible ministers can
26 rely on regulatory boards' and agencies' processes such

1 as project impact assessments to fulfill the Crown's
2 duty to consult.

3 The Nunavut Agreement's comanagement regime gives
4 the Nunavut Impact Review Board jurisdiction to assess
5 projects in Nunavut and their potential impacts. The
6 Government of Canada will rely primarily on the Nunavut
7 Impact Review Board's reconsideration process to
8 fulfill the duty to consult for the Mary River Phase 2
9 proposal.

10 The Nunavut Impact Review Board's assessment
11 proceedings are designed specifically to provide
12 potentially affected Inuit with a meaningful
13 opportunity to express their views and concerns with
14 respect to the potential project-related impacts on
15 their treaty rights.

16 The Government of Canada has supported the
17 participation of Inuit in the Phase 2 assessment by
18 providing participant funding to multiple intervenors
19 during this consideration.

20 While the Government of Canada relies on the Mary
21 River Phase 2 reconsideration process to fulfill the
22 Crown's duty to consult, it is also the Government of
23 Canada's practice with respect to reviews in Nunavut to
24 correspond with the designated Inuit organization, in
25 this instance the Qikiqtani Inuit Association, after
26 the issuance by the Nunavut Impact Review Board of its

1 final report and recommendation.

2 This provides an opportunity to confirm that the
3 Nunavut Impact Review Board's final report and
4 recommendation properly captures, balances, and
5 addresses Inuit's views and concerns expressed during
6 the Board's reconsideration and ensuring that it can be
7 relied upon in deciding whether to accept, reject, or
8 vary the Nunavut Impact Review Board's determination.

9 The Government of Canada urges all intervenors to
10 continue to share with the Nunavut Impact Review Board
11 all of the information and evidence including Inuit
12 Qaujimagatuqangit that they consider important to the
13 assessment of the Mary River Phase 2 project. Next
14 slide, please.

15 I'll now speak briefly to Crown-Indigenous
16 Relations and Northern Affairs Canada's mandate.
17 Crown-Indigenous Relations and Northern Affairs Canada
18 has participated in every stage of review for the
19 proposed Phase 2 project. Based on our mandate, we
20 have provided expertise on impact assessment
21 methodology and best practices, including cumulative
22 effects assessment; Crown land contamination and
23 degradation, particularly closure and reclamation
24 planning; surface water quality and quantity;
25 groundwater quality and quantity; marine water quality
26 as it is affected from land; permafrost; waste

1 management; and socio-economic impact assessment and
2 monitoring. Next slide, please.

3 Crown-Indigenous Relations and Northern Affairs
4 Canada participated in all phases of the review process
5 as outlined on this slide. Today we'll be talking
6 about our technical comments submitted to the Board in
7 February 2020 and discussed at the Board technical
8 meeting in September 2020.

9 For the Phase 2 reconsideration, there were a
10 total of 16 concerns. Twelve of these concerns have
11 been resolved and require no additional follow-up. The
12 remaining four are now considered resolved for the
13 purposes of impact assessment with commitments made by
14 Baffinland. Next slide, please.

15 THE CHAIR: Please slow down.

16 MR. DEWAR: Qujannamiik, Madam Chair. I
17 will.

18 Spencer Dewar, Crown-Indigenous Relations and
19 Northern Affairs Canada.

20 This Slide 6 refers to the resolved concerns, and
21 they relate to geotechnical aspects of the northern
22 railway alignment, hazardous material and waste
23 management, and socio-economic. Next slide.

24 This slide is -- represents the resolved concerns
25 that would require commitments and determine condition
26 recommendation to the Nunavut Impact Review Board, and

1 they include thermal modelling of the waste rock
2 facility, thermal monitoring of the Phase 2 project
3 facilities, acid rock drainage, and metal leach
4 potential of the railway cut materials and quarries and
5 pit walls, and acid rock drainage and metal leaching
6 from the waste rock facility. Next slide, please.

7 THE INTERPRETER: He hasn't changed the pace.

8 You have not changed your pace.

9 MR. DEWAR: Sorry.

10 Our first concern is related to thermal modelling
11 of the waste rock facility. On the slide you will see
12 the commitments agreed to by Baffinland that I'll read
13 into the record.

14 Prior to the approval of the revised version of
15 the waste rock management plan or during the water
16 licence amendment process, subject to the Nunavut Water
17 Board requirements, Baffinland shall provide a heat
18 balance and relationship of heat generation associated
19 with the exothermic reaction of potentially acid
20 generating waste rock deposited and soluble sulphates.

21 Baffinland shall demonstrate that the current
22 design of the waste rock facility will maintain
23 permafrost conditions in the long term, closure, and
24 beyond.

25 Number 2, Baffinland shall perform an oxygen
26 balance of the waste rock facility and correlate it

1 with soluble sulphates. This will provide
2 understanding of the process of acid rock drainage and
3 metal leaching and the performance of the waste rock
4 facility.

5 What we are seeking is the assurance that the
6 proposed design, construction, and operation of the
7 waste rock facility will perform as planned.

8 The modelling shall account for the oxidization
9 processes and internal heat generation to ensure that
10 the waste rock remains frozen inside the waste rock
11 pile. Next slide, please.

12 Our next concern is related to thermal monitoring
13 of the project facilities for Phase 2. On this slide,
14 you will see the term and condition agreed to by
15 Baffinland that I'll read into the record. We are
16 requesting that the Nunavut Impact Review Board add
17 this term and condition to the project certificate
18 should the project be approved. (as read)

19 (1) Baffinland shall develop a detailed site
20 program to monitor thaw consolidation and
21 soil deformation under the structures and
22 embankments constructed as part of the
23 Phase 2 project. The monitoring results
24 shall be compared with the final
25 environmental impact statement addendum
26 predictions, and appropriate mitigation

1 measures shall be identified and incorporated
2 into the adaptive management approach.

3 What we are seeking is assurances that the construction
4 and operation of the Phase 2 facilities will be
5 monitored to preserve the integrity of the permafrost
6 and that the proposed mitigation is adequate. Next
7 slide, please.

8 Our third concern relates to acid rock drainage
9 and metal leaching potential of the rocks found in the
10 rail cuts, quarry materials, and pit walls, and the
11 elevated levels of metals in the shake flask extraction
12 tests for rock material.

13 On this slide, you will see the commitments agreed
14 to by Baffinland that I'll read into the record:
15 (as read)

16 (1) Baffinland shall confirm the origin of
17 elevated concentrations of aluminium,
18 mercury, and copper in the shake flask
19 extraction test results for rock materials
20 sourced from quarry and borrow pits for the
21 road and railway construction and develop and
22 implement an appropriate water quality
23 monitoring and management strategy for the
24 railway corridor rock quarries as part of the
25 water licencing.

26 (2) The monitoring results should be compared

1 with the final environmental impact statement
2 addendum predictions and appropriate
3 mitigation measures shall be identified and
4 implemented.

5 What we are seeking through this -- through this
6 commitment is assurances that Baffinland will properly
7 identify the potential acid generating rock material
8 and avoid its use for the road and railway
9 construction, and Baffinland shall monitor the water
10 quality in the railway corridor rock quarries and
11 implement proper mitigation as required. Next slide,
12 please.

13 The last concern relates to uncertainty in the
14 classifying -- rocks in the waste rock pile that have
15 the potential to generate acids and leach metals.

16 On this slide, you will see the commitments agreed
17 to by Baffinland that I'll read into the record:
18 (as read)

19 (1) Baffinland shall develop reliable
20 criteria for identification of potentially
21 acid generating rock that clearly accounts
22 for uncertainty in the 0.2 percent total
23 sulphur thresholds and the presence of acidic
24 soluble sulphates upon projected life of mine
25 tonnages of potentially acid generating and
26 non-acid generating rock.

1 (2) Baffinland shall incorporate these
2 criteria, clearly stated ranges in project --
3 in the projected life of mine potentially
4 acid generating and non-acid generating rock
5 tonnages and the resultant necessary
6 contingencies and methods of validation that
7 need to be incorporated into engineering
8 design, environmental monitoring, and
9 management strategies for the waste rock
10 management plan, and interim closure and
11 reclamation plan. These documents are to be
12 submitted for the review during the water
13 licence amendment process subject to the
14 Nunavut Water Board's requirements.

15 (3) Baffinland shall review the performance
16 of these plans and provide evidence of the
17 effectiveness of these plans by demonstrating
18 compliance with the management measures and
19 that the desired outcomes of mitigation are
20 achieved on an annual basis.

21 What we are seeking through this commitment is
22 assurances that the proposed criteria for identifying
23 potentially acid-generating rock are robust and
24 reliable and that the operation of the waste rock
25 facility ensures encapsulation of the potentially
26 acid-generating rock, that the proposed waste rock

1 management plan and interim closure and reclamation
2 plans ensure that no acid rock drainage or metal
3 leaching will occur in the long term, mine closure, and
4 beyond. Next slide, please.

5 To conclude, Crown-Indigenous Relations and
6 Northern Affairs Canada conducted a review of aspects
7 of the environmental impact statement that fall within
8 our mandate and found the majority of the analysis and
9 presentation of the materials to be adequate. For most
10 of the aspects of the proposed project is not likely to
11 cause significant adverse environmental effects based
12 on the information provided by Baffinland. The other
13 aspects as discussed in the presentation can be
14 addressed by the implementation of commitments and the
15 terms and conditions outlined.

16 If approved, Crown-Indigenous Relations and
17 Northern Affairs Canada will continue to review and
18 provide input on updated plans through the regulatory
19 process to minimize potential impacts on people and the
20 environment.

21 In closing, Crown-Indigenous Relations and
22 Northern Affairs Canada appreciates the opportunity to
23 participate in this review, and we are looking forward
24 to working with all parties involved throughout the
25 remaining review phases. Qujannamiik. (INUKTITUT
26 SPOKEN - NO TRANSLATION).

1 THE CHAIR: Moving on to the next
2 presentation from Environment and Climate Change
3 Canada.

4 Before we go to the next presentation, just to --
5 a reminder to presenters speaking in English, when
6 you're saying words, instead of saying the word slow,
7 take a pause between sentences.

8 Legal counsel, can you please affirm the
9 individuals who will be presenting evidence and also
10 anyone who could be providing answers to questions
11 during the community roundtable.

12 MS. MEADOWS: Thank you, Madam Chair.
13 Teresa Meadows, legal counsel for the Nunavut Impact
14 Review Board.

15 And, Madam Chair, before I start with that, I've
16 been advised that there is now a Bible in the venue in
17 Iqaluit, so anyone who wishes to be sworn in Iqaluit
18 can also do so.

19 So, Madam Chair, I have the following participants
20 listed as those who will be -- offered to be affirmed,
21 and I will say their names, and then I will administer
22 the attestation and if they can signify -- come back
23 online, state your name, and then affirm.

24 The first is Anna Graham, Anne Wilson, Reg
25 Ejeckam, Brian Asher, Matthew Parsons, Carl Kabanguka,
26 Meagan Tobin, Richard Holt, Jean-Francois Dufour, and

1 Krupesh Patel.

2 THE CHAIR: Anna Graham.

3 MS. GRAHAM: Anna Graham. I would like to
4 note that the following individuals for Environment and
5 Climate Change Canada will not be affirming at this
6 time: Meagan Tobin, Jean-Francois Dufour, Richard
7 Holt, and Matthew Parsons. I will also note that Anne
8 Wilson is listening by phone, and perhaps needed to be
9 unmuted. That is all. Thank you.

10 THE CHAIR: Carl Kabanguka.

11 MS. MEADOWS: Madam Chair, it's my
12 understanding that he will not be required to be
13 affirmed as he's not giving evidence. Thank you, Madam
14 Chair.

15 THE CHAIR: The interpreter made me smile.

16 ANNA GRAHAM, ANNE WILSON, REG EJECKAM, BRIAN ASHER,
17 KRUPESH PATEL, Affirmed

18 THE CHAIR: Legal counsel, can you please
19 advise regarding any exhibits that will be filed on the
20 public hearing record for this intervenor.

21 MS. MEADOWS: Thank you, Madam Chair.

22 Teresa Meadows, legal counsel for the Nunavut Impact
23 Review Board.

24 Madam Chair, I have two PowerPoint -- hard copy
25 PowerPoint presentation material that I intend to file
26 as the next exhibits in this public hearing being the

1 presentations to be presented by Environment and
2 Climate Change Canada, one in English and one version
3 in Inuktitut, and those are all my procedural matters,
4 Madam Chair.

