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Renewal and Amendment Application for Type "A" Water Licence No: 2AM-LUP1520 for the Lupin Gold Mine

HEARING

VOLUME 1

Kugluktuk, Nunavut
January 15, 2020

1	TABLE OF CONTENTS	
2		
3	Description	Page
4		
5	January 15, 2020 Morning Session	8
6	Opening Remarks	11
7	KARYN LEWIS, BELINDA LABATTE, DAVID HOHNSTEIN,	34
8	KEN BOCKING, SARA WILKINS, ALVIN TONG, JIM	
9	MCKINLEY, KENNETH RUPTASH, Affirmed	
10	Presentation by Lupin Mines Incorporated	34
11	Discussion	73
12	January 15, 2020 Afternoon Session	75
13	Submissions by Lupin Mines Incorporated	76
14	Presentation by Lupin Mines Incorporated	80
15	Nunavut Water Board Staff Questions Lupin Mines	86
16	Incorporated	
17	Environment and Climate Change Canada Questions	87
18	Lupin Mines Incorporated	
19	Nunavut Water Board Staff Questions Lupin Mines	95
20	Incorporated	
21	Response to Nunavut Water Board Question by	104
22	Environment and Climate Change Canada	
23	Response to Nunavut Water Board Question by	104
24	Crown-Indigenous Relations and Northern Affairs	
25	Canada	
26		

1	Nunavut Water Board Staff Questions Lupin Mines	105
2	Incorporated	
3	Questions for Lupin Mines Incorporated by	106
4	Community Representatives	
5	Nunavut Water Board Staff Questions Lupin Mines	109
6	Incorporated	
7	Nunavut Water Board Panel Questions Lupin Mines	112
8	Incorporated	
9	GODWIN OKONKWO, Sworn; GERD WIATZKA, NOAH NOAH,	115
10	Affirmed	
11	Presentation by Crown-Indigenous Relations and	117
12	Northern Affairs Canada	
13	Lupin Mines Incorporated Questions	133
14	Crown-Indigenous Relations and Northern Affairs	
15	Canada	
16	Nunavut Water Board Staff Questions	142
17	Crown-Indigenous Relations and Northern Affairs	
18	Canada	
19	Nunavut Water Board Panel Questions	149
20	Crown-Indigenous Relations and Northern Affairs	
21	Canada	
22	Submissions by Lupin Mines Incorporated	151
23	Nunavut Water Board Panel Questions	152
24	Crown-Indigenous Relations and Northern Affairs	
25	Canada	
26	Discussion	153

1		1.57
1	Submissions by Lupin Mines Incorporated	157
2	Nunavut Water Board Panel Questions	157
3	Crown-Indigenous Relations and Northern Affairs	
4	Canada	
5	Certificate of Transcript	166
6		
7		
8	EXHIBITS	
9	Description	Page
10		
11	EXHIBIT 1 - Hard Copy, PowerPoint Presentation,	31
12	Lupin Mine Application for Renewal and Amendment	
13	of Licence 2AM-LUP1520, Mandalay Resources	
14	(English and Inuinnaqtun)	
15		
16	EXHIBIT 2 - Hard Copy, Executive Summary	31
17	Lupin Mine Final Closure and Reclamation Plan	
18	(English)	
19		
20	EXHIBIT 3 - Hard Copy, Executive Summary	31
21	Lupin Mine Final Closure and Reclamation Plan	
22	(Inuktitut)	
23		
24	EXHIBIT 4 - Hard Copy, Executive Summary	31
25	Lupin Mine Final Closure and Reclamation Plan	
26	(Inuinnaqtun)	

```
1
     EXHIBIT 5 - Hard Copy, Executive Summary
                                                        31
 2
     Lupin Mine Final Closure and Reclamation Plan
 3
     (French)
 4
 5
     EXHIBIT 6 - Hard Copy, Technical Memo From Alvin
                                                        32
 6
     Tong (Stantec Consulting) To Karyn Lewis (Lupin
 7
     Mine Incorporated) Dated January 9, 2020,
 8
     Reference: Supporting Information to the
 9
     Contingency Contaminants Management Decision
10
    Matrix (English)
11
12
     EXHIBIT 7 - Hard Copy, Technical Memo From Alvin
13
     Tong (Stantec Consulting) To Karyn Lewis (Lupin
14
     Mine Incorporated) Dated January 10, 2020,
15
     Reference: Supporting Information for the Dam
16
     Stability and Cover Design (English)
17
18
     EXHIBIT 8 - Hard Copy, Technical Memo From Ken
                                                        32
19
     Bocking (Golder Associates) To Karyn Lewis (Lupin
20
     Mine Incorporated) Dated January 10, 2020,
21
     Reference: Supporting Information to the
22
     Conceptual Design for the Waste Rock "Dome" at
23
     Lupin Mine (English)
24
25
     EXHIBIT 9 - Hard Copy, Resumé of Ken Bocking,
                                                        32
26
     Golder Associates Ltd. (English)
```

```
EXHIBIT 10 - Hard Copy, Resumé of Jim McKinley,
 1
                                                         32
 2
     Stantec Consulting Ltd. (English)
 3
     EXHIBIT 11 - Hard Copy, Resumé of Alvin Tong,
 4
                                                         32
 5
     Stantec Consulting Ltd. (English)
 6
 7
     EXHIBIT 12 - Electronic Copy, Resumé of Sara
                                                         33
 8
     Wilkins, Stantec Consulting Ltd. (English)
 9
10
     EXHIBIT 13 - Electronic Copy, Summary of
                                                         79
     Additional Commitments and Issue Resolution Dated
11
12
     January 15, 2020 (English)
13
     EXHIBIT 14 - Electronic Copy, Updated Lupin Mine
14
                                                         79
15
     Remediation Schedule January 2020 Dated January
16
     13, 2020 (English)
17
18
     EXHIBIT 15 - Electronic Copy, Security Framework
                                                         79
     Milestones for draft water licence framework
19
20
     (English)
21
22
     EXHIBIT 16 - Hard Copy PowerPoint Presentation,
                                                         116
23
     Crown-Indigenous Relations and Northern Affairs
24
     Canada, Lupin Mine Inc. Renewal/Amendment
25
     Application for Water Licence 2AM-LUP1520 for
     Lupin Mine Project (English/Inuinnagtun)
26
```

1	EXHIBIT 17 - Hard Copy Executive Summary,	116
2	Crown-Indigenous Relations and Northern Affairs	
3	Canada (English)	
4		
5	EXHIBIT 18 - Hard Copy, Executive Summary	116
6	Crown-Indigenous Relations and Northern Affairs	
7	Canada (Inuinnaqtun)	
8		
9	EXHIBIT 19 - Hard Copy, Executive Summary	116
10	Crown-Indigenous Relations and Northern Affairs	
11	Canada (French)	
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		

1	Proceedings taken at	the Kugluktuk Recreation Complex,
2	Kugluktuk, Nunavut	
3		
4	January 15, 2020	Morning Session
5		
6	NUNAVUT WATER BOARD	
7	L. Toomasie	The Chair
8	A. Hanson Main	Vice-Chair
9	A. Ningark	Panel Member
10		
11	NUNAVUT WATER BOARD S	STAFF
12	T. Meadows	Legal Counsel
13	S. Autut	Executive Director
14	K. Kharatyan	Director of Technical Services
15	B. Kogvik	Director of Board
16		Administration and
17		Communications
18	R. Dwyer	Manager of Licencing
19	D. Donald	Technical Advisor
20		
21		
22		
23		
24		
25		
26		