5 EXHIBIT 47 - Environment and Climate Change
6 Canada's presentation to the Nunavut Impact
7 Review Board respecting the Mary River
8 Phase 2 Proposal (English)

9 EXHIBIT 48 - Environment and Climate Change
10 Canada's presentation to the Nunavut Impact
11 Review Board respecting the Mary River
12 Phase 2 Proposal (Inuktitut)

13 THE CHAIR: Environment and Climate Change
14 Canada, Anna Graham.

15 Presentation by Environment and Climate Change Canada
16 Regarding Baffinland Iron Mines Corporation Phase 2
17 Development Proposal

18 MS. GRAHAM: Thank you, Madam Chair, and
19 good afternoon. Good afternoon, Madam Chair, Board
20 Members, Elders, community members, Board staff, and
21 everyone who has joined us here today.

22 My name is Anna Graham, and I am an environmental
23 assessment coordinator with Environment and Climate
24 Change Canada. With me today to present is Brian
25 Asher, our air quality expert.

26 In this presentation, we will summarize the

1 department's final written submission along with any
2 relevant discussions with the proponent and note also
3 that comments have been resolved. Next slide, please.

4 To start off, I will go through Environment and
5 Climate Change Canada's mandate and briefly touch on
6 the relevant acts and legislation before getting to the
7 status of our comments on the Phase 2 project. Next
8 slide, please.

9 Under the Department of Environment Act the
10 powers, duties, and functions of the Minister of
11 Environment and Climate Change extend to the following
12 matters: The preservation and enhancement of the
13 quality of the natural environment, including water,
14 air, and soil quality; and the coordination of the
15 relevant policies and programs of the Government of
16 Canada; renewable resources, including migratory birds
17 and other non-domestic flora and fauna; meteorology;
18 the enforcements of rules and regulations; and
19 Environment and Climate Change Canada also provides
20 technical expertise on matters related to environmental
21 assessments. Next slide, please.

22 Environment and Climate Change Canada's mandate is
23 governed by the Department of the Environment Act, the
24 Canadian Environmental Protection Act, the pollution
25 prevention provisions of the Fisheries Act, the
26 Migratory Birds Convention Act, and the Species At Risk

1 Act. Next slide, please.

2 Environment and Climate Change Canada has
3 participated throughout the review process for the Mary
4 River Phase 2 Project. We have provided many comments
5 and recommendations at all stages of the assessment
6 based on our available technical and scientific
7 expertise.

8 We currently have one unresolved issue from the
9 technical review, which we would have liked to address
10 during this public hearing. This issue is related to
11 black carbon emissions from the project's shipping
12 operations.

13 We also have two technical comments which, through
14 conversations with Baffinland, have been partially
15 resolved and deferred to the water licence process,
16 which will follow this current review process if the
17 project is approved. Next slide, please.

18 The remainder of our technical comments outlined
19 in this slide have been resolved through changes made
20 to plans or commitments from Baffinland. However, we
21 would like to use this presentation time to focus on
22 the outstanding or partially resolved comments. Next
23 slide.

24 Environment and Climate Change Canada has one
25 outstanding issue that we would like to bring before
26 the Board regarding black carbon emissions from the

1 proposed shipping operations.

2 Black carbon is a component of ship exhaust, and
3 it is a significant contributor to warming effects in
4 the Arctic. The operations of the Mary River mine are
5 expected to more than double the amount of black carbon
6 emissions or a 157 percent increase from shipping
7 operations in the three Canadian territories combined.

8 Due to the significance of black carbon,
9 Environment and Climate Change Canada is putting
10 forward a recommendation that Baffinland use distillate
11 fuel in their shipping vessels. It is Environment and
12 Climate Change Canada's view that distillate fuel is a
13 technically feasible mitigation option. The fuel is
14 available. It is currently used by vessels, and it can
15 be carried in one of several fuel tanks these ships
16 have on board.

17 Environment and Climate Change Canada has reviewed
18 the list of ships calling at Milne Inlet in 2017 and
19 2018. The ships have on average three or four fuel
20 tanks on board with a total fuel tank capacity of 2,300
21 tons. These ships already carry low sulphur distillate
22 fuel for use in the North Sea emission control area on
23 approach to the port of Rotterdam.

24 In addition, ships sometimes use exhaust gas
25 cleaning systems known as "scrubbers" that allow them
26 to burn cheaper fuel -- heavy fuel oil while allowing

1 them to meet air pollution requirements. These
2 scrubbers are not effective in reducing black carbon
3 emissions and discharge wash water containing toxic
4 substances to marine environment. We therefore suggest
5 that scrubbers should not be used to meet the
6 conditions -- we suggest that scrubbers not be used to
7 meet conditions imposed associated with the use of
8 cleaner fuels by ships for the purpose of black carbon
9 mitigation. Next slide.

10 Environment and Climate Change Canada has made
11 comments during the project process regarding acid rock
12 drainage and the characterization and classification
13 criteria of potentially acid-generating rock. Through
14 conversations with Baffinland, we have partially
15 resolved our comments, and Baffinland has made
16 commitments to address these issues.

17 As a result of these conversations and
18 commitments, Environment and Climate Change Canada has
19 agreed with Baffinland that the full resolution of
20 these comments will be most appropriately completed
21 during the water licence application with the Nunavut
22 Water Board.

23 I would like to now introduce our air quality
24 expert, Brian Asher, to go into a little more detail
25 regarding the feasibility of using distillate fuel to
26 mitigate black carbon emissions and to respond to some

1 items that were mentioned earlier in the hearing
2 proceedings. Thank you, Madam Chair.

3 THE CHAIR: Brian Asher.

4 MR. ASHER: Thank you, Madam Chair.

5 Thank you for the opportunity to clarify some
6 points related to environment and climate change
7 recommendations to Baffinland to implement distillate
8 fuel for their marine shipping in Canadian waters.
9 Early in this hearing, Baffinland made comments related
10 to our recommendations, feasibility, cost, and, in
11 their view, inconsistency with Canada's position on the
12 IMO's heavy fuel oil ban.

13 In response to a question from World Wildlife
14 Fund, Baffinland also characterized the impact of their
15 project's black carbon emissions as 2.3 percent of the
16 Canadian north. Environment and Climate Change Canada
17 disagrees with Baffinland on each of these points, and
18 I will briefly address each one.

19 First, regarding the increase in black carbon
20 emissions. The black carbon emissions from this
21 project were estimated in Baffinland's
22 August 22nd, 2019, memo which calculated these
23 emissions for the marine vessels' route within Canada's
24 exclusive economic zone that is 200 nautical miles from
25 shore.

26 In this memo, Baffinland calculated annual

1 emissions of 65 tonnes of black carbon per year from
2 its ships, which is based on the mine's full production
3 of 30 million tonnes of ore per year. This corresponds
4 to an 11 percent increase of all black carbon emissions
5 from Nunavut, Northwest Territories, and Yukon
6 combined, based on Canada's 2017 black carbon emission
7 inventory.

8 Baffinland's claim of 2.3 percent is based on only
9 the 6-million-tonne incremental emissions from the
10 proposed production increase compared to territorial
11 emissions. This number is not reflective of the mine's
12 true impact on shipping emissions. The cumulative
13 impact of the full 30 million tonnes of shipping must
14 be considered.

15 It is also important to note that much of the
16 three territories' black carbon emissions do not occur
17 in the Arctic. The Canadian total used by Baffinland
18 includes numerous sources from municipalities,
19 transportation, and industrial activities that are at
20 more southern latitudes. For this reason, it is
21 informative to compare the project's black carbon
22 emissions to the Canadian north's shipping emissions.
23 With that comparison, we find that the black carbon
24 emissions from Arctic shipping will increase by
25 157 percent as a result of the Baffinland Mary River
26 mines shipping.

1 By all accounts, black carbon emissions from the
2 proposed project's shipping activities are substantial.
3 Black carbon emissions from ships contribute to the
4 warming of the Arctic both in the atmosphere and when
5 deposited on snow and ice where they accelerate
6 melting.

7 Because black carbon emissions can stay in the
8 atmosphere for several weeks and be transported long
9 distances, the impact of this project shipping can be
10 felt beyond the shipping corridor and into the Nunavut
11 settlement area. It is, therefore, essential that
12 black carbon emissions from this project be mitigated.
13 Environment and Climate Change Canada's proposal would
14 require the use of low sulphur distillate fuel by
15 project vessels within Canada's 200-nautical-mile
16 exclusive economic zone, which would reduce black
17 carbon emissions by 80 percent regarding Government of
18 Canada policy consistency.

19 In their atmospheric environment presentation,
20 Baffinland mentioned that our proposal was not in line
21 with Canada's position taken at the IMO. This is not
22 the case. The IMO's ban on HFO mentioned by the
23 proponent is intended to mitigate the risks of spills
24 to the Arctic marine environment and does not assure
25 black carbon mitigation. The IMO currently does not
26 have any regulations to reduce black carbon in the

1 Arctic.

2 With the goal of mitigating black carbon emissions
3 and applicable specifically to the use of fuels within
4 Canadian waters, Environment and Climate Change
5 Canada's recommendation is distinct from the IMO ban on
6 HFO.

7 Among Canada's other international commitments is
8 the collective goal for Arctic Council countries to
9 reduce emissions of black carbon by 25 to 33 percent of
10 2013 levels by the year 2025.

11 Canada has strongly supported this goal since it
12 was adopted by all Arctic states in the Arctic Council
13 Fairbanks Declaration. Canada participates in the
14 Arctic Council expert group on black carbon and methane
15 to assess progress on this goal. Emissions from this
16 project's shipping would increase sharply in 2025,
17 which would hinder Canada's goal of reducing black
18 carbon.

19 A recommendation of available feasible mitigation
20 measures to reduce this project's black carbon
21 emissions is consistent with the Government of Canada's
22 position to take strong action on climate change and
23 protect the Arctic environment.

24 Regarding technical feasibility. In their
25 response to World Wildlife Fund's question, Baffinland
26 suggested that the use of distillate fuel would not be

1 feasible. Environment and Climate Change Canada
2 disagrees with this assessment. The use of low sulphur
3 distillate fuel is technically feasible. There are no
4 modifications necessary to vessels to use the fuel.
5 The use of this fuel is standard practice in emission
6 control areas, including within 200 nautical miles of
7 the coast of North America outside of the Arctic and
8 Europe. The shipping industry has over a decade of
9 experience using these fuels, and thousands of ships
10 globally are using these fuels every day.

11 As noted by my colleague Anna Graham, Environment
12 and Climate Change Canada reviewed the list of ships
13 calling at Baffinland in 2017 and 2018.

14 THE CHAIR: Please say the last sentence,
15 and before you keep going, can you please say what the
16 abbreviation is for IMO and describe distillate fuel
17 for the interpreter.

18 MR. ASHER: Thank you. Qujannamiik.

19 IMO stands for International Maritime
20 Organization. Distillate fuel is a cleaner, lighter
21 fuel compared to the heavier -- heavy fuel oil.

22 THE CHAIR: Okay. Please proceed with
23 your last sentence.

24 MR. ASHER: Thank you.

25 Environment and Climate Change Canada reviewed the
26 list of ships calling at Baffinland in 2017 and 2018

1 and noted an average of three or four fuel tanks on
2 board these ships and a total fuel tank capacity of
3 2,300 tonnes. These ships already carry low sulphur
4 distillate fuel for use on the North Sea emission
5 control area on approach to the port of Rotterdam.

6 During a call between Environment and Climate
7 Change Canada and the proponent on January 11th of this
8 year, Baffinland acknowledged that there were no
9 technical impediments to the use of low sulphur
10 distillate fuel and that their primary concern was fuel
11 cost.

12 Earlier in the hearing, Baffinland indicated that
13 such a fuel requirement was not entirely within
14 Baffinland's ability and at the vessel's discretion,
15 implying that Baffinland does not have control over the
16 fuel that its contracted shippers use. Environment and
17 Climate Change Canada disagrees with this assertion.

18 Time charters for vessels allow the charterer to
19 have full commercial control of the vessel, including
20 arranging bunkering, that is, the loading of fuel.

21 As the charterer, Baffinland is responsible for
22 all bunkering costs and can impose requirements on
23 vessel age, type, or other requirements within the
24 charter contract, including fuel type.

25 We therefore believe it is entirely within the
26 proponent's control to require the use of cleaner fuel

1 within Canada's exclusive economic zone.

2 Finally, on economic feasibility. In their
3 response to World Wildlife Fund, Baffinland indicated
4 concern related to the cost of implementing this
5 mitigation measure noting that they would be carried
6 entirely by Baffinland.

7 Environment and Climate Change Canada notes that
8 our recommendation for use of distillate fuel applies
9 to the Canadian exclusive economic zone only, which is
10 just 11 percent of the vessel's journey to Rotterdam
11 and corresponding fuel use.

12 Low sulphur distillate fuel is readily available
13 in North America, Europe, Asia, and all other major
14 global bunkering ports, and price differences are only
15 marginally higher than very low sulphur fuel oil.

16 Environment and Climate Change Canada believes
17 that the increased costs associated with our
18 recommendation are reasonable. If these emissions are
19 not mitigated, then the costs are externalized. These
20 costs still exist, but they would be borne by the
21 Arctic environment and its people in the form of
22 increased pollution -- increased pollution and climate
23 change.

24 The Government of Canada believes in the polluter
25 pays principle, and we therefore believe it is
26 appropriate for the proponent to bear some increase in

1 cost in order to reduce pollution in the Arctic.
2 Qujannamiik.

3 THE CHAIR: Environment and Climate Change
4 Canada, Anna Graham, is that the end of your team's
5 presentation?

6 MS. GRAHAM: Thank you, Madam Chair.
7 That concludes our presentation.

8 THE CHAIR: Moving on to the next
9 presentation, from Fisheries and Oceans Canada. Just a
10 reminder, when there's lots of technical terms in your
11 presentation, pause between sentences.

12 Legal counsel, can you please affirm the
13 individuals who will be presenting evidence and also
14 anyone who could be providing answers to questions
15 during the community roundtable.

16 MS. MEADOWS: Thank you, Madam Chair.
17 Teresa Meadows, legal counsel for the Nunavut Impact
18 Review Board.

19 So, Madam Chair, the following individuals have
20 indicated to me they need to be affirmed before this
21 presentation: Thomas Hoggarth, Alasdair Beattie,
22 Alexandra Sorckoff, Gabriel Bernard-Lecaille, Marriane
23 Marcoux, Kimberly Howland, Paula Smith.

24 Madam Chair, I will issue the attestation and then
25 if I can have people affirm.

26 THOMAS HOGGARTH, ALASDAIR BEATTIE, ALEXANDRA SORCKOFF,

1 GABRIEL BERNARD-LECAILLE, MARRIANNE MARCOUX, KIMBERLY
2 HOWLAND, PAULA SMITH, Affirmed

3 THE CHAIR: Legal counsel, can you please
4 advise regarding any exhibits that will be filed on the
5 public hearing record for this intervenor? Legal
6 counsel.

7 MS. MEADOWS: Thank you, Madam Chair.
8 Teresa Meadows, legal counsel for the Nunavut Impact
9 Review Board.

10 Madam Chair, I have two exhibits to file in
11 advance of this presentation consisting of the hard
12 copy PowerPoint presentation in English and Inuktitut,
13 and those are my procedural matters, Madam Chair.

14 EXHIBIT 49 - Fisheries and Oceans Canada
15 Baffinland Iron Mines Corporation's Mary
16 River Project Phase 2 Development
17 presentation to the Nunavut Impact Review
18 Board (English)

19 EXHIBIT 50 - Fisheries and Oceans Canada
20 Baffinland Iron Mines Corporation's Mary
21 River Project Phase 2 Development
22 presentation to the Nunavut Impact Review
23 Board (Inuktitut)

24 THE CHAIR: NIRB staff.

25 MS. COSTELLO: Thank you, Madam Chair. Karen
26 Costello, NIRB staff.

1 I'd just like to ask the DFO representative
2 Gabriel to turn the volume down on his device. That is
3 resulting in a significant feedback and echo on the
4 line.

5 So if Gabriel could please ensure that his
6 interpretation is turned off on Zoom and his volume or
7 headsets are unplugged. Thank you.

8 THE CHAIR: Fisheries and Oceans Canada,
9 Alasdair Beattie.

10 MR. BEATTIE: One moment.

11 Thank you. Just checking. Can you hear me?

12 THE CHAIR: Yes. You can proceed.

13 MR. BEATTIE: Thank you.

14 THE CHAIR: Hold on. We have -- NIRB
15 staff.

16 MS. COSTELLO: Thank you, Madam Chair.

17 Alasdair, turn down your volume. Disconnect your
18 headsets, and turn the translation off.

19 Thank you, Madam Chair.

20 THE CHAIR: Can you please test one more
21 time.

22 MR. BEATTIE: Is that any better?

23 THE CHAIR: Yes. You may proceed.

24 Presentation by Fisheries and Oceans Canada Regarding
25 Baffinland Iron Mines Corporation Phase 2 Development
26 Proposal

1 MR. BEATTIE: Thank you.

2 Good morning, Madam Chair, members and staff of
3 the Board, Elders and community members, and everyone
4 joining us virtually.

5 My name is Alasdair Beattie, and I'm the team lead
6 for the Fisheries and Oceans regulatory review team in
7 the north and for the Mary River iron mine proposal.
8 Other key members of our team include the lead
9 biologist in the review of the project, Alexandra
10 Sorckoff; the senior biologist for the review, Gabriel
11 Bernard-Lecaille; and our regional director, Thomas
12 Hoggarth. Key contributors from our science branch are
13 marine mammal expert, Marrienne Marcoux, and aquatic
14 invasive species expert, Kimberly Howland.

15 I would like to acknowledge that there were many
16 others who also contributed, too many unfortunately to
17 name here. We should be on Slide 2 at this point.

18 For our presentation today, first I'll -- I will
19 provide a brief overview of our applicable legislation,
20 mandate, and how we approach project reviews.

21 Second, I will provide an overview of our updated
22 recommendations --

23 THE CHAIR: Please slow down for the
24 interpreter.

25 MR. BEATTIE: Thank you, Madam Chair.

26 ... that we provided to the Nunavut Impact Review

1 Board in our February 2020 updated technical comments
2 and updated written submission filed in January of
3 2021.

4 For time, we will not present all the details
5 here. We would note that the details in the technical
6 submissions are important to fully inform our
7 recommendations. Finally, I will present a summary and
8 key messages of our submission.

9 I would also like to note that we provided posters
10 that are set up at the Pond Inlet and Iqaluit hubs,
11 which we hope will be helpful and informative for
12 community members and other stakeholders. These
13 posters detail some of our current research on fish,
14 marine mammals, and aquatic invasive or non-indigenous
15 species. Next slide, please.

16 We have many branches with different
17 responsibilities that all help to ensure healthy and
18 sustainable aquatic ecosystems for future generations
19 through habitat protection and sound science.

20 The fish and fish habitat protection program is
21 responsible for ensuring that projects in or near water
22 are undertaken following the requirements of the
23 Fisheries Act including providing advice and guidance
24 to proponents of development projects on how to avoid,
25 mitigate, or offset impacts to fish and fish habitat.

26 In August of 2019, the fish and fish habitat

1 protection provisions were restored when the new
2 Fisheries Act came into force including two key
3 prohibitions that protect fish, including marine
4 mammals and their habitat.

5 First, the prohibition against works,
6 undertakings, and activities that result in the death
7 of fish by means -- any other means other than fishing.

8 And second, the prohibition against the harmful
9 alteration, disruption, or destruction of fish habitat.
10 In our project reviews, we will seek to avoid and
11 mitigate impacts to fish and fish habitat. Should a
12 review conclude that some impacts cannot be avoided and
13 mitigated but the project can proceed, then the Act
14 does provide for the Minister of Fisheries and Oceans
15 to allow the harmful alteration, disruption, or
16 destruction of fish habitat with conditions. The
17 conditions include, for example, restoring and
18 rebuilding damaged or destroyed fish habitat or
19 creating entirely new fish habitat that more than makes
20 up for what was lost.

21 Our following comments are made with the intent to
22 providing our scientific and expert advice to the NIRB
23 on potential impacts to fish, marine mammals, and their
24 habitats and project-related activities. Next slide,
25 please.

26 Our updated written submission and recommendations

1 to the Board focused on the following three areas:
2 First, marine mammals and impacts such as acoustic
3 disturbances, ice entrapments, migration changes, and
4 ship strikes; second, ballast water release and hull
5 biofouling and associated impacts related to the spread
6 of non-indigenous and aquatic invasive species; and
7 third, freshwater impacts to fish passage and fish
8 habitat associated with watercourse crossings and water
9 withdrawals of the proposed railway and terrestrial
10 environment. Next slide, please.

11 For our presentation today, Fisheries and Oceans
12 Canada will be focusing on technical comments and
13 commitments from the proponent that, in our opinion,
14 should be incorporated as terms and conditions in a
15 project certificate. For topics or technical comments
16 not discussed in this presentation, we invite you to
17 refer to our updated written submission for further
18 details.

19 The slide you're seeing has a lot of information
20 on it, but what we mean to show with it is the outcome
21 of extensive and continuing engagement with Baffinland
22 since the adjournment of the November 2019 final
23 hearing.

24 Those meetings have led to the resolution of many
25 of our remaining technical comments through the
26 development of commitments. However, we would like to

1 provide clarification on the term "resolved". Next
2 slide, please.

3 A resolved commitment indicates that Baffinland
4 and Fisheries and Oceans Canada have agreed upon a
5 commitment that we expect will reduce the risks and the
6 uncertainty of whether potential project impacts or a
7 given activity or project component have been
8 identified, can be detected and managed within
9 reasonable boundaries.

10 A resolved recommendation does not mean that
11 impacts will be completely avoided or mitigated.
12 Rather, that mitigations are applied where possible,
13 and that risks of remaining impacts are monitored and
14 managed. This should also provide information that,
15 over time, should help us understand how well they work
16 and inform adaptive management within Baffinland's
17 marine monitoring plan.

18 Again, throughout this presentation, we will
19 highlight the commitments to the NIRB that, in our
20 opinion, would benefit from the establishment of terms
21 and conditions in the project certificate that includes
22 the details presented in our updated written
23 submission. Next slide, please.

24 This set of recommendations are focused on the
25 shipping season proposed for Phase 2. Based on our
26 recommendation, Baffinland is committed to providing a

1 summary of monitoring conducted during the opening and
2 closing of the shipping season along with marine mammal
3 behaviours or ecological factors considered in their
4 determination of the opening and closing such as --

5 THE CHAIR: Please slow down for the
6 interpreter.

7 MR. BEATTIE: Yes. Thank you, Madam Chair.

8 ... such as the out migration of narwhal. We
9 consider these comments resolved.

10 However, if Phase 2 is approved, Fisheries and
11 Oceans further recommends to the NIRB that a term and
12 condition be established and a project certificate
13 based on this commitment. It should include clear due
14 dates and information requirements with the field
15 reports and any supplemental reports such as included
16 in the details presented in our updated written
17 submission. Next slide, please.

18 We apologize for not spelling out some of the
19 terms on this slide. DFO is Fisheries and Oceans, and
20 AMAR or A-M-A-R is a type of microphone for recording
21 sounds under water.

22 This comment is focused on the potential
23 shipping-related impacts to the acoustic environment of
24 marine mammals. Based on our recommendation,
25 Baffinland has agreed to collect additional acoustic
26 data within the regional study area during Phase 2

1 construction and operations and will develop this
2 long-term program in collaboration with Inuit and
3 Fisheries and Oceans prior to submission to the Marine
4 Environmental Working Group. We consider this
5 technical comment resolved.

6 However, if Phase 2 is approved, we further
7 recommend to the NIRB that a term and condition be
8 established in the project certificate based on this
9 commitment that includes the details presented in our
10 updated written submission. Next slide, please.

11 These recommendations are based on
12 shipping-related project impacts, especially
13 icebreaking, to the acoustic environment of marine
14 mammals and the associated risks of entrapment. Based
15 on Fisheries and Oceans' recommendation, Baffinland has
16 committed to completing annual end of season aerial
17 surveys and will provide coordinates and group sizes of
18 narwhal found along the aerial survey tracks as well as
19 documentation of ice conditions.

20 Fisheries and Oceans Canada is hopeful that
21 collection of this data at the end of the shipping
22 season will help to identify areas and ice conditions
23 that pose a greater risk of narwhal ice entrapment
24 events.

25 Baffinland has also committed to establishing a
26 reporting structure with the Mittimatalik Hunters and

1 Trappers Organization, Fisheries and Oceans Canada, and
2 other relevant boards and organizations. As per the
3 commitment, Baffinland will also need to collaborate
4 with these groups to establish procedures for
5 determining if observed narwhal ice entrapment events
6 are project related or naturally caused.

7 We consider this technical comment resolved.
8 However, if Phase 2 is approved, we further recommend
9 to the NIRB that a term and condition be established
10 and the project certificate based on this commitment
11 that includes the details presented in our updated
12 written submission. Next slide, please.