1	APPLICANT	
2		
3	LUPIN MINES INCORPORATEI	
4	K. Lewis	Project Manager
5	B. Labatte	Chief Development Officer,
6		Mandalay Resources
7	C. Kowbel	Legal Counsel, Lawson Lundell
8	D. Hohnstein	Consultant, Lupin Mines
9		Incorporated
10	K. Bocking	Principal, Golder Associates
11	S. Wilkins	Project Manager, Water
12		Resources, Stantec Consulting
13	A. Tong	Senior Geotechnical Engineer,
14		Stantec Consulting
15	J. McKinley	Senior Hydrogeologist, Stantec
16		Consulting
17	K. Ruptash	VP Projects, Nahanni
18		Construction
19		
20		
21		
22		
23		
24		
25		
26		

1	INTERVENORS	
2		
3	CROWN-INDIGENOUS RELATIO	ONS AND NORTHERN AFFAIRS CANADA
4	G. Okonkwo	Manager of Water Resources
5	N. Noah	Land Administrator Major
6		Projects
7	G. Wiatzka	VP Director of Mining, Arcadis
8	S. Dewar	Director Resource Management
9		(Via Teleconference)
10	D. Kohlenberg	Department of Justice
11		(Via Teleconference)
12		
13	ENVIRONMENT AND CLIMATE	CHANGE CANADA
14	E. Walker	Senior Environmental
15		Coordinator
16	A. Wilson	Lead - Water Quality Expert
17		Support
18	E. Watson	Climate Services (Via
19		Teleconference)
20		
21	INTERPRETERS/TRANSLATORS	
22	B. Kogvik	Inuinnaqtun Language
23		Translator
24	J. Otokiak	Inuinnaqtun Language
25		Translator
26		

1	J. Albert, CSR(A) Official Court Reporter
2	
3	N. Poitras Sound Technician
4	
5	(PROCEEDINGS COMMENCED AT 9:07 AM)
6	Opening Remarks
7	THE CHAIR: Good morning. I hope you can
8	hear me, 1, 2, 3, testing 1, 2, 3. All right. Good.
9	Okay.
10	Good morning once again. Welcome to the public
11	hearing for Type "A" Water Licence submitted by Lupin
12	Mine Incorporated it feels good. Too warm in
13	here seeking authorization to renew and amend their
14	water licence for initially requested terms of seven
15	years, until 2027, and then updated to 12 years' use of
16	water and deposit of waste associated with the closure
17	and the reclamation stages of a mining undertaking.
18	My name's Lootie Toomasie, and I am the
19	chairperson of the Nunavut Water Board and hearing
20	chair for today's public hearing.
21	Over the two days, the Nunavut Water Board will be
22	considering LMI's application to authorize activities
23	associated with the final closure and the reclamation
24	of the Lupin Mine Project, which sits approximately 285
l	

The mine has not operated since 2005 and has been

kilometres south of Kugluktuk on Contwoyto Lake.

25

- 1 under care and maintenance since that time. The
- 2 application to renew and amend the existing water
- 3 licence requests the use of 250,000 cubic metres of
- 4 water per year during active reclamation for
- 5 approximately two years, followed by a drop in use to
- 6 5,000 cubic metres per year during the post-closure.
- 7 The application also requests the authorization of use
- 8 of deposit of wastes associated with various site
- 9 reclamation activities and waste-management facilities
- 10 remaining on-site.
- 11 Before we proceed with the hearing, please let us
- 12 begin with a prayer. Let's stand and pray --
- 13 Opening Prayer
- 14 THE CHAIR: -- on behalf of the Nunavut
- 15 Water Board, I welcome you to the hamlet of Kugluktuk.
- 16 Now, to provide you with some background and set
- 17 the stage for the hearing, the Nunavut Water Board,
- 18 which I shall refer to as "the Board" or "NWB", is an
- 19 institution of public government created under Article
- 20 13 of Nunavut -- of the agreement between the Inuit of
- 21 the Nunavut Settlement Area and Her Majesty the Queen
- 22 in Right of Canada, "Nunavut Agreement". The NWB is
- 23 responsible for the use, management, and regulation of
- 24 freshwater in Nunavut Settlement Area.
- The purpose of this public hearing is to review an
- 26 application filed by Lupin Mines Incorporated -- I may

```
1 refer to them as "LMI" or "the Applicant" -- for
```

2 renewal and amendment to the existing Type "A" Water

- 3 Licence 2AM-LUP1520, under the Nunavut Waters and
- 4 Nunavut Surface Rights Tribunal Act, to authorize the
- 5 use of water and deposit of waste associated with the
- 6 reclamation and post-closure monitoring of the Lupin
- 7 Mine Project.
- 8 Under Article 13, Section 13.3.6 of the Nunavut
- 9 Agreement and Section 29 of the Nunavut Waters and
- 10 Nunavut Surface Rights Tribunal Act, the Board has
- 11 delegated its power to dispose of all matters related
- 12 to the processing of LMI's application for this renewal
- 13 and amendment to Type "A" Licence Number 2AM-LUP1520,
- 14 including the conduct of this public hearing to a panel
- of the Board, which the Board refers to as the "Lupin
- 16 Panel" or "Panel P11".
- 17 I will be chairing this panel, and with me today,
- 18 as members of the panel, are Board members Amanda
- 19 Hanson Main on my right, and to my left is Alex
- 20 Ningark.
- 21 Several Staff members, who have contributed to the
- 22 NWB's administration and technical review of the
- 23 application are present, along with legal counsel to
- 24 the NWB. I ask them to wave when I say your name.
- 25 Stephanie Autut -- sorry, Stephanie Autut, sorry,
- 26 sorry about that -- Stephanie Autut, executive

- 1 director; and Karén Kharatyan, director of technical
- 2 services. I always have a hard time pronouncing his
- 3 last name. Sorry about that, Karén. Ben Kogvik,
- 4 director of Board administration and communications is
- 5 at the back, at the interpreting area. Richard Dwyer,
- 6 manager of licencing is out at the front; and Derek
- 7 Donald, technical advisor; and Teresa Meadows from
- 8 Meadows Law, legal counsel to the Board.
- 9 In addition, we have two interpreters available
- 10 for simultaneous -- that's not my language, too --
- 11 interpretation throughout the year -- sorry, throughout
- 12 the hearing. I'm sorry. Ben Kogvik, in-house
- interpreter to the Board, and Joe Otokiak, who is
- 14 originally from Cambridge Bay, now in -- living in
- 15 Yellowknife.
- 16 For audio support, we have Norbert Poitras, if
- 17 I've pronounced your last name properly, from PIDO. If
- 18 you experience any difficulties with your headsets,
- 19 Norbert is able to provide you assistance.
- To ensure an accurate recording of the proceeding
- 21 is kept, we have with us a court reporter, Julie
- 22 Albert, from Dicta Court Reporting Inc.
- 23 Before I move to an overview of this application
- 24 and what to expect today during this public hearing,
- 25 there are some important housekeeping items for
- 26 everyone here.

- 1 First, as indicated earlier -- sorry. First, as
- 2 indicated earlier, there's interpretation available
- 3 throughout the hearing in English and Inuinnagtun.
- 4 Earpieces can be obtained from the table located just
- 5 by the door as you come into this room. So Channel 1
- 6 is the floor, and Channel 2 is English, and Channel 3
- 7 is broadcasting in Inuinnagtun. When you speak into
- 8 the microphone, please make sure you have turned off
- 9 your earpieces to prevent audio feedback or
- 10 interference with the speakers.
- 11 Second, the Board appreciates everyone, including
- 12 the Applicant, Intervenors, and members of the public
- 13 sign in on the sheet located at the table as you come
- 14 in. This is an important record of the hearing, and we
- 15 appreciate your help in making sure it is complete.
- 16 Thirdly, the agendas for the public hearing and
- 17 the community sessions are available at the back.
- 18 Please pick one up and follow along with us as we
- 19 proceed.
- The washrooms are located at the lobby as we came
- 21 in through here, out in the lobby, and the exits are
- located as we came through the lobby, and there is one
- 23 here at the back here. There will be coffee, tea, and
- 24 snacks brought in throughout the hearing during breaks,
- and you are welcome to help yourself throughout the
- 26 day.

- I would also like to remind everyone to please
- 2 turn off your cell phones or put them on silent before
- 3 we begin.
- Finally, to assist both our court reporter and our
- 5 interpreters, please wait to have a microphone before
- 6 you speak, then state your name, speak clearly and
- 7 slowly, and avoid the use of abbreviations. We
- 8 appreciate your assistance in making sure your comments
- 9 are recorded, and the Board's record of proceedings is
- 10 accurate and complete.
- 11 Prior to identifying and introducing all of the
- 12 parties in attendance today, I will provide a
- 13 description of the application that is before the
- 14 Board.
- The application we'll be discussing today is for a
- 16 renewal and amendment to existing Type "A" Water
- 17 Licence Number 2AM-LUP1520 requested by Lupin Mines
- 18 Incorporated. The scope of the application is
- 19 generally as follows: The use of 685 cubic metres of
- 20 water per day or 250,000 cubic metres per year during
- 21 active reclamation, followed by 5,000 cubic metres per
- 22 year during post-closure monitoring, and the permanent
- 23 deposit of waste associated with final closure of the
- 24 Lupin mine site.
- 25 The following is a list of some of the key
- 26 documents pertaining to the Type "A" Water Licence

- 1 renewal and amendment, Application Number 2AM-LUP1520,
- 2 submitted to the Water Board, Nunavut Water Board, by
- 3 the Applicant to date:
- 4 On July 27, 2018, the applicant filed the main
- 5 application package, including the following documents:
- 6 A cover letter, application form, and executive summary
- 7 in English, and Licence 2AM-LUP1520 application for
- 8 renewal and amendment supporting submission, which
- 9 included the final closure and reclamation plan and
- 10 security cost estimate.
- On February 5, 2019, the Applicant supplemented
- 12 the application materials by providing the following:
- 13 A compliance assessment and status report; executive
- 14 summaries in Inuinnaqtun and Inukitut.
- On March 19, 2019, the Applicant provided
- 16 additional information in response to information
- 17 requests received from Intervenors.
- On May 17, 2019, the Applicant provided additional
- 19 information in response to technical review comments
- 20 and recommendations made by Intervenors.
- 21 On August 15, 2019, the Applicant provided
- 22 technical memo: Waste Rock Information from Lupin Mine
- 23 Tailings Containment Area. In response to commitments
- 24 agreed to by parties at the NWB technical meeting and
- 25 pre-hearing conference on June 6 and 7, 2019.
- On October 15, 2019, the Applicant provided the

- 1 Health -- Human Health and Ecological Risk Assessment
- 2 Report, the conceptual design of the waste rock covered
- 3 dome, the decision matrix for dealing with exposed
- 4 tailings, if they arise, and a geophysical survey of
- 5 the frozen-core dams.
- 6 On June -- sorry, on November 15, 2019, the
- 7 Applicant provided geophysical details of engineered
- 8 structures, risk assessment of selected dams, the draft
- 9 water licence framework, and a security release
- 10 framework.
- On January 10, 2020, the Applicant provided
- 12 presentation materials for this public hearing, along
- 13 with some additional information/clarification
- 14 associated with its commitments made at the technical
- 15 meeting.
- 16 Copies of all submissions received from all
- 17 parties and correspondence from the Board associated
- 18 with the application are available on the NWB's Public
- 19 Registry and the FTP site. In addition, our manager of
- 20 licencing, Richard Dwyer, has available for the public
- 21 reviewing at this hearing, the electronic copy of the
- 22 Public Registry for this application and paper copies
- 23 of some of the key documents for the application
- 24 received to date. If you are interested in reviewing
- 25 any of the documentation, please ask Richard.
- Now, I'm going to provide you with a brief

- 1 overview of the procedural history for the application
- 2 that is before the Board, which captures only the major
- 3 procedural steps.
- July 27, 2018, NWB received a Type "A" Water
- 5 Licence application for the amendment and renewal of
- 6 Licence 2AM-LUP1520 for the Lupin Mine Project from
- 7 LMI.
- 8 February 1, 2019, NWB received NPC conformity
- 9 determination indicating that the project is situated
- 10 outside the area of approved land-use plan and that a
- 11 review of the project by NIRB is not required.
- 12 February 5, 2019, NWB received summaries of the
- 13 application translated into Inukitut and Inuinnaqtun as
- 14 well as compliance assessments and a status report from
- 15 LMI.
- 16 February 6th, 2019, NWB issued correspondence
- 17 requesting that interested parties conduct a
- 18 completeness review of the application and provide
- 19 information requests to the Applicant.
- 20 March 4, 2019, Crown-Indigenous Relations and
- 21 Northern Affairs -- I will call them "CIRNAC" for
- 22 short -- responded to the completeness review
- 23 indicating they had a number of information requests
- 24 for the Applicant.
- 25 March 19, 2019, LMI responded to information
- 26 requests by CIRNAC.

1 March 25, 2019, CIRNAC confirmed that the level of

- 2 information provided by LMI was adequate to complete
- 3 full technical review of the application.
- 4 March 29, 2019, NWB received a notice -- sorry,
- 5 NWB issued a notice application for the application and
- 6 indicated the commencement of the NWB's 30-day
- 7 technical review period.
- 8 April 30, 2019, NWB received a technical review
- 9 commitment -- comments from CIRNAC and Environment and
- 10 Climate Change Canada -- I will call them "ECCC" for
- 11 short -- and requested that LMI provide response.
- May 23, 2019, NWB distributed the draft agenda and
- 13 correspondence to confirm the NWB would hold an
- in-person technical meeting and pre-hearing conference
- for the file on June 6 and 7, 2019, in Kugluktuk.
- June 6 and 7, 2019, NWB hosted the technical
- 17 meeting and pre-hearing conference in the closest
- 18 community of Kugluktuk, Nunavut.
- 19 June 18, 2019, NWB issued a pre-hearing conference
- 20 decision in respect of the application, providing a
- 21 list of commitments, timelines for the submission of
- 22 additional documentation, a list of issues to be
- 23 considered at this public hearing, and a tentative
- 24 timeline for this in-person public hearing and
- 25 Community Session.
- 26 On November 8, 2019, NWB issued an update and

- 1 formal notice of this public hearing as required under
- 2 the Nunavut Waters and Nunavut Surface Rights Tribunal
- 3 Act.
- 4 January 8, 2020, NWB issued a public hearing
- 5 update correspondence with draft agendas for this
- 6 public hearing and Community Session.
- January 13, 2020, NWB distributed the final agenda
- 8 for this public hearing and Community Session.
- 9 Complete details of all submissions received in
- 10 relation to the application and key procedural steps
- 11 are available on the NWB FTP site. If you need any
- 12 assistance finding or reviewing any of the
- 13 documentation filed on the site, please check with our
- 14 manager of licencing, Richard Dwyer, at the table, and
- 15 he will help you get access to the documents.
- 16 I will now move on to a list of issues to be
- 17 addressed at this hearing, as identified during the
- 18 technical meeting and pre-hearing conference for this
- 19 file: Terms of renewed licence, initially requests
- 20 seven years, which will cover a period of active
- 21 closure and reclamation for approximately two years,
- 22 and the first five years of post-closure monitoring,
- 23 updated subsequently to 12 years.
- 24 Water-use requirement: Increased during active
- 25 closure and reclamation; reduction over the course of
- 26 term.