13 Previously, we recommended that Baffinland
14 implement the most conservative mitigation measure and
15 avoid shipping during the shoulder seasons, avoid
16 icebreaking activities, and only ship during the open
17 water season. In response, Baffinland has indicated
18 that icebreaking and shoulder-season shipping
19 activities are essential to the proposed Phase 2
20 operations.

21 If the project is approved and includes these
22 activities, we have proposed to Baffinland to undertake
23 additional mitigation and monitoring commitments. At
24 the time we submitted this presentation, this item was
25 outstanding. However, Baffinland has since agreed to
26 commitments -- to additional mitigation and monitoring

1 measures, and we now consider this technical comment
2 resolved.

3 If Phase 2 is approved, we recommend to the NIRB
4 to include a term and condition in the project
5 certificate that reflects the agreed-to final wording
6 of the commitment, which is similar to what we will
7 present in the next slide. Next slide, please.

8 The additional measures that Baffinland has
9 committed to include the application of spring transit
10 restrictions as long as relevant ice conditions persist
11 along the shipping route; the establishment of
12 mitigations and restrictions for the fall shoulder
13 season to address noise disturbance impacts from
14 icebreaking and shipping activities; monitoring for
15 ship strikes with remote technology during icebreaking
16 and shoulder-season shipping activities; to host
17 workshops with Inuit and the Marine Environmental
18 Working Group throughout 2021 to identify and review
19 thresholds, indicators, and strategies for adaptive
20 management; and the expansion of the acoustic
21 monitoring program to include monitoring at the floe
22 edge and working with the MEWG to review -- the Marine
23 Environmental Working Group -- I apologize -- to review
24 and ensure that existing early warning indicators are
25 effective and to select new early warning indicators
26 where needed.

1 These are important commitments. In our opinion,
2 however, project-induced impacts to narwhal remain
3 possible and the ability of Baffinland's monitoring
4 programs to detect impacts or how narwhal populations
5 respond remains uncertain.

6 Therefore, we strongly encourage an additional
7 early warning indicator that links to narwhal health
8 and body condition be identified and monitored in order
9 to ensure the early detection of the potential impacts
10 from shipping activities. However, we acknowledge that
11 the selection of early warning indicators should be
12 made in consultation with the Marine Environmental
13 Working Group and Inuit.

14 We further note that early warning indicators,
15 when considered in isolation, may be difficult to
16 conclusively relate to project activities and impacts
17 but that that should not prevent them from informing
18 adaptive management.

19 If Phase 2 is approved, we recommend to the NIRB
20 that a term and condition be established in the project
21 certificate for icebreaking and shoulder-season
22 shipping activities that includes measures such as
23 those suggested in our final written submission and in
24 the updated commitment that we will provide to the
25 NIRB. Next slide, please.

26 Potential for marine mammal ship strikes is

1 another concern that was raised by DFO during the
2 review of the project. Based on our recommendation,
3 Baffinland has committed to develop a pilot project
4 using remote technology to monitor ship strikes for
5 three years along the shipping route within the Nunavut
6 settlement area. This program will be developed with
7 our input and will be submitted to the Marine
8 Environmental Working Group for further review and
9 recommendations.

10 Baffinland has further committed to begin this
11 pilot program one year in advance of Phase 2 shipping
12 operations and to making the program a permanent
13 component of the marine monitoring plan should ship
14 strikes or near misses occur. Should the program end
15 after the pilot period, Baffinland has committed to
16 reinstate the program as needed through recommendations
17 from the Marine Environmental Working Group and Inuit,
18 or as a response component of the adaptive management
19 plan, for example, if ship strikes are reported. Based
20 on this commitment, Fisheries and Oceans considers this
21 technical comment resolved.

22 However, if Phase 2 is approved, we further
23 recommend to the NIRB to include a term and condition
24 in the project certificate based on this commitment.
25 We would further recommend that it should include the
26 elements described in our updated written submission.

1 Next slide, please.

2 DFO provided multiple recommendations for ballast
3 water and vessel hull biofouling in order to address
4 concerns related to aquatic invasive species and
5 non-indigenous species. Based on our recommendation,
6 Baffinland has committed to ensuring that ballast water
7 exchange will be carried out prior to treatment for all
8 vessels that are able to do so. For those that are
9 unable to do so, they will be required to conduct
10 exchanges in the alternate ballast water exchange zones
11 that have been identified in the eastern Arctic. We
12 consider this technical comment resolved.

13 Baffinland has indicated that exchange plus
14 treatment practices may be discontinued if treatment
15 systems become good enough that they no longer offer
16 additional safety. Baffinland has committed that any
17 decision to discontinue these practices will be made in
18 consultation with Transport Canada and Fisheries and
19 Oceans Canada and that Baffinland will update the
20 ballast water dispersion modelling if these practices
21 are discontinued. Based on this commitment, we
22 consider this resolved.

23 If Phase 2 is approved, we further recommend to
24 the NIRB that the term and condition be established in
25 the project certificate for each of these commitments
26 that reflects the full details in our final written

1 submission. Next slide, please.

2 It was also recommended that Baffinland implement
3 a ballast water compliance sampling plan based on risk
4 based targeting methodology developed in consultation
5 with Fisheries and Oceans and Transport Canada.

6 Baffinland has agreed to this commitment, and DFO,
7 Fisheries and Oceans, has taken the lead initiative in
8 developing a draft ballast water study program.

9 This program focuses on finding the numbers and
10 kinds of organisms in the ballast to increase our
11 understanding of the effectiveness of ballast water
12 management practices used in the project. We
13 acknowledge the importance of community involvement in
14 developing plans for this research, and we've designed
15 the study to be a community-based program. We are
16 hopeful that community involvement will be ongoing
17 throughout all stages of the program.

18 If Phase 2 is approved, we further recommend --
19 recommend to the NIRB that a term and condition be
20 established in the project certificate based on this
21 commitment and include the details in our updated
22 written submission. The next slide, please.

23 We recommended that Baffinland commit to develop a
24 vessel hull biofouling sampling program, which
25 specifically includes the collection of organisms in a
26 way that makes it possible for the identification of

1 non-indigenous or invasive species that can be
2 transported this way.

3 Baffinland has committed to ensure that vessels
4 arriving to Milne Port are following international
5 guidelines and that shipmasters share information on
6 their biofouling management methods and records, for
7 example, how often they clean the ship's hull and that
8 this information be shared with the Marine
9 Environmental Working Group.

10 Baffinland has also committed to develop, with our
11 input, an initial monitoring plan to help understand
12 the current extent of biofouling on ship hulls by using
13 underwater videos of the outer surfaces and identifying
14 other things about the vessels such as the age of their
15 anti-fouling paint and how it may affect the risks.
16 This will help Baffinland develop methods to better
17 predict which ships carry more organisms so in the
18 future they can monitor and manage for those.

19 Baffinland has further committed to review
20 alternative methods available for biological sampling
21 of vessels in a way that would allow identification of
22 non-indigenous or invasive species that can be
23 transported on the outside of ships and to submit a
24 report on this to the Marine Environmental Working
25 Group. When they find a feasible and safe method to
26 doing this, it will be included in the marine

1 monitoring plan. Baffinland has further committed that
2 these monitoring programs will also be applied at
3 Steensby Port. Based on these commitments, we consider
4 this technical comment resolved.

5 If Phase 2 is approved, we further recommend to
6 the NIRB that a term and condition be established and a
7 project certificate based on this commitment. Next
8 slide, please.

9 Our remaining technical comments concern project
10 activities which have the potential to cause the
11 harmful alteration, disruption, or destruction of fish
12 habitat and freshwater rivers and lakes.

13 If Phase 2 is approved, Baffinland has committed
14 to provide the requested information in regulatory
15 applications to Fisheries and Oceans. This information
16 to be provided includes a method for the selection of
17 watercourse crossing structures, a lessons-learned
18 report for the existing tote road, hydrologic
19 assessments, water withdrawal assessments, and plans
20 associated with that.

21 We are confident that our regulatory review
22 process will provide a sufficient mechanism to ensure
23 that impacts to freshwater and marine fish habitat are
24 sufficiently avoided, mitigated, and offset as required
25 by our policies.

26 If Phase 2 is approved to proceed, any project

1 components that require offsetting under the Fisheries
2 Act would require further consultation with impacted
3 communities. Based on Baffinland's commitments and our
4 regulatory process, these technical comments are
5 resolved. Next slide, please.

6 In summary, we acknowledge the considerable -- the
7 considerable progress and efforts that Baffinland has
8 made to resolve outstanding technical comments through
9 the development of commitments. These commitments
10 reduce uncertainty of our understanding and ability to
11 detect potential project-related impacts to the marine
12 and freshwater fish and fish habitat. It will help
13 ensure that potential project impacts are appropriately
14 mitigated where possible and monitored and managed
15 where standard mitigation measures do not exist.

16 Risks to fish and fish habitat, including marine
17 mammals, remain. For these commitments to be
18 successful, it is crucial that a detailed, operational
19 adaptive management plan capable of detecting changes
20 early and responding rapidly is developed. It is
21 important that it is developed and informed by the
22 Marine Environmental Working Group, including Inuit
23 Qaujimajatuqangit.

24 Throughout this presentation, we've identified a
25 number of commitments that, in our opinion, would
26 benefit from being incorporated into specific terms and

1 conditions in the project certificate.

2 If Phase 2 is approved, to ensure that these
3 commitments achieve their intended purpose, we will
4 continue to work with impacted communities,
5 stakeholders, and Baffinland to ensure marine and
6 freshwater concerns are addressed through mitigation
7 measures, monitoring programs, adaptive management
8 measures, and offsetting as required. Last slide,
9 please.

10 We would like to thank the many scientists who
11 have provided their expertise and advice to us
12 throughout this process, and we'd like to thank the
13 Board, Elders, community members, and intervenors for
14 the opportunity for us to share this information.

15 We look forward to addressing your questions and
16 to continuing to work together in the future. We'd
17 also like to thank the interpreters for their patience
18 with us, hard work, and expertise. This concludes our
19 presentation. Qujannamiik. Thank you.

20 THE CHAIR: It is now 3:25. Let's take a
21 15-minute break before we go to the next presentation.

22 (ADJOURNMENT)

23 THE CHAIR: Welcome back, everyone.
24 Welcome back.

25 The next presentation, from Health Canada.

26 Legal counsel, can you please affirm the

1 individuals who will be presenting evidence and anyone
2 who could be providing answers to questions during the
3 community roundtable. Legal counsel.

4 MS. MEADOWS: Thank you, Madam Chair.
5 Teresa Meadows, legal counsel for the Nunavut Impact
6 Review Board.

7 Madam Chair, so I have the following three people
8 for Health Canada, Matthew Gale, Wendy Wilson, Kathleen
9 Buset, and I will administer the affirmation, and if
10 the parties can state their name and indicate that they
11 affirm.

12 MATTHEW GALE, WENDY WILSON, KATHLEEN Buset, Affirmed

13 THE CHAIR: Legal counsel, can you please
14 advise regarding any exhibits that will be filed on the
15 public hearing record for this intervenor. Legal
16 counsel.

17 MS. MEADOWS: Thank you, Madam Chair.
18 Teresa Meadows, legal counsel for the Nunavut Impact
19 Review Board.

20 So, Madam Chair, I have two PowerPoint
21 presentations, hard copies, that Health Canada proposes
22 to present in this session, and I will be marking those
23 as the next two exhibits in the public hearing. One
24 version is in English, and one version is in Inuktitut.
25 Thank you, Madam Chair.

26 EXHIBIT 52 - Mary River Phase 2, final

1 hearing presentation, Health Canada (English)

2 EXHIBIT 53 - Mary River Phase 2, final

3 hearing presentation, Health Canada

4 (Inuktitut)

5 THE CHAIR: Health Canada, Matthew Gale.

6 Presentation by Health Canada Regarding Baffinland Iron

7 Mines Corporation Phase 2 Development Proposal

8 MR. GALE: Qujannamiik, Madam Chair.

9 Matthew Gale, Health Canada.

10 I believe we had presented a prerecorded
11 presentation, but if it's all right with the Board, I
12 can just read off our PowerPoints, if the Board could
13 advise, that would be great. Thank you.

14 THE CHAIR: NIRB staff.

15 MS. COSTELLO: Thank you, Madam Chair, Karen
16 Costello, Nunavut Impact Review Board staff.

17 Madam Chair, I would suggest we invite Health
18 Canada to introduce their presentation, and then the --
19 it has -- it is with our technicians, and it is ready
20 for playing. Thank you, Madam Chair.