- 1 Waste disposal, including the following waste
- 2 types: Hazardous waste, waste rock with elevated
- 3 arsenic content, petroleum hydrocarbon contaminated
- 4 soil, asbestos, surface infrastructure and on-site
- 5 equipment.
- 6 Tailing and waste rock: Covered design for waste
- 7 rock storage dome; acid rock drainage and metal
- 8 leaching potential; water management: potential for
- 9 waste rock contact water, potential for seepage from
- 10 waste rock, potential for seepage from TCA.
- 11 Amendments to terms and conditions: Discussion of
- 12 the draft water licence framework proposed by LMI;
- 13 changed to reflect change in status of the site from
- 14 temporary care and maintenance to permanent closure and
- 15 reclamation; amendments to reflect activities completed
- 16 under the existing licence and progressive reclamation
- 17 that has taken place in 2019; amendments to reflect
- 18 post-closure environmental and site condition, for
- 19 example, change to monitoring and reporting
- 20 frequencies.
- 21 Management plans and reports: Updates to plans,
- 22 timing/approval of plans.
- 23 Monitoring programs: Plans for monitoring during
- 24 active closure and reclamation through to mine closure;
- 25 post-closure monitoring requirement, including how long
- 26 monitoring should continue.

- 1 Closure and reclamation planning: Additional
- 2 studies/analysis (acid rock drainage and metal
- 3 leaching, geochemical and pathways); Human Health
- 4 Ecological Risk Assessment; climate change
- 5 models/scenarios and potential effects on closure and
- 6 reclamation; geotechnical stability and erosion
- 7 control; timing, phase, and scheduling; final closure
- 8 and reclamation plan.
- 9 Reclamation security cost estimate: Update to
- 10 total cost estimate to reflect updated final closure
- 11 and reclamation planning; mechanism for and agreements
- 12 about the progressive release of security to allow for
- 13 periodic reduction in security over the terms of the
- 14 licence to reflect progressive reclamation and
- 15 completeness -- completion of site remediation.
- So now that I have given you the background to the
- 17 renewal and amendment application we will be discussing
- 18 throughout this public hearing and Community Session, I
- 19 would like to turn to Item 4 on the agenda , the
- 20 introduction of the Applicants and Intervenors
- 21 participating in this public hearing.
- I will now ask that the Applicants, LMI, introduce
- 23 their representatives.
- 24 MS. LEWIS: Karyn Lewis here. Thank you,
- 25 Mr. Chair.
- 26 On behalf of Lupin Mines Incorporated and Mandalay

- 1 Resources Corporation, I would like to thank you and
- 2 the panel members for the opportunity to introduce you,
- 3 as well as the public and parties participating in this
- 4 important hearing, to the members of the Lupin Mine
- 5 team. As I introduce each member, I would ask each to
- 6 acknowledge the Board. I will begin with the core LMI
- 7 and Mandalay representatives.
- 8 My name is Karyn Lewis, and I'm the project
- 9 manager for the Lupin Mine. With me today, I have
- 10 Belinda Labatte, chief development officer from
- 11 Mandalay Resources and director of LMI.
- 12 MS. LABATTE: Good morning, Mr. Chair and
- 13 Board.
- 14 MS. LEWIS: Now, supporting LMI's team, we
- 15 have legal counsel, Christine Kowbel, partner at Lawson
- 16 Lundell, as well as several technical consultants,
- 17 including Dave Hohnstein, regulatory advisor for Lupin
- 18 Mines.
- 19 MR. HOHNSTEIN: Thank you, Karyn. Thanks to
- 20 the Chair.
- 21 MS. LEWIS: Ken Bocking, principal,
- 22 geotechnical engineer with Golder.
- 23 MR. BOCKING: Thank you. Good morning.
- 24 MS. LEWIS: Kenny Ruptash, vice president
- 25 projects at Nahanni Construction; and from Stantec, we
- 26 have Jim McKinley, senior hydrogeologist; Sara Wilkins,

- 1 project manager and professional hydrogeologist; and
- 2 Alvin Tong, senior geotechnical engineer.
- And, Mr. Chairman, thank you, and be advised I
- 4 will be filing with the Board CVs for our consultants
- 5 for the Public Registry.
- 6 Thank you.
- 7 THE CHAIR: Thank you, Applicant.
- 8 I will now go to local associations and
- 9 representatives and intervening parties to introduce
- 10 the people who will be representing them here today.
- 11 We'll start with Crown-Indigenous Relations and
- 12 Northern Affairs, CIRNAC.
- 13 MR. POITRAS: Press the little mouth on
- 14 there.
- 15 MR. OKONKWO: Okay. Yes.
- 16 Thank you, Mr. Chair. Thank you so much,
- 17 Mr. Chairman, for the opportunity for us to participate
- 18 in this public hearing. My name is Godwin Okonkwo, and
- 19 I'm manager of water resources with the
- 20 Crown-Indigenous Relations and Northern Affairs Canada,
- 21 also known as "CIRNAC".
- 22 With me here is a colleague of mine, Noah Noah.
- 23 He's of the lands division of CIRNAC, and then also
- 24 with me here is Gerd Wiatzka with Arcadis. He's a
- 25 consultant that's representing us as well.
- On the phone, I have Spencer Dewar, who's director

- 1 resource management, and Dale Kohlenberg, who is from
- 2 the Department of Justice.
- 3 Thank you.
- 4 THE CHAIR: Thank you, CIRNAC.
- 5 And then Environment and Climate Change Canada.
- 6 MS. WALKER: Thank you, Mr. Chair. We're
- 7 happy to be here and participate, have the opportunity
- 8 to participate.
- 9 My name is Eva Walker. I'm a senior environmental
- 10 assessment coordinator with Environment and Climate
- 11 Change Canada. With me today, I have Anne Wilson, who
- is our lead with water quality; and on the phone, I
- 13 will have Emma Watson, who is with climate services.
- 14 THE CHAIR: Thank you, ECCC. I'll have to
- 15 be able to say that clearly after from now on.
- 16 Okay. And then is there any other Intervenors who
- 17 would like to speak, please identify yourself and
- 18 introduce your representatives, if there are any.
- 19 Okay. I take that there's none here.
- 20 It is our tradition to give respect to our Elders;
- 21 therefore, at any time during the proceeding, an Elder
- 22 may speak about the application that is before the
- 23 Board. I just ask that any Elder wanting to speak
- 24 about the application wait until the Board Staff can
- 25 get you a microphone so that we can ensure we have a
- 26 complete record of what you have to say.

1 Are there any members of the general public who

- 2 would like to identify themselves and make a formal
- 3 request to speak to the Board during this public
- 4 hearing?
- 5 I also want to mention that any community member
- 6 who wishes to ask questions or provide comments to the
- 7 Board about this application will also have an
- 8 opportunity to do so tonight during the Community
- 9 Session starting at 7, unless we get some housekeeping
- 10 for that, we're good. We'll notify that.
- 11 Are there any representatives from agencies,
- 12 associations, et cetera, who have not submitted
- interventions but would like to speak?
- I now turn to identification of any motions or any
- objection to the application that is before the Board.
- 16 Is there any?
- 17 Okay. I take that there's none. Seeing none, we
- 18 will now proceed with Item 8 of the agenda, the
- 19 presentation by the Applicant.
- 20 The Applicant is requested -- okay. Go ahead.
- 21 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 22 Meadows, legal counsel for the Nunavut Water Board.
- 23 Mr. Chair, we thought that we would just take a
- 24 break so that I can get all my exhibits organized for
- 25 the next section and also so that I can get my Bible
- 26 over to the witnesses.

- 1 Thank you, Mr. Chair.
- 2 THE CHAIR: Thank you.
- Okay. One of the panel members wants to have a
- 4 quick break before you're proceeding on that. Okay,
- 5 take a short break.
- 6 (ADJOURNMENT)
- 7 THE CHAIR: Okay. We can continue on from
- 8 the break.
- 9 So, the Applicant, if you're all set to go, you
- 10 may go ahead.
- 11 MS. LEWIS: Karyn speaking, Mr. Chairman.
- Once again, I would like to take the opportunity
- 13 to thank you and the panel members for the opportunity
- 14 to present our application.
- 15 THE CHAIR: Excuse me. I think Teresa --
- 16 MS. LEWIS: Oh, sorry --
- 17 THE CHAIR: -- our legal counsel, will
- 18 have you sworn in.
- 19 MS. LEWIS: I thought they said us.
- 20 Sorry.
- 21 THE CHAIR: Yeah. Yeah.
- 22 MS. MEADOWS: Thank you, Mr. Chair. We're
- 23 not situated well, so we -- I'm not within his sight
- 24 line, and I didn't want to throw anything. Thank you,
- 25 Mr. Chair.
- 26 So there are several procedural matters that I

- 1 have, Mr. Chair. The first being that there are 11
- 2 exhibits that have been provided to us by LMI to
- 3 support their presentation and participation here
- 4 today, including several materials that were already
- 5 filed electronically with the Board, but have been
- 6 provided in hard copy for the convenience of the
- 7 parties, but also so that the exhibits can be reflected
- 8 when someone is looking at the transcript, they're able
- 9 to conveniently and easily locate the materials that
- 10 are being referenced that have already been filed on
- 11 the Public Registry.
- 12 So I have -- those materials include the
- 13 PowerPoint presentation that will be presented by LMI
- 14 shortly, an English, French, Inukitut, and Inuinnagtun
- 15 copies of the executive summary of the closure plan
- 16 that has already been filed with the Board, but is
- 17 being provided for convenience of the parties.
- I also have technical memos from Stantec, from
- 19 Alvin Tong, dated January 10th, 2020, and the subject
- 20 matter is "Supporting Information For the Dam Stability
- 21 and Cover Design".
- I also have a technical memorandum that, again,
- 23 was filed on the Public Registry, but is being provided
- 24 in hard copy for the convenience of the parties. It is
- 25 dated January 10th, 2020, from Ken Bocking. The
- 26 subject matter is "Supporting Information to the

- 1 Conceptual Design for the Waste Rock Dome at Lupin
- 2 Mine".
- 3 I also have another technical memo that was filed
- 4 with the Board dated January 9th, 2020, from Alvin Tong
- 5 at Stantec Consulting. The reference is "Supporting
- 6 Information to the Contingency Contaminants Management
- 7 Decision Matrix".
- 8 And, finally, Mr. Chair, I have copies of the CVs,
- 9 which have not been previously filed with the Board,
- 10 for Jim McKinley, for Alvin Tong, and for Ken Bocking.
- 11 So those are the 11 hard-copy exhibits that I
- 12 propose to file, and I would just like to confirm with
- 13 legal counsel for LMI that those are the materials in
- 14 support of the presentation that are required to be
- 15 filed as exhibits.
- 16 MS. KOWBEL: Christine Kowbel, legal
- 17 counsel for Lupin Mines Incorporated.
- 18 Yes, I confirm those are the exhibits that -- that
- 19 Lupin Mines has provided to the Board. I also wanted
- 20 to note that we have one more expert that I have not
- 21 yet provided a 'C' -- a resume for, and that is our
- 22 expert Sara Wilkins. We will be providing an
- 23 electronic copy to the Board this morning, but there
- 24 was not a paper copy available at the time the hearing
- 25 started this morning. My apologies, Mr. Chair.
- Thank you.

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MS. MEADOWS:
                               Thank you, Mr. Chair.
 1
 2
          So duly noted. We will file that in electronic
 3
     form, and any parties here who wish to see a copy of
 4
     that electronic filing, I'm assuming that you will be
     circulating it to all the parties that are here as
 5
 6
     well.
     THE CHAIR:
                               Thank you.
          Go ahead.
 8
 9
     MS. KOWBEL:
                               Thank you, Mr. Chair.
          We confirm we will -- we'll copy Environment
10
11
     Canada and Crown-Indigenous Northern Relations Canada
12
     on that email.
13
          Thank you.
14
          EXHIBIT 1 - Hard Copy, PowerPoint
15
          Presentation, Lupin Mine Application for
16
          Renewal and Amendment of Licence 2AM-LUP1520,
17
          Mandalay Resources (English and Inuinnagtun)
18
          EXHIBIT 2 - Hard Copy, Executive Summary
19
          Lupin Mine Final Closure and Reclamation Plan
20
          (English)
21
          EXHIBIT 3 - Hard Copy, Executive Summary
22
          Lupin Mine Final Closure and Reclamation Plan
23
          (Inuktitut)
24
          EXHIBIT 4 - Hard Copy, Executive Summary
25
          Lupin Mine Final Closure and Reclamation Plan
26
          (Inuinnaqtun)
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1	EXHIBIT 5 - Hard Copy, Executive Summary
2	Lupin Mine Final Closure and Reclamation Plan
3	(French)
4	EXHIBIT 6 - Hard Copy, Technical Memo From
5	Alvin Tong (Stantec Consulting) To Karyn
6	Lewis (Lupin Mine Incorporated) Dated January
7	9, 2020, Reference: Supporting Information to
8	the Contingency Contaminants Management
9	Decision Matrix (English)
10	EXHIBIT 7 - Hard Copy, Technical Memo From
11	Alvin Tong (Stantec Consulting) To Karyn
12	Lewis (Lupin Mine Incorporated) Dated January
13	10, 2020, Reference: Supporting Information
14	for the Dam Stability and Cover Design
15	(English)
16	EXHIBIT 8 - Hard Copy, Technical Memo From
17	Ken Bocking (Golder Associates) To Karyn
18	Lewis (Lupin Mine Incorporated) Dated January
19	10, 2020, Reference: Supporting Information
20	to the Conceptual Design for the Waste Rock
21	"Dome" at Lupin Mine (English)
22	EXHIBIT 9 - Hard Copy, Resumé of Ken Bocking,
23	Golder Associates Ltd. (English)
24	EXHIBIT 10 - Hard Copy, Resumé of Jim
25	McKinley, Stantec Consulting Ltd. (English)
26	EXHIBIT 11 - Hard Copy, Resumé of Alvin Tong,

- 1 Stantec Consulting Ltd. (English)
- 2 EXHIBIT 12 Electronic Copy, Resumé of Sara
- Wilkins, Stantec Consulting Ltd. (English)
- 4 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 5 Meadows, legal counsel for the Nunavut Water Board.
- 6 Mr. Chair, I would now like to have the panel of
- 7 witnesses for LMI who will be making presentations
- 8 today affirmed or sworn in. It's my understanding that
- 9 they all have asked to be affirmed, so if I can have
- 10 all the witnesses state and spell your name for the
- 11 record, please.
- 12 MS. LEWIS: Karyn Lewis, K-A-R-Y-N,
- 13 "Lewis", L-E-W-I-S.
- 14 MS. LABATTE: Belinda Labatte,
- 15 B-E-L-I-N-D-A, "Labatte", L-A-B-A-T-T-E.
- 16 MR. HOHNSTEIN: Thank you, Mr. Chair. David
- 17 Hohnstein, D-A-V-I-D H-O-H-N-S-T-E-I-N.
- 18 MR. BOCKING: Mr. Chair, I'm Ken Bocking,
- 19 K-E-N, and "Bocking" is B-O-C-K-I-N-G.
- 20 MS. WILKINS: Good morning. Thank you.
- 21 Sara Wilkins, S-A-R-A, last name "Wilkins",
- 22 W-I-L-K-I-N-S. Thank you.
- 23 MR. TONG: Thank you, Mr. Chair. Alvin
- 24 Tong, A-L-V-I-N T-O-N-G.
- 25 MR. MCKINLEY: Jim McKinley, J-I-M,
- 26 "McKinley", M-C-K-I-N-L-E-Y.