21 THE CHAIR: Health Canada, Matthew Gale.

22 MR. GALE: Qujannamiik, Madam Chair.

23 Matthew Gale, Health Canada, acting regional manager
24 for the environmental health program.

25 We -- Health Canada is going to present today our
26 work on the Mary River Phase 2 proposal under the view

1 of the Nunavut Impact Review Board.

2 I'm joined today by my colleagues Kathleen Buset,
3 manager of the impact assessment program in Ottawa;
4 Thien-Thanh Nguyen, indigenous engagement specialist;
5 and Wendy Wilson, environmental assessment coordinator.
6 And we'll be presenting on the nature of Health
7 Canada's review in areas of expertise for this project.
8 Thank you.

9 Video Played

10 MS. ROBERGE: Good day, Chair, members of
11 the board, Elders, residents in the audience, and all
12 other hearing participants. Thank you for having
13 Health Canada at the hearing for the Mary River Phase 2
14 Project.

15 My name is Chantal Roberge. I am the national
16 director of the environmental health programs for
17 Health Canada. I am joined today by several Health
18 Canada colleagues: Matthew Gale, acting regional
19 manager for the environmental health program in
20 Winnipeg; Kathleen Buset, manager of the impact
21 assessment program in Ottawa; Thien-Thanh Nguyen,
22 indigenous engagement specialist; and Wendy Wilson,
23 environmental assessment coordinator.

24 I will be presenting information on the nature of
25 Health Canada's review in areas of expertise for this
26 project.

1 This presentation will cover Health Canada's
2 mandate on environmental assessments. I will present
3 Health Canada's areas of expertise relevant to this
4 environmental assessment process. Health Canada's
5 comments focused on the project's potential risk to
6 human health. This included potential health risk due
7 to changes in air quality, contaminants in country
8 foods, water quality, and noise. For each topic area,
9 I will present an overview of Health Canada's review
10 and recommendations.

11 Baffinland has addressed all Health Canada's
12 issues before this hearing. The updated commitment
13 list of the Nunavut Impact Review Board's registry
14 reflect this.

15 Health Canada's mandate. Health Canada is
16 responsible for helping Canadians maintain and improve
17 their health. For environmental assessments, Health
18 Canada provides expert information and knowledge of
19 proposed projects' impacts on human health and makes
20 recommendations to reduce the risk for these projects.

21 In general, Health Canada provides comments on
22 whether the conclusion around human health effects are
23 accurate, scientifically valid, and complete.

24 Baffinland's actions to help mitigate the health
25 impacts of the project are suitable. The proposed
26 follow-up action or programs to help reduce risk to

1 human health are appropriate.

2 Limitations to Health Canada's review. When
3 reviewing environmental assessments, Health Canada does
4 not review Baffinland's modelling methods. Other
5 departments such as Environment and Climate Change
6 Canada have this expertise. Health Canada assumes that
7 the modelling yields correct results.

8 I would like to emphasis that Health Canada is not
9 a decision-maker or a regulator of this project. The
10 department does not issue any licences, permits, or
11 authorizations for this project. Lastly, Health Canada
12 does not offer comments on occupational health or
13 socio-economic impacts on environment assessment.

14 Throughout the environment assess -- the
15 environmental assessment, Health Canada reviewed human
16 health information in submitted documents. This
17 included reviewing Baffinland's responses to
18 information requests and technical comments. The areas
19 for which we considered potential impacts that we
20 reviewed include the project's predicted on air
21 quality, country foods, water quality, and noise.

22 The next slides are on air quality issues. They
23 summarized Health Canada's review and recommendations.
24 Please note that Baffinland has addressed these issues
25 prior to this hearing. Impacts to air quality
26 described in the proposal have the potential to

1 negatively affect land users in the area. Health
2 Canada acknowledges the importance of incorporating
3 appropriate mitigations for gaseous emissions such as
4 exhaust that can impact human health.

5 Several air pollutants are known to be
6 non-threshold in their effects. This means that health
7 effects may occur at any level or exposure. Fine
8 particulate matter known as PM2.5 and nitrogen dioxide
9 or NO2 are two key pollutants associated with the
10 project and for which health effects may occur at all
11 levels. Fine particulate matter is particles that have
12 a diameter less than 2.5 micrometres which are more
13 than a hundred times thinner than human hair.

14 Nitrogen dioxide is a gas that is part of everyday
15 engine exhaust. Canadian ambient air quality standards
16 have been established nationally to manage the health
17 and environmental risk of key pollutants, including
18 nitrogen dioxide and fine particulate matter.

19 Baffinland has presented calculated emissions
20 inventories to Environment and Climate Change Canada,
21 ECCC, as a memo document for ECCC RR3.11. The document
22 shows that predictions for nitrogen dioxide are higher
23 than those presented in the earlier documents.
24 Nitrogen dioxide concentrations in air are predicted to
25 be higher than the Canadian ambient air quality
26 standards over a large area.

1 Based on the analysis provided in response to
2 Technical Document ECCC 3.11, the highest emitters are
3 the power plant generators. Fine particulate matter is
4 also expected to be released by shipping vessel or
5 boats in areas close to communities while moving and --
6 and idling. Therefore, air quality will be degraded,
7 which could impact human health. A reduction in fine
8 particulate matter levels would reduce potential risk
9 to human health.

10 Health Canada is of the view that air quality
11 should be monitored to verify the accuracy of the air
12 modelling and reported through the Nunavut Impact
13 Review Board for transparency.

14 Health Canada summary of recommendation. Health
15 Canada recommended that Baffinland investigate measures
16 to further reduce and mitigate nitrogen dioxide, fine
17 particulate matter, and other common air pollutants to
18 protect human health. Measures may include
19 implementations of Tier 4 engines for all site
20 vehicles, investigate additional measures to reduce
21 emissions from highest emitters of nitrogen dioxide,
22 and additional measures to mitigate the air pollutant
23 emissions associated with project-related shipping.

24 Baffinland explained how they will address Health
25 Canada's recommendation in the air quality and noise
26 abatement management plan and in the climate change

1 strategy. Health Canada is satisfied with this
2 response and considers this matter resolved.

3 Air -- air quality nitrogen dioxide monitoring.
4 Baffinland's models predict that air quality at certain
5 sites for nitrogen dioxide will be greater than the
6 Canadian ambient air quality standards.

7 The local community members such as the hunter and
8 trapper organization use these sites. The way the
9 Canadian ambient air -- ambient air quality standards
10 are written considers that health effects may occur
11 below the level of the standard. Baffinland should,
12 therefore, try to reduce population and individual
13 exposure by aiming for the lowest air pollutant
14 concentrations.

15 Monitoring and consistent reporting of data allows
16 for valid comparison with existing standards and
17 guidelines such as the Canadian ambient air quality
18 standards and the Nunavut ambient air guidelines. This
19 comparison is important in verifying environmental
20 assessment predictions on human health.

21 Health Canada summary of recommendation.
22 Baffinland has committed to using the existing
23 continuous air quality monitors on-site. This will
24 validate the predictions of nitrogen dioxide and other
25 air quality contaminants in the environment impact
26 statement. If incidents beyond those predicted in the

1 environmental impact statement occur, Baffinland has
2 committed to updating the human health risk assessment
3 in the annual report. Based on this commitment, Health
4 Canada has no outstanding concerns of this matter.

5 Resolved topics of concern. I will now summarize
6 the air quality issues raised by Health Canada and
7 resolved during the environmental assessment review
8 process. Health Canada asked for a human health
9 assessment for each contaminant that may be emitted in
10 air during all phases of the project, including
11 polycyclic aromatic hydrocarbons, PAH; volatile organic
12 compounds, VOC; fine particulate matter, PM.25; and
13 diesel particulate matter, DPM.

14 Health Canada also requested more modelling and
15 rationale on why certain emissions were not of concern.
16 Baffinland provided this information to Health Canada.
17 Health Canada has no outstanding concerns on this
18 matter. Health Canada also requested information about
19 various contaminants associated with dust fall and
20 potential impacts on people by breathing in dust.
21 Baffinland provided detailed information reports, and
22 Health Canada has no outstanding concerns on this
23 matter.

24 Air quality. Under topic of non-terrestrial air
25 pollutants such as nitrogen dioxide and fine
26 particulate matter, Health Canada investigated a

1 potential risk to human health under multiple
2 information requests. Baffinland provided extensive
3 information related to these requests. Health Canada
4 notes that health risks exist even below standards and
5 objectives of these pollutant. Health Canada suggested
6 that Baffinland identify additional mitigation measures
7 to reduce predicted incidents and increase additional
8 monitoring and reporting measures to verify that the
9 predictions are accurate.

10 These concerns are addressed through Baffinland's
11 commitment to verifying model predicted air pollutant
12 levels using continuous air quality monitoring. Health
13 Canada also raised questions related to access to the
14 project development area and further consideration of
15 air quality effects at the hunter and trapper
16 organization cabins. Baffinland responded with site
17 access procedures and air quality assessment. Health
18 Canada has no outstanding concerns on this matter.

19 Country foods monitoring. The next slides
20 summarize Health Canada's review and recommendation on
21 country food issues. Baffinland's human health risk
22 assessment looked at two scenarios. The first scenario
23 examines the current environmental conditions without
24 the Phase 2 project while the second scenario examines
25 the current environmental conditions with the addition
26 of Phase 2 project. Results show -- show that there

1 are elevated levels of cadmium, methylmercury, and
2 inorganic mercury in the first scenario. The Phase 2
3 project is not expected to significantly increase these
4 contaminants.

5 At the request of Health Canada, Baffinland
6 refined its human health risk assessment. The
7 conclusion states that Phase 2 impacts will be minimal.
8 Baffinland has committed to monitoring programs for
9 contaminants of potential concern. Health Canada
10 supports this initiative. The monitoring programs for
11 Phase 2 will include all layers of the environment.
12 The programs will provide information to address risk
13 associated with the elevated baseline as well as the
14 project.

15 During Phase 2, the human health risk assessment
16 will be updated with new monitoring data if contaminant
17 concentrations increase. If appropriate, the
18 monitoring programs should be extended to include
19 relevant country foods. Health Canada will review the
20 updated information and provide advice upon request.

21 Health Canada raised concerns around country foods
22 during different phases of the project. Since filing
23 Health Canada's final written submission in 2019,
24 Baffinland has committed to continuing to monitor
25 contaminants of potential concern and has committed to
26 updating the relevant management plans such as the air

1 quality and noise abatement management plan. Should
2 measured concentrations of contaminants not follow
3 predictions, Baffinland will take steps to support the
4 potential health risk being adequately captured and
5 assessed. Given Baffinland's response, Health Canada
6 has no outstanding concerns in this regard.

7 Water quality. I will now present topics of
8 potential concern related to water quality and noise
9 that were raised by Health Canada and have since been
10 resolved. With respect to water quality, Health Canada
11 requested a drinking water assessment and commitments
12 surrounding the issue of drinking surface waters.

13 Based on the information provided in the drinking
14 water assessment, the project is not expected to
15 contribute to significant loading of metals into the
16 camp lake. The levels of metals are projected to
17 remain within the Canadian drinking water quality
18 guidelines.

19 Baffinland committed to revisiting the drinking
20 water assessment if Baffinland, ECCC, or the Government
21 of Nunavut identifies that dust fall levels are
22 significantly higher than predicted or if any other
23 body of water is identified as an important drinking
24 water source to Inuit, land users, or the camp lake --
25 other than camp lake. Sorry. Health Canada has no
26 outstanding concerns related to water quality. Upon

1 request, Health Canada will review the updated
2 information and provide its advice.

3 Finally, with respect to noise, throughout the
4 process, Health Canada requested information related to
5 noise impacts on land users in the area of the project.
6 The questions from Health Canada related to different
7 noise factors which were applied in the models.
8 Baffinland provided further information to clarify
9 their position and incorporated an appropriate noise
10 complaints resolution procedure. Health Canada has no
11 outstanding concerns related to noise. Thank you for
12 your time today.

13 THE CHAIR: On to the next presentation
14 from Transport Canada. Legal counsel, can you please
15 affirm the individuals who will be presenting evidence
16 and anyone who could be providing answers to questions
17 during the community roundtable. Legal counsel.

18 MS. MEADOWS: Madam Chair, I think we've
19 skipped over a couple of presenters. Next up in the
20 agenda is Natural Resources Canada.

21 THE CHAIR: Okay. Natural Resources
22 Canada, legal counsel.

23 MS. MEADOWS: Thank you, Madam Chair. So I
24 have two parties that need to be affirmed. Rob
25 Johnstone and Peter Unger, and I will administer the
26 affirmation.

1 ROBERT JOHNSTONE, PETER UNGER, Affirmed

2 THE CHAIR: Legal counsel, can you please
3 advise regarding any exhibits that will be filed on the
4 public hearing record for this intervenor. Legal
5 counsel.