- 1 MR. RUPTASH: And Kenneth Ruptash,
- 2 K-E-N-N-E-T-H, last name R-U-P-T-A-S-H.
- 3 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 4 Meadows, legal counsel for the Nunavut Water Board.
- 5 KARYN LEWIS, BELINDA LABATTE, DAVID HOHNSTEIN, KEN
- 6 BOCKING, SARA WILKINS, ALVIN TONG, JIM MCKINLEY,
- 7 KENNETH RUPTASH, Affirmed
- 8 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 9 Meadows, legal counsel for the Nunavut Water Board.
- 10 Thank you, Mr. Chair. Those are all my procedural
- 11 matters.
- 12 THE CHAIR: Thank you.
- So, Applicant, you may go ahead with your
- 14 presentation, but I heard that your presentation will
- 15 be at least more than an hour for sure, so just keeping
- 16 in mind that whenever we, the panel, or somebody needs
- 17 a break, so I'll call it right away.
- 18 Thank you.
- 19 Presentation by Lupin Mines Incorporated
- 20 MS. LEWIS: Thank you, Mr. Chair. Karyn
- 21 Lewis speaking.
- 22 Mr. Chairman, once again, I would like to take the
- 23 opportunity to thank giving the panel members for the
- 24 opportunity to present our application for
- 25 renewal/amendment of our current Type "A" Water Licence
- 26 2AM-LUP1520 to support final closure and reclamation of

- 1 the Lupin mine site.
- I would also like to thank the community of
- 3 Kugluktuk as well as the other Kitikmeot communities
- 4 and all parties that have expressed interest in our
- 5 project throughout the regulatory processes.
- 6 Mr. Chairman, LMI has provided copies of our
- 7 presentation in hard copy for you and the panel members
- 8 as well as the public.
- 9 Mr. Chairman, I would like to turn it over to Dave
- 10 Hohnstein to go through our presentation.
- 11 Thank you.
- 12 MR. HOHNSTEIN: Thank you, Mr. Chair, and
- 13 thanks, Karyn.
- Good morning, everybody, and much appreciated that
- 15 everybody could make it here today. We had a little
- 16 bit of trouble getting in yesterday, but managed to get
- in a little -- a little later than planned, so
- 18 hopefully the rest of the week goes -- goes well here.
- 19 Karyn has asked me to do the presentation on
- 20 behalf of LMI on their water licence application for
- 21 renewal and amendment of the current licence and
- 22 looking to achieve, I guess, final closure of the mine
- 23 site and, along with that, approval of the final
- 24 closure and reclamation plan.
- 25 So what we've done here is we've put together a
- 26 fairly lengthy presentation. The first half of it goes

- 1 through, you know, the current status of the mine site,
- 2 what's happened during the last few years at Lupin, and
- 3 plans for the future here in the next two years or so
- 4 during closure activities.
- 5 So on our slides here, we've got, of course, the
- 6 forward-looking statement from the -- from the company,
- 7 and that's available on hard copy. I'll let everybody
- 8 read that at their own leisure.
- 9 The Lupin mine site, we've got a current photo on
- 10 the screen from, I think it was, July 2019, and it's a
- 11 fairly -- a fairly recent photo. Most of the photos
- 12 I've got in the presentation are from this last summer
- 13 season, and you can still see a lot of the
- 14 infrastructure on the -- on the photo, the main mine
- 15 site, the fuel tank farms, the sewage lakes off to the
- 16 right-hand side, and the tailings line access road.
- So it has been mentioned previously, the mine site
- is located approximately 285 kilometres southeast of
- 19 Kugluktuk, and it's only been accessible by air and
- 20 winter road throughout its entire mine life, including
- 21 during the initial construction back in late '78 to
- 22 1980. The mine has been in operation from 1982 through
- 23 to 2005 with two short closure periods during that
- 24 time. The mine site is currently opened -- or owned by
- 25 Lupin Mines Incorporated, which is a wholly owned
- 26 indirect subsidiary of Mandalay Resources Corporation.

- 1 The interim closure and reclamation plan submitted
- 2 by LMI was approved by the Nunavut Water Board in July
- 3 of 2018. So over the last number of years, LMI has
- 4 carried out progressive reclamation under this and
- 5 previously approved plans since the initial ownership
- 6 of the property in 2011, which was through Elgin Mining
- 7 and now through Mandalay Resources.
- 8 The final closure and reclamation plan was
- 9 submitted, along with the application, in July of 2018
- 10 with an application for amendment and renewal of the
- 11 current licence. The application and final closure and
- 12 reclamation plan completeness review and technical
- 13 review has been completed, and LMI -- or in addition to
- 14 the application, LMI provided notice, in January of
- 15 2019, to Environment Canada -- Environment and Climate
- 16 Change Canada with respect to the Metal and Diamond
- 17 Mines Effluent Regulations seeking closed mine status.
- I did forget to mention at the start, we apologize
- 19 for not being able to get the full presentation
- 20 translated. We've used previously translated slides
- 21 from a previous presentation back at the technical
- 22 meeting, so there are empty spaces in the presentation
- 23 where there would have been translations.
- So the technical meeting and pre-hearing
- 25 conference took place in Kugluktuk June 6th to 7 of
- 26 this past year. A list of 15 commitments was provided

- 1 with the decision from the Board to be addressed and
- 2 submitted prior to the public hearing.
- 3 All 15 commitments were completed and provided to
- 4 the NWB prior to or on their respective dates. Most
- 5 commitments considered -- have been considered
- 6 resolved, with the exception of the security cost
- 7 estimate and framework for progressive release of
- 8 security, and these discussions have been taking place
- 9 since the technical meeting and since submissions back
- 10 in November. LMI anticipates that all commitments will
- 11 be resolved prior to or at the public hearing.
- 12 So during 2019 and to fill -- fulfill commitments
- 13 that were generated from the technical meeting in June,
- 14 bathymetric surveys of Ponds 1, 2, and Cells 4 and 5
- 15 were completed. For Commitment Number 10, test pits in
- 16 the covered cells and standpipe water levels and water
- 17 quality information was collected. A one-time
- 18 geophysical survey of two selected dams, Dam 3D and
- 19 Dam 4, were completed by Aurora Geosciences Limited for
- 20 Stantec. There were geotechnical assessments carried
- 21 out, and LMI completed a Human Health and Ecological
- 22 Risk Assessment through Golder Associates.
- 23 Some site photographs from this last summer's
- 24 work, the upper-left photograph shows bathymetry work
- 25 being carried out in Cell 4, and the photograph on
- 26 the -- on the right shows one of the test pits that was

- done in Cell Number 1 in completion of Commitment
- 2 Number 10.
- And just as a note, this cell was covered in 1995,
- 4 so it's been 25 years, covered in -- in Cell 1, and the
- 5 wording on the slide's a little hard to read, but the
- 6 report that was generated from Stantec indicates that
- 7 there was thawed cover material for about a metre above
- 8 the tailings. There was a thin layer of frozen
- 9 material, and the actual tailings that was uncovered
- 10 below the -- below the esker cover material was showing
- 11 no oxidation and no actual, you know, physical changes
- 12 since covering took place 25 years ago, so that
- information is all contained in the response to
- 14 Commitment Number 10.
- 15 So under care and maintenance and general
- 16 operations that took place, discharge of the water from
- 17 the Lower Sewage Lake to the environment that was
- 18 carried out in June of 2019 with water quality
- 19 monitoring and flow measurement taking place, and the
- 20 company completed -- or had completed, through Golder
- 21 Association -- Associates, the Phase 6 or final
- 22 environmental effects monitoring study under the Metal
- 23 and Diamond Mines Effluent Monitoring Regulations.
- 24 That report, I believe, is due to be submitted sometime
- 25 within or before three years following the completion
- of the study, so there will be a draft report done up

- 1 within the next year, reviewed, and then finally
- 2 submitted through to Environment and Climate Change
- 3 Canada.
- 4 The company carried out transfer of water, water
- 5 management in the tailings on containment area,
- 6 transfer of water from Cell 3 to Cell 4, syphoning of
- 7 water from Pond 1 to Pond 2, and pumping of water from
- 8 Cell 5 to Pond 1. This was all done to manage the
- 9 water levels within the tailings pond in anticipation
- 10 of discharge in 2020.
- 11 So, again, some more photographs from this last
- 12 summer's work. The upper left is the -- showing the
- 13 intake location of the syphons for discharge from the
- 14 Lower Sewage sewage Lake. The lower centre is a
- 15 photograph of active pumping from Cell 5 to Pond Number
- 16 1, and the right-hand photo is syphoning of water from
- 17 Cell 3, which is on the right side, over to Cell 4, a
- 18 little bit out of the photograph.
- 19 In addition to the work at the TCA with regards to
- 20 water management, pumping of water from the West Zone
- 21 Pit Number 2 to Stope Number 1 occurred at the mine
- 22 site. Some physical work that was done at the tailings
- 23 containment area included repairs to the KDam crest due
- 24 to erosion, excavated a drainage swale along Cell
- 25 Number 3 and KDam to control and prevent further
- 26 erosion of the downstream face of KDam. The gate

- 1 culvert which controls water flow from Cell Number 4
- 2 through to Pond 1 was removed and a coffer dam
- 3 installed to contain water.
- And, again, some photos of the actual work taking
- 5 place. The upper left photo is active repair, the
- 6 downstream slope of KDam, some erosion areas on the
- 7 crest of the dam. The right-hand photo is the
- 8 excavation of the -- the drainage swale along Cell
- 9 Number 3 and KDam to control runoff and prevent the
- 10 erosion that took place on the downstream slope, and
- 11 the centre lower photograph is a photograph of the
- 12 bermed area, the coffer dam around the gated culvert.
- 13 It's not quite visible there, but the culvert is on the
- 14 right-hand side here with the berm containing the water
- 15 in Cell 4.
- 16 So continuing on with the Lupin Mine status, we've
- 17 included a satellite view of the Lupin mine site, and
- one of the things, I think, that should be noted on
- 19 this photograph, it'll be mentioned a number of times
- 20 during the -- during the presentation, but the areas of
- 21 the mine site where mining had occurred, and there's
- 22 openings at the surface, include the west zone opened
- 23 crown pillar and the centre zone opened crown pillar.
- 24 The east zone, which was mined out in early 2000s, has
- 25 already been covered in and reclaimed, and that was
- done prior to the final closure of the site back in

- 1 2005.
- 2 So, again, just the general arrangement of the
- 3 mine site. On the left-hand side, here's a fuel tank
- 4 farm, the main mill area, the mine headframe, and some
- 5 of the -- some of the accommodation complexes, and
- 6 actually, this photograph includes a bit of the
- 7 airstrip for access to the Lupin Mine.
- 8 So looking at the application highlights, some of
- 9 the things that Lupin Mines Incorporated was looking
- 10 for in the new licence, the main points were,
- 11 initially, the application included a request for a
- 12 seven-year licence; however, following the technical
- 13 meetings and the pre-hearing conference report
- 14 decision, LMI has since confirmed -- LMI has since
- 15 confirmed a request for a licence term of 12 years to
- 16 coincide with full closure activities, and I apologize,
- 17 this number here should have been changed to the first
- 18 10 years of post-closure monitoring, and that 12-year
- 19 term allows for the time required for submission for an
- 20 application for renewal of that licence and the time
- 21 needed to review the application and go through the
- 22 licence renewal process.
- 23 The water requirements for the -- for the site
- 24 during closure activities and then following care and
- 25 maintenance, a request has been included for total
- 26 water-use increase. The original application indicated

- 1 a rate per day and discussions at the technical
- 2 meetings indicated that keeping the units consistent
- 3 would be more preferable, so the original rate of, I
- 4 think it was, 685 cubic metres a day was converted over
- 5 to 250 cubic -- 250,000 cubic metres per year, and that
- 6 request would be for the first two years for closure
- 7 activities, and then the following ten years would be
- 8 limited to 5,000 cubic metres per year during
- 9 post-closure monitoring and maintenance.
- 10 In addition to the water quantity request, Lupin
- 11 Mines has included an additional request for additional
- 12 water sources. Rather than all the water being
- 13 required to come from Contwoyto Lake, they've included
- 14 a request for minimal water use from water sources
- 15 along the access roads to allow for industrial water
- 16 use and water use for dust control on the roads.
- 17 Rather than having to haul water from Contwoyto Lake
- 18 all the way out to tailings area where a lot of the
- 19 work is being carried out, they can utilize water
- 20 sources in and around the tailings area.
- 21 So along with these requests, there's been a
- 22 request for a review of the licence terms and
- 23 conditions to better structure the licence and
- 24 represent the closure status of the mine and activities
- 25 that would be taking place over the next licence term.
- 26 And then the final request was with the submission of

- 1 the 2018 final closure plan, the approval of that plan
- 2 and the approval for moving ahead with final closure
- 3 activities.
- 4 So just a -- just a quick recap of the technical
- 5 meeting/pre-hearing conference decision, the technical
- 6 meetings, as was mentioned, took place in June of 2019,
- 7 and the list of commitments that was developed through
- 8 that technical meeting, as well as -- as well of a list
- 9 of issues was conveyed to all parties in the
- 10 pre-hearing conference decision report.
- 11 I believe the issues will be -- will be discussed
- 12 and addressed through the public hearing agenda, and
- 13 with regards to commitments, LMI's pleased to report
- 14 that all the commitments listed in Appendix D of the
- 15 decision have been completed and submitted either prior
- 16 to or by the dates set out in advance of the public
- 17 hearing. With the exception of a few minor items to be
- 18 dealt with at this public hearing, which include the
- 19 issue of security, cost estimate, and the security
- 20 framework for progressive release of security, LMI
- 21 considers the commitments fulfilled and issues
- 22 resolved.
- 23 There have been a few items that were discussed in
- 24 the last few days, including yesterday evening, and I
- 25 believe those will be discussed later on during this
- 26 public hearing agenda.