6 MS. MEADOWS: Thank you, Madam Chair.

7 Teresa Meadows, legal counsel for the Nunavut Impact
8 Review Board.

9 Madam Chair, I have two additional exhibits to
10 file in advance of this presentation consisting of the
11 PowerPoint presentation materials of Natural Resources
12 Canada, and one version is in English, and one is in
13 Inuktitut, and those will be the next two exhibits in
14 the public hearing. Thank you, Madam Chair.

15 EXHIBIT 54 - Natural Resources Canada's final
16 hearing presentation: Baffinland Iron Mines
17 Corporation's Phase 2 Development Proposal
18 (English)

19 EXHIBIT 55 - Natural Resources Canada's final
20 hearing presentation: Baffinland Iron Mines
21 Corporation's Phase 2 Development Proposal
22 (Inuktitut)

23 THE CHAIR: Natural Resources Canada,
24 Peter Unger.

25 Presentation by Natural Resources Canada Regarding
26 Baffinland Iron Mines Corporation Phase 2 Development

1 Proposal

2 MR. UNGER: Thank you, Madam Chair.

3 There we go. Good afternoon. My name is Peter
4 Unger, and I work in the environmental assessment
5 division at Natural Resources Canada. I am joined here
6 with my colleague Rob Johnstone, who is the deputy
7 director of the explosives safety and security branch
8 in the lands and mineral sector at Natural Resources
9 Canada also known as NRCan. Next slide, please.

10 Natural Resources Canada is a federal government
11 department that works to improve the competitiveness of
12 the natural resource sectors and grow their
13 contribution to Canada's economy. The department
14 supports the sustainable development of Canada's
15 resources in a manner that advances Canada's global
16 standing as a leader on the environment.

17 NRCan applies its knowledge and expertise of
18 Canada's land mass to support the safety and security
19 of citizens in laboratories and offices from coast to
20 coast to coast. NRCan leads science and technology in
21 the fields of earth sciences, energy, forests,
22 minerals, and metals. NRCan develops policies and
23 programs to enhance the contribution of the natural
24 resources sector to the economy and improve the quality
25 of life for all Canadians. Next slide, please.

26 There we go. So specific to this project, NRCan

1 had two roles. One was to provide expert advice in the
2 field of permafrost and terrain stability as it relates
3 to the northern railway corridor for the Phase 2
4 development. This advice has been provided by the
5 Geological Survey of Canada.

6 The second role is our administration of the
7 Explosives Act, which is what makes us a regulatory
8 authority under the Nunavut Project Planning and
9 Assessment Act for this project. Next slide, please.

10 NRCan issues licences for the storage and
11 manufacturing of explosives under Section 7.1 of the
12 Explosives Act. To be clear, NRCan does not issue any
13 permits related to the use of explosives.

14 An emulsion plant currently operates at the Mary
15 River mine, and there are some photos of it here under
16 a factory licence issued to the mine's explosives
17 supplier. For the Phase 2 development proposal, it is
18 anticipated that licences will be required for
19 explosive magazines situated at three storage areas
20 along the tote road together with a new factory licence
21 for a second emulsion plant to be constructed north of
22 the waste rock pile. Next slide, please.

23 Moving on to our technical review. We provided
24 expert advice on permafrost and terrain stability.
25 Information on terrain and permafrost conditions is
26 essential to adequately design project components to

1 ensure they perform as intended. In particular,
2 knowledge of ground ice conditions is required to
3 assess terrain stability and determine if thawing of
4 permafrost due to project activities will have an
5 impact on ground stability and performance of
6 structures such as the northern railway. We
7 specifically looked at three issues here. These are
8 the baseline conditions for permafrost and ground ice,
9 the thermal analysis, and the modelling, and the timing
10 of the installation of the instruments that would
11 gather the data for the first two I just mentioned.
12 Next slide, please.

13 So these photos are not of the Mary River mine
14 site or of anywhere near it. These are in Nunavut, and
15 these are photos of retrogressive thaw slumps, and
16 these are just to give a visual representation of the
17 permafrost degradation that we would be concerned
18 about.

19 NRCan initially recommended larger scale detailed
20 terrain analysis as well as the installation of
21 instrumentation to measure ground temperature and
22 improve characterization of the ground thermal regime.
23 This instrumentation was recommended to be installed
24 prior to construction to provide baseline data and
25 support the final design.

26 Baffinland responded that additional areas will be

1 mapped, and instrumentation would be installed during
2 preliminary drilling programs. NRCan is satisfied with
3 this approach and recommends that Baffinland implement
4 the plans outlined in their responses to NRCan. Next
5 slide, please.

6 So, again, these are just examples. These are not
7 anywhere near the Mary River site. These are in
8 northern Manitoba. They're just examples of why
9 permafrost conditions are important to constructing a
10 rail line, and these are examples of damage that could
11 happen due to permafrost degradation.

12 NRCan also initially recommended thermal analysis
13 and modelling, including two-dimensional thermal
14 modelling with an accompanying monitoring program that
15 includes ongoing measurement of ground temperatures and
16 changes in surface elevation to support the detailed
17 design of the railway embankments.

18 In response to the proponent's provision of more
19 detailed information related to their thermal analysis
20 and modelling, Natural Resources Canada recommended
21 continued refinement of the thermal creep and stability
22 analysis and the development of monitoring programs
23 through the incorporation of new information collected.

24 NRCan also recommended incorporating the effects
25 of local factors. These could be things like snow
26 accumulation or water bodies into the 2D thermal

1 modelling and the establishment of instrumented sites
2 prior to construction. The proponent agreed to these
3 recommendations and provided additional information,
4 and NRCan agrees with the approach proposed by the
5 proponent at this stage. Next slide, please.

6 You've also seen this map a number of times
7 before, but for reference, the grey line is the tote
8 road, and the red line is the rail corridor. And NRCan
9 also recommended that the mapping program be conducted
10 in areas where the railway deviates from the road.
11 Baffinland agreed with this recommendation, and NRCan
12 is satisfied with this approach. Next slide, please.

13 So this slide just shows some examples of the data
14 collection methods we have asked for. Again, to be
15 clear, these are not at the Mary River site, and these
16 are just examples. Two of them are from NRCan work,
17 and the picture of the thermistor, which is one of the
18 instruments we recommended for measuring ground
19 temperature, is provided by the smart ice program. I
20 should also mention that the pictures of the permafrost
21 degradation earlier were from Melissa Ward, a
22 researcher at McGill University who also gave me
23 permission to use them.

24 So in summary, NRCan's recommendations were to
25 conduct the mapping program in areas where the railway
26 corridor deviates from the road, to conduct the

1 predrilling and drilling programs described in
2 Baffinland's responses to our information requests.
3 These would be to establish baseline conditions along
4 the corridor prior to construction and to obtain
5 additional subsurface data to support design, to
6 install thermistors, such as the one pictured here,
7 during the predrilling programs to establish baseline
8 conditions along the corridor prior to construction and
9 to establish instrumentation as outlined in their
10 responses prior to and during construction, to
11 implement the recommendations made by Hatch to
12 accommodate the 30-year design life, including those
13 related to pile length embedment and the number of
14 piles required for foundations, to continue to refine
15 the thermal stability and creep analysis incorporating
16 new data collected during geotechnical investigations
17 and from the instrumentation along the railway
18 corridor, and to consider local factors such as snow
19 accumulation or water bodies in the 2D thermal
20 modelling to support the final design of the
21 embankments and bridges.

22 Baffinland has agreed to these recommendations and
23 has made commitments to implement them. Natural
24 Resources Canada is satisfied with this approach for
25 this stage of the project. Thank you very much for the
26 opportunity to speak, and a special thank you to the

1 interpreters who never cease to amaze me with their
2 endurance. Thank you very much. Qujannamiik.

3 THE CHAIR: Okay. On to the next
4 presentation from Transport Canada. Legal counsel, can
5 you please affirm the individuals who will be
6 presenting evidence and also anyone who may be
7 answering questions during the community roundtable.

8 MS. MEADOWS: Thank you, Madam Chair.
9 Teresa Meadows, legal counsel for the Nunavut Impact
10 Review Board.

11 Madam Chair, I believe Parks Canada is the next
12 presentation. Madam Chair, I have listed the following
13 people who require affirmation before their
14 presentation: Jacquie Bastick, Allison Stoddart, Jenna
15 Boon, Laurent Jonart, Jane Chisholm, and Andrew Maher.

16 THE CHAIR: Allison Stoddart.

17 JACQUIE BASTICK, ALLISON STODDART, Affirmed

18 THE CHAIR: Legal counsel, can you please
19 advise regarding any exhibits that will be filed on the
20 public hearing record for this intervenor. Legal
21 counsel.

22 MS. MEADOWS: Thank you, Madam Chair.
23 Teresa Meadows, legal counsel for the Nunavut Impact
24 Review Board.

25 Madam Chair, I have three hard copy presentation
26 materials to file as the next three exhibits in this

1 public hearing consisting of the English, French, and
2 Inuktitut versions of this presentation, and those are
3 my procedural matters. Thank you, Madam Chair.

4 EXHIBIT 56 - Parks Canada presentation, Mary
5 River Phase 2 Development, public hearing
6 January 25 - February 6, 2021 (English)

7 EXHIBIT 57 - Parks Canada presentation, Mary
8 River Phase 2 Development, public hearing
9 January 25 - February 6, 2021 (Inuktitut)

10 EXHIBIT 58 - Parks Canada presentation, Mary
11 River Phase 2 Development, public hearing
12 January 25 - February 6, 2021 (French)

13 THE CHAIR: Parks Canada, Allison
14 Stoddart.

15 Presentation by Parks Canada Regarding Baffinland Iron
16 Mines Corporation Phase 2 Development Proposal

17 MS. STODDART: Qujannamiik, Madam Chair. My
18 name is Allison Stoddart, and I'm an environmental
19 assessment specialist with Parks Canada.

20 I would like to thank the Nunavut Impact Review
21 Board and staff for organizing these hearing sessions,
22 and I would like to thank the community of Pond Inlet
23 for virtually hosting all of us.

24 I will start off Park Canada's presentation with
25 several slides explaining why we are involved in this
26 process. I'd particularly like to highlight this

1 aspect of our presentation in response to Baffinland's
2 contention in their October 15th, 2019, final written
3 comment responses where they indicate that it is
4 reasonable to request that the Nunavut Impact Review
5 Board view Parks Canada's submissions as a reiteration
6 of the Department of Fisheries and Oceans submission
7 and not a separate and distinct set of recommendations.

8 Though we are not yet a regulator for this
9 project, Parks Canada is a federal authority that
10 provides expert advice on the management of protected
11 areas. This is relevant to this process as the
12 shipping component of Baffinland's Phase 2 proposal is
13 located beside Sirmilik National Park and within the
14 proposed Tallurutiup Imanga National Marine
15 Conservation Area, which I will refer to as "TINMCA"
16 moving forward in this presentation.

17 We would like to highlight that the federal
18 government endeavours as much as possible to work as a
19 team in terms of sharing and building on expertise and
20 reducing duplication. Therefore, from the beginning of
21 the Mary River review, Parks Canada has worked closely
22 with other federal departments with overlapping
23 mandates. Next slide.

24 This map shows the geographic context for Parks
25 Canada's involvement in the project's review. Sirmilik
26 National Park, which includes the three parcels

1 engrained at the tip of Baffinland and the boundary for
2 TINMCA in light blue at the centre area of the map.

3 THE CHAIR: Allison Stoddart. Can you --

4 MS. STODDART: Yeah?

5 THE CHAIR: Can you please refrain from
6 using abbreviations and just refer to it as Tallurutiup
7 Imanga for the interpreter.

8 MS. STODDART: Yes. Qujannamiik, Madam
9 Chair.

10 THE CHAIR: Okay. Thank you. You may
11 proceed.

12 MS. STODDART: The boundary for Tallurutiup
13 Imanga National Marine Conservation Area is in light
14 blue at the centre area of the map. Note that that
15 Tallurutiup Imanga National Marine Conservation Area
16 includes the waters of Navy Board Inlet, Pond Inlet,
17 Eclipse Sound, and Milne Inlet.

18 The northern shipping route for Baffinland's
19 Phase 2 proposal traverses Milne Inlet and Eclipse
20 Sound, which is within Tallurutiup Imanga Natural
21 Marine Conservation Area and adjacent to Sirmilik
22 National Park. We would also like to note that the
23 waters at the head of Milne Inlet, including Milne
24 Port, are excluded from the boundary of Tallurutiup
25 Imanga National Marine Conservation Area. Next slide.

26 Parks Canada has a broad integrated mandate to

1 manage for ecological integrity, cultural resource
2 management, traditional use, and visitor experience
3 within its protected area. Next slide.

4 Sirmilik National Park is cooperatively managed by
5 Inuit and Parks Canada in accordance with the Nunavut
6 Agreement, the Inuit Impact and Benefit Agreement for
7 Auyuittuq, Quttinirpaaq, and Sirmilik National Parks
8 and the Canada National Parks Act. Next slide.

9 The purpose of Sirmilik National Park is
10 identified in the Inuit -- Inuit Impact and Benefit
11 Agreement for Auyuittuq, Quttinirpaaq, and Sirmilik --
12 Sirmilik National Parks. Key elements include
13 respecting the special relationship between Inuit and
14 the area, ensuring the long-term protection of the
15 migratory bird population and their habitat in the
16 park, and encouraging public understanding,
17 appreciation, and enjoyment of the park, including the
18 special relationship of Inuit to this area so as to
19 leave the park unimpaired for future generations. Next
20 slide.

21 Tallurutiup Imanga National Marine Conservation
22 Area is cooperatively managed by Inuit represented by
23 the Qikiqtani Inuit Association and the Government of
24 Canada represented by Parks Canada, the Department of
25 Fisheries and Oceans, and Transport Canada. The Canada
26 National Marine Conservation Areas Act and the

1 Tallurutiup Imanga Inuit Impact Benefit Agreement as
2 well as existing legislation such as the Fisheries Act
3 and the Canada Shipping Act provides a foundation for
4 the cooperative framework under which Tallurutiup
5 Imanga National Marine Conservation Area is managed.

6 The Tallurutiup Imanga Inuit Impact Benefit
7 Agreement was signed by the Qikiqtani Inuit
8 Association, Transport Canada, the Department of
9 Fisheries and Oceans, and Parks Canada on August 1st,
10 2019.

11 This Inuit Impact Benefit Agreement stipulates
12 that the management of Tallurutiup Imanga National
13 Marine Conservation Area be consistent with the Canada
14 National Marine Conservation Areas Act. The
15 Tallurutiup Imanga Inuit Impact Benefit Agreement
16 includes Inuit stewardship to governance and
17 programming and the importance of Inuit
18 Qaujimajatuqangit in decision-making.

19 For example, the Inuit Impact Benefit Agreement
20 prescribes a cooperative management approach requiring
21 the Qikiqtani Inuit Association and the Government of
22 Canada to work closely to make reasonable efforts to
23 reach consensus on how Tallurutiup Imanga National
24 Marine Conservation Area will be managed and operated.

25 The Inuit Impact Benefit Agreement establishes
26 Aulattigatigiit Board which includes representatives

1 from the Qikiqtani Inuit Association and the Government
2 of Canada and is tasked with examining all steps,
3 decisions, initiatives, and undertakings relating to
4 the planning, operation, and management of Tallurutiup
5 Imanga national conservation area.

6 Among the matters to be addressed by this board is
7 the development of recommendations to responsible
8 authorities with respect to marine shipping activities
9 within Tallurutiup Imanga National Marine Conservation
10 Area.

11 One of the overarching themes of Tallurutiup
12 Imanga Inuit Impact Benefit Agreement is that of Inuit
13 relationships with the environment. It indicates that
14 the cultural values and identities of Inuit of
15 Tallurutiup Imanga and the Qikiqtani region are
16 intrinsically connected with the Arctic marine
17 environment and wildlife. Next slide.

18 The purpose of Tallurutiup Imanga National Marine
19 Conservation Area is the protection and conservation of
20 this representative marine area and the preservation of
21 Inuit cultural practices, expression, and customs and
22 to secure socio-economic benefits for Inuit.

23 Tallurutiup Imanga National Marine Conservation
24 Area was selected by a steering committee composed of
25 Parks Canada, the Government of Nunavut, and the
26 Qikiqtani Inuit Association to represent the diversity

1 of the Lancaster Sound marine region, to protect the
2 natural and cultural values of the area as an intact
3 ecosystem, and to respond to the views and aspirations
4 of Inuit communities who depend on the ecosystem.

5 Tallurutiup Imanga National Marine Conservation
6 Area is internationally recognized as a significant
7 ecological area. It is one of the most productive
8 marine environments in the Arctic Ocean. It is a major
9 east-west migratory corridor leading from Baffin Bay
10 into the Arctic archipelago linking wintering and
11 summering areas. It provides essential habitat for
12 marine mammals and seabirds. For example, it provides
13 essential habitat for up to 75 percent of the global
14 population of narwhal, 20 percent of the Canadian
15 beluga population, the largest subpopulation of polar
16 bears in Canada, and some of the largest seabird
17 colonies in the Canadian Arctic.

18 Finally, it helps to preserve the way of life and
19 traditions of Inuit through protection of the marine
20 environment and marine wildlife food sources. Next
21 slide.

22 The following key management principles -- sorry.
23 The following are key management principles within
24 Tallurutiup Imanga National Marine Conservation Area.
25 Tallurutiup Imanga will be managed and used in a
26 sustainable manner without compromising the structure

1 and function of the ecosystem. The precautionary
2 principle and ecosystem management principles will be a
3 primary consideration and management will incorporate
4 traditional ecological knowledge and the involvement of
5 affected indigenous organizations and government. Next
6 slide.

7 When determining the significance of an impact,
8 the Nunavut Impact Review Board must take into
9 consideration a number of factors under Section 90 of
10 the Nunavut Planning and Project Assessment Act. This
11 list includes (j), which indicates that: (as read)

12 The Board can consider any other factor
13 relevant to the assessment of the
14 significance of impacts.

15 Consequently, Parks Canada has recommended to the
16 Nunavut Impact Review Board that the protected area
17 context and importance as described in the preceding
18 slides be strongly considered as a factor when making
19 their determination of significance. Next slide.

20 The Tallurutiup Imanga Inuit Impact Benefit
21 Agreement indicates that the primary considerations in
22 the development and modification of management plans
23 for Tallurutiup Imanga National Marine Conservation
24 Area will be the precautionary principle and principles
25 of ecosystem management.

26 The Canada National Marine Conservation Areas Act

1 indicates that where there are threats of environmental
2 damage, lack of scientific certainty is not used as a
3 reason for postponing preventative measures. Next
4 slide.

5 THE CHAIR: Please slow down for the
6 interpreter.

7 MS. STODDART: Protected areas are
8 established to represent a specific area and its
9 attributes. Tallurutiup Imanga National Marine
10 Conservation Area represents a natural and cultural
11 seascape that is one of the most significant ecological
12 areas in the world providing important habitat for
13 species such as polar bear, bowhead whale, narwhal, and
14 beluga. For Inuit living in the communities of
15 Tallurutiup Imanga, it is a home rich in culture and
16 wildlife. A precautionary principle in the context of
17 a protected area should particularly apply to these
18 attributes. Next slide.

19 The following slides provide an overview of Parks
20 Canada's issues from our final written submission. Our
21 first comment from our final written submission
22 concerns the understanding at the time that Baffinland
23 was proposing an alternate shipping route to the
24 Northwest Passage. Parks Canada considers this issue
25 resolved by Baffinland's September 20th letter to the
26 Nunavut Impact Review Board in which they clarified

1 their intent to not use the Navy Board Inlet Northwest
2 Passage route under the Phase 2 project proposal. Next
3 slide.

4 Our second comment from our final written
5 submission has to do with the functioning of the Marine
6 Environmental Working Group. Under the existing terms
7 of reference for the Marine Environmental Working
8 Group, mechanisms for the provision and implementation
9 of recommendations are unclear. Parks Canada
10 recognizes that much work has been undertaken to revise
11 the terms of reference and thanks all parties,
12 including Baffinland, for their hard work to date on
13 this. Next slide.

14 Parks Canada believes that outstanding concerns
15 with the Marine Environmental Working Group must be
16 resolved before Phase 2 operations begin. Many of the
17 established and proposed commitments for Phase 2 rely
18 on review and recommendations from the Marine
19 Environmental Working Group.

20 There's currently no mechanism and accountability
21 for the implementation of recommendations provided by
22 the Marine Environmental Working Group. Parks Canada
23 is currently working with Marine Environmental Working
24 Group members to revise the terms of reference in an
25 attempt to improve how the Marine Environmental Working
26 Group is organized, reviews materials, and makes

1 recommendations.

2 If the Marine Environmental Working Group was able
3 to successfully evaluate the marine monitoring program
4 and results for both western science and IQ and its
5 robust recommendations were applied, this would be an
6 important component of successful adaptive management.
7 Next slide.

8 Our third comment from our final written
9 submission refers to the issue of ballast water and
10 hull biofouling. The projected increase in project
11 shipping for Phase 2 will make Milne Port the fourth
12 largest port in Canada in terms of ballast water
13 discharge volumes. Ballast water release and hull
14 biofouling of vessels has high potential to introduce
15 non-indigenous species and aquatic invasive species
16 into Tallurutiup Imanga National Marine Conservation
17 Area. In a worst-case scenario, there is a potential
18 that aquatic invasive species could spread through and
19 impact the entire national marine conservation area and
20 alter the ecosystem. Next slide.

21 Parks Canada has worked with other federal
22 departments, the Qikiqtani Inuit Association, and
23 Baffinland to develop commitments related to ballast
24 water management and hull biofouling. Parks Canada
25 supports the commitment between Baffinland, the
26 Department of Fisheries and Oceans, and Transport

1 Canada to address outstanding concerns related to
2 ballast water management and hull biofouling. These
3 commitments provide best efforts of mitigation and
4 robust adaptive management.

5 However, it is important to note that
6 uncertainties do remain regarding the potential for
7 impacts from ballast water. Ballast water release and
8 biofouling of vessels has high potential to introduce
9 non-indigenous species and aquatic invasive species.
10 It is difficult to determine the magnitude of impacts
11 associated with this as some species may have few
12 effects while other species could transform ecosystems.

13 The reversibility of the introduction of aquatic
14 invasive species is likely low due to their
15 survivability. Effective and appropriate monitoring
16 plans are critical to assess the risk of management
17 strategies proposed for ballast water and biofouling
18 management. Next slide.

19 Finally, our fourth comment from our final written
20 submission speaks to the effect to marine mammals from
21 increased shipping and icebreaking. Tallurutiup Imanga
22 National Marine Conservation Area is an area that has
23 been used for generations by Inuit. It represents a
24 natural and cultural seascape and provides important
25 habitat for species such as bowhead whales, narwhal,
26 and beluga. Shipping traffic, noise, and icebreaking

1 has the potential to cause mortality, interrupt marine
2 mammal communication, misplace individuals, and change
3 feeding behaviour. Next slide.

4 Parks Canada has worked with other federal
5 departments, the Qikiqtani Inuit Association, and
6 Baffinland to develop commitments related to managing
7 impacts on marine mammals. Parks Canada supports DFO's
8 proposed commitments related to the management of
9 impacts of marine mammals noting -- and considers this
10 issue resolved, noting that by this we mean a path
11 forward has been identified to adaptively manage this
12 issue.

13 We also note that uncertainties remain regarding
14 these impacts and their extent cannot be defined.
15 Overall impacts on marine mammals could range from
16 shift in behaviour, abandonment of Milne Inlet, the
17 population level impacts. Given that narwhal are such
18 an important species to the reason for designating this
19 area a national marine conservation area, if the most
20 serious of these impacts occurred, they would be
21 contrary to the purposes of establishing Tallurutiup
22 Imanga National Marine Conservation Area.

23 Therefore, if the project is approved, Parks
24 Canada recommends a precautionary approach be taken to
25 reduce potential impacts from shipping on marine
26 mammals. Next slide.

1 In conclusion, I have described the value of this
2 area as Inuit have articulated through the Tallurutiup
3 Imanga Inuit Impact Benefit Agreement and as nationally
4 recognized. I have also highlighted a high degree of
5 uncertainty combined with the degree of environmental
6 damage that is possible and that in the context of a
7 protected area, a precautionary principle should apply.
8 In our view, this means that the lack of scientific
9 certainty around the expected impacts to marine mammals
10 did not stop us from mitigating them.

11 In our final submission, we have characterized the
12 potential for environmental damage probability and
13 scientific uncertainty to help you assess whether
14 adaptive management is an appropriate precautionary
15 response for those impacts. If you believe it is and
16 the project is approved, it will be critical that
17 project adaptive management is robust and enforceable.

18 We believe this requires an effective Marine
19 Environmental Working Group and the commitments and
20 recommendations that have been described by the
21 Qikiqtani Inuit Association, Environment and Climate
22 Change Canada, the Department of Fisheries and Oceans,
23 and Transport Canada be prescribed by terms and
24 conditions. Qujannamiik, Madam Chair. This concludes
25 Parks Canada's presentation.

26 THE CHAIR: We have one more presentation

1 from the federal family, and recognizing that we have
2 lots of presenters tomorrow, we're going to go just a
3 little bit past 5 with Transport Canada's presentation.

4 Legal counsel, can you please affirm the
5 individuals who will be presenting evidence and also
6 anyone who could be providing answers to questions
7 during the community roundtable. Legal counsel.

8 MS. MEADOWS: Thank you, Madam Chair.
9 Teresa Meadows, legal counsel for the Nunavut Impact
10 Review Board.

11 Madam Chair, I have the following four people
12 identified who need to be affirmed: Jackie Barker,
13 Anita Gudmunson, Jaideep Johar, and Jason Cram.
14 JACKIE BARKER, ANITA GUDMUNSON, JAIDEEP JOHAR, JASON
15 CRAM, Affirmed

16 THE CHAIR: Legal counsel, can you please
17 advise regarding any exhibits that will be filed on the
18 public hearing record for this intervenor.

19 MS. MEADOWS: Thank you, Madam Chair.
20 Teresa Meadows, legal counsel for the Nunavut Impact
21 Review Board.

22 Madam Chair, I have two additional exhibits to
23 file before this registered intervenor speaks
24 consisting of their PowerPoint presentations in hard
25 copy, in English, and Inuktitut. Thank you, Madam
26 Chair.

1 EXHIBIT 59 - Transport Canada's final hearing
2 presentation, Baffinland Iron Mines
3 Corporation Phase 2 Development Proposal
4 (Inuktitut)

5 EXHIBIT 60 - Transport Canada's final hearing
6 presentation, Baffinland Iron Mines
7 Corporation Phase 2 Development Proposal
8 (English)

9 THE CHAIR: Transport Canada, Jackie
10 Barker.
11 Presentation by Transport Canada Regarding Baffinland
12 Iron Mines Corporation Phase 2 Development Proposal
13 (AUDIO FEED LOST)

14 THE CHAIR: Jackie Barker, your audio is
15 not on.

16 MS. BARKER: Apologies. Can you hear me
17 now?

18 THE CHAIR: Yes, you may proceed.

19 MS. BARKER: Thank you, Madam Chair.
20 Jackie Barker, Transport Canada.

21 I am a regional environmental advisor. I am
22 joined today by Jaideep Johar, manager, marine safety
23 and security; Jason Cram, manager, rail safety
24 engineering; and Anita Gudmunson, regional manager of
25 environmental programs. Anita will be providing
26 Transport Canada's presentation in a moment after I

1 provide a few opening remarks.

2 Transport Canada has heard concerns from
3 intervenors and community members about the impacts of
4 railway operations on wildlife and the impacts of
5 project shipping on the marine environment. Transport
6 Canada's presentation will provide information on
7 current regulations related to railway and shipping
8 operations in Canada. Transport Canada is providing
9 this information to help the Board and all participants
10 in the review process to better understand the
11 departmental role in relation to the Mary River Project
12 to help determine if Transport Canada's regulations can
13 help mitigate impacts from the project and to support
14 intervenors in developing their recommendations to the
15 Board.

16 Transport Canada is supported by science experts
17 from the Department of Fisheries and Oceans who are
18 best positioned to speak to the Government of Canada's
19 views on the project impacts to marine fish and fish
20 habitat, including marine mammals, aquatic invasive
21 species, and non-indigenous species.

22 As our presentation will explain, Transport Canada
23 is supportive of the additional mitigation measures
24 agreed to through Baffinland's commitments related to
25 ballast water management. These measures will help
26 further reduce the risk of introducing invasive species

1 to Milne Port. I will now turn the presentation over
2 to Anita Gudmunson. Thank you.

3 THE CHAIR: Anita Gudmunson.

4 MS. GUDMUNSON: Thank you.

5 As Jacquie stated, my name is Anita Gudmunson, and
6 I'm the regional manager of environmental programs for
7 Transport Canada's prairie and northern region. My
8 team is responsible to coordinate the departmental
9 review of the Phase 2 project and assist in responding
10 to questions that you may have.

11 I want to thank the Nunavut Impact Review Board
12 for allowing Transport Canada the opportunity to
13 present during the final public hearing for the Phase 2
14 proposal. Next slide, please.

15 Transport Canada's presentation will provide an
16 overview of our mandate and responsibilities related to
17 the Phase 2 proposal. I will also speak to the
18 comments and recommendations raised by the department
19 throughout the environmental review process, all of
20 which have been resolved. Next slide, please.

21 Transport Canada is responsible for transportation
22 policies and programs. The department promotes an
23 integrated transportation system that is safe, secure,
24 efficient, and environmentally responsible by
25 regulating associated transportation infrastructure,
26 equipment, and personnel, as well as carrying out

1 oversight, monitoring, and enforcement activities.

2 The Phase 2 proposal involves transportation modes
3 and associated infrastructure that Transport Canada is
4 responsible for regulating. Next slide, please.

5 If following the conclusion of the environmental
6 review process the project is approved to proceed,
7 Baffinland will be required to follow all applicable
8 laws. The following, which are administered by
9 Transport Canada, will apply to the Phase 2 project:
10 the Transportation of Dangerous Goods Act, the Canadian
11 Navigable Waters Act, the Railway Safety Act, the
12 Canada Shipping Act, 2001; the Marine Liability Act;
13 the Arctic Waters Pollution Prevention Act; and the
14 Marine Transportation Security Act.

15 Transport Canada's regulatory responsibilities
16 include the issuance of approvals where required as
17 well as conducting oversight and/or monitoring to
18 verify compliance with the laws. The Phase 2 proposal
19 will require approvals under the Canadian Navigable
20 Waters Act and the Railway Safety Act. While other
21 laws, such as the Canada Shipping Act, 2001, do not
22 require approvals, Baffinland will still need to follow
23 all of the requirements set out in the law.

24 During the rest of the presentation, I will focus
25 on four areas of the Phase 2 proposal and the
26 applicable Transport Canada laws and regulations. As

1 well, I will provide information on the specific
2 recommendations that the department has made beginning
3 with dangerous goods. Next slide, please.

4 Under Canadian law, dangerous goods must be
5 stored, shipped, and handled in a manner that upholds
6 safety to people and the environment. Baffinland is
7 proposing that explosives, gases, flammable liquids,
8 corrosives, and oxidizing substances be transported as
9 part of expanded mining operations.

10 The department reviewed the information provided
11 by Baffinland related to the storage, shipment, and
12 handling of dangerous goods and provided
13 recommendations to improve the clarity of Baffinland's
14 management documents for the transportation of
15 dangerous goods.

16 The department has reviewed the updated management
17 plans and have no outstanding concerns or
18 recommendations with respect to the transportation of
19 dangerous goods. Should the project be approved to
20 proceed, Transport Canada will continue to provide
21 regulatory oversight and verify compliance with the
22 Transportation of Dangerous Goods Act and associated
23 regulations. Next slide, please.

24 Baffinland proposes to construct a second ore dock
25 at Milne Inlet to accommodate the increased shipment of
26 ore and supplies required for the project. As Milne

1 Inlet is considered part of the Arctic Ocean,
2 Baffinland must obtain an approval under the Canadian
3 Navigable Waters Act prior to construction of the ore
4 dock.

5 During its review, Transport Canada will identify
6 potential impacts to navigation from the proposed ore
7 dock and may identify conditions that minimize the
8 potential impact to navigation. While these specific
9 terms and conditions would be developed during the
10 regulatory process, when more detailed information is
11 available to Transport Canada, the department
12 experience with the approval of the existing ore dock
13 indicates that impacts to navigation can be mitigated
14 and conditions of approval will likely be similar, and
15 these could include conditions on lighting and signage.

16 Baffinland is also proposing to construct numerous
17 water crossings to support the north railway
18 construction. This would include four bridge crossings
19 and approximately 417 culverts. Although none of the
20 proposed bridges or culverts will cross waters listed
21 on the schedule to the Canadian Navigable Waters Act,
22 there may still be regulatory requirements which need
23 to be met.

24 If the waterways that are impacted by the railway
25 crossings are navigable, Baffinland will either apply
26 to Transport Canada for approval or they may go through

1 a public resolution process, which involves a notice to
2 the public. Any comments or concerns raised during the
3 public resolution process must be addressed by
4 Baffinland before the work begins. If an issue remains
5 outstanding, the party who raised the comment can ask
6 Transport Canada to review the file, and we may decide
7 to issue an approval with terms and conditions.

8 Following the issuance of approvals for the ore
9 dock and potentially railway crossings, Transport
10 Canada will verify compliance with any of the
11 conditions that may be attached to the approval. Next
12 slide, please.

13 Baffinland proposes to construct a 110-kilometre
14 railway as we, I believe, all know between the mine
15 site and Milne Port. Transport Canada is responsible
16 for the regulation of railway operations in accordance
17 with the Railway Safety Act. Transport Canada must
18 approve the railway operating certificate before
19 Baffinland can operate the proposed railway.

20 Transport Canada's review of railway operations
21 focuses on the safety of the railway design, training
22 of railway personnel, and its general operations.
23 Transport Canada is not responsible for approving the
24 construction or the alignment of the railway.

25 The Canadian Transportation Agency grants a
26 certificate of fitness and the approval to construct

1 the railway. While there are no explicit provisions in
2 the Railway Safety Act with respect to the protection
3 of wildlife, Transport Canada recommended that
4 Baffinland consider these potential conflicts when
5 developing its operating procedures. Baffinland
6 confirmed that potential conflicts between trains and
7 caribou have already been considered in the execution
8 of safe railway operations. Should the project be
9 approved to proceed, Transport Canada will be
10 responsible for monitoring and inspecting railway
11 operations. Next slide, please.

12 Baffinland is proposing to expand the shipping
13 season, increase the level of voyages by ore carriers
14 up to 176, in addition, to supply vessels and
15 icebreaker support. The department reviewed the
16 information provided by Baffinland related to marine
17 shipping and provided recommendations for a
18 spill-at-sea response and navigation and ice, as well
19 as ballast water, particularly as the department has
20 heard these concerns related to invasive species.

21 Baffinland agreed to implement the recommendations
22 related to spill-at-sea response and navigation and
23 ice, however, requested further discussion on Transport
24 Canada's recommendations related to ballast water.

25 With the agreement that Baffinland will expand the
26 present sampling and testing protocols and introduce a

1 risk-based sampling program during Phase 2 of the
2 project, Transport Canada has no outstanding concerns
3 or recommendations with respect to the marine
4 environment -- excuse me, with respect to marine
5 shipping. Transport Canada will continue to ensure
6 compliance with all applicable regulations related to
7 marine shipping. Next slide, please.

8 This concludes my overview of the department's
9 role in the regulation of transportation-related
10 activities in Baffinland's Phase 2 project. I
11 appreciate the opportunity to participate in the review
12 process. I do wish I was not remote and that I could
13 be there with you all, but on behalf of the department,
14 I would like to thank you again for the opportunity to
15 present our views today. Thank you.

16 THE CHAIR: All right. Thank you to all
17 of the registered intervenors who presented today for
18 your evidence and your contributions to a very busy and
19 productive day. We'll resume the hearing tomorrow
20 morning at 9, and I hope to see you all back tomorrow.
21 There is no evening session tonight. Have a good
22 evening.

23 _____
24 PROCEEDINGS ADJOURNED UNTIL 9:00 AM, FEBRUARY 5, 2021

25 _____

26

1 CERTIFICATE OF TRANSCRIPT:

2

3 We, Sandra Burns and Andres Vidal, certify that
4 the foregoing pages are a complete and accurate
5 transcript of the proceedings taken down by us in
6 shorthand and transcribed from our shorthand notes to
7 the best of our skill and ability.

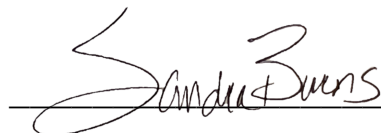
8 Dated at the City of Edmonton, Province of
9 Alberta, this 19th day of February 2021.

10

11

12

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14

Sandra Burns, CSR(A), RPR, CRR

15

Official Court Reporter

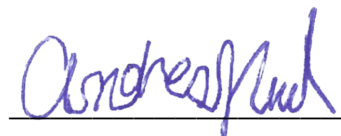
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Andres Vidal, CSR(A)

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Official Court Reporter

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48 1740:15 1741:23 1792:9	7 1733:22 1736:21	accept 1782:7	acids 1787:15	acts 1793:6
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