- 1 So for the Lupin mine closure, the final closure
- 2 and reclamation plan has been developed and submitted,
- 3 and included on this slide here are a couple of
- 4 photographs. The one on the left is the current or
- 5 most recent mine-site status, so you've got the mine
- 6 site connected to the tailings area via road, and then
- 7 the tailings containment area, which are the two main
- 8 components of the closure plan, so you've currently got
- 9 water-containing areas Pond Number 2, Pond Number 1,
- 10 and Cell Number 4 down in the lower part here.
- 11 Currently through progressive reclamation, there's
- 12 several cells within the tailings containment area that
- 13 have been covered: Cell Number 1 and 2 and Cell Number
- 14 5. Cell Number 5 is near completely covered. There's
- 15 a small water-containing area just next to the
- 16 containment dam, Dam M, and then Cell Number 3 is
- 17 considerably covered with a small little
- 18 water-collection area down in the far lower-right here.
- 19 So these waters all are collected. They transfer
- 20 through to Pond Number 1. Pond Number 2, treatment
- 21 takes place, and then it's discharged to the
- 22 environment when required.
- 23 So for final closure, this is a -- I guess, a
- 24 conceptual drawing that's been digitally changed to
- 25 show what the mine site and tailings area may look like
- 26 upon final closure. So you've got a small

- 1 water-retaining natural drainage area. The main
- 2 tailings cell areas have been covered, and natural
- 3 water flow has been allowed to take place through Pond
- 4 Number 1, through the original Pond Number 2 area, and
- 5 then out to the environment.
- 6 For the mine site, the -- all the mine buildings,
- 7 infrastructure, everything has been removed, disposed
- 8 of either in the open crown pillars or to a demolition
- 9 materials landfill that's going to -- that's proposed
- 10 to be located next to the upper sewage pond, and then
- 11 all the waste rock, mined rock, and everything has been
- 12 consolidated and covered with one metre of esker
- 13 material with grading to allow drainage in certain
- 14 areas to allow for runoff.
- So the final closure and reclamation plan is
- 16 fairly comprehensive. What we'd like to highlight here
- is mainly the permanent closure and reclamation
- 18 activities.
- 19 So within the progressive reclamation activities,
- 20 there's a number of items that have to be addressed:
- 21 The underground mine, the tailings impoundment area,
- 22 the issue of a rock pile being developed at the mine
- 23 site, dealing with chemicals and contaminated soils,
- 24 dismantling/demolition of buildings and removal of
- 25 equipment, the overall capital expenditures and
- 26 short-term water treatment and management for the site,

- 1 overall interim care and maintenance for long-term
- 2 monitoring maintenance of the reclaimed site, and,
- 3 again, post-closure monitoring, and then the
- 4 mobilization of equipment into the site and demob of
- 5 equipment from the site once all the reclamation
- 6 activities have been completed.
- 7 So with regards to the underground mine, the
- 8 portal and mine openings will be closed off. The crown
- 9 pillar, the proposal is, if needed, the crown pillar
- 10 will be blasted open. Right now, it ranges from two to
- 11 five metres opening or so at surface, so that area --
- 12 that area will be blasted, and it'll be blasted down
- into the actual mine openings below to allow opening on
- 14 the surface that will allow for disposal of all the
- 15 mine -- mine-site infrastructure, then backfill and
- 16 reclaim of the open stopes.
- 17 So right here is a photo of the -- from 2018,
- 18 actually, the open crown pillar at the -- at the centre
- 19 zone, and the photo on the right is the -- the portal
- 20 opening, which will be closed off and blocked off with
- 21 a -- with an engineered seal.
- 22 And, again, from 2018, the previous photo
- 23 showed that water was filling the opening here.
- 24 There's a picture of part of the crown pillar that's --
- or for the centre zone that you can see it's open, open
- 26 to depth. The photo on the right is a -- there's a

- 1 historical photo from 2002 showing where the east zone
- 2 crown pillar was mined out, backfilled, and eventually
- 3 covered with esker material and graded.
- 4 So if you can imagine, once all the buildings are
- 5 gone, all the -- all the waste rock and materials are
- 6 collectively moved to the centre of the mine site, the
- 7 final closure of the mine site will look similar to the
- 8 east zone crown here, which will be covered with one
- 9 metre of esker material.
- The tailings impoundment area, so the current
- 11 plan, and through studies that were done in summer of
- 12 2019, it's been determined that the slopes on the
- 13 Pond 2 side of MDam and KDam will be flattened to
- 14 reduce the slope slightly and allow better stability of
- 15 those dam slopes.
- 16 A point to make clear here is that on final
- 17 closure, once water's been discharged from the tailings
- 18 area, and the water level's lowered to the maximum --
- 19 or the minimum level they can be, there will actually
- 20 be no water up against any of the dams that are in the
- 21 tailings area, so the dam structures will be only
- 22 containing the solid tailings material that's been
- 23 deposited over the years.
- 24 So there will -- there's required tailings
- 25 pipeline removal to take place. Approximately 4 --
- 26 4,000 metres cubed of pipeline was removed in 2018 and

- 1 about 4,500 metres is remaining to be removed.
- 2 The syphon infrastructure at the tailings area
- 3 will need to be removed and disposed of, and then there
- 4 will be construction or excavation of spillways at
- 5 Dam 1a and the JDam to allow for natural drainage of
- 6 the area.
- 7 So, again, an overview of the tailings impoundment
- 8 area, we've got Cells 1 and 2, Cell 3, and Cell 5,
- 9 partially covered Cell 5, so there's an area to the
- 10 southwest here that still needs to be covered, a small
- 11 area in the lower right corner of Cell 3 that remains
- 12 to be covered, and then the water management of the
- 13 tailings ponds that will need to be dealt with in the
- 14 upcoming open-water season here in 2020. So the plan
- 15 this summer will be to treat the waters within the full
- 16 tailings area and discharged through the syphoned
- infrastructure and discharged to the environment.
- 18 So a few closer looks at the tailings area here.
- 19 This is Pond 2 on the right-hand side, the main MDam
- 20 which contains Cell 5, and MDam which contains a little
- 21 area of exposed tailings in the corner here. These
- 22 areas will all be covered up during final closure.
- 23 The lower photo here, a little -- a little hard to
- 24 see with this lighting here, but it's Cell -- Cell 5,
- 25 just showing some of the exposed tailings that remains
- 26 to be covered and esker material further back here

- 1 covering the main portion of Cell 5; and the upper
- 2 photo here is Cell 3 on the -- on the left, Cell 4 on
- 3 the right. During regular water management, water's
- 4 pumped or syphoned from Cell 3 over the small dam here
- 5 into Cell 4, which naturally flows over to Pond Number
- 6 1.
- 7 So there's -- there's a couple of historical
- 8 photos here from 2002, and the main reason for
- 9 including these is that these show water levels that
- 10 will be relatively close to what the final closure
- 11 situation will be when the water's completely -- or as
- 12 completely removed from the tailings area as physically
- 13 can be done with the natural ground elevations, so the
- 14 photo on the left here shows the Dam 1a and syphons,
- and it's hard to see in the photo, but there's the
- 16 intakes of the syphons that are showing just near the
- 17 water level there, so that's physically the furthest
- 18 the water level can be drawn down; and then at the same
- 19 time, a photo on the right showing the water level of
- 20 Pond 2 and the KDam, which it -- obviously in the
- 21 photo, once the water level is drawn down in Pond 2,
- that there will be no water up against the toe of the
- 23 dam to, you know, influence any erosion.
- 24 The work done this summer identified that the
- 25 slope of this dam needs to be flattened out slightly to
- 26 allow for better stability and limit any possible

- 1 erosion of that, that embankment.
- 2 So the rock pile item is referring to the -- to
- 3 the mine site, and as mentioned before, all the
- 4 buildings, infrastructure will be demolished, removed
- 5 from the mine site, and disposed of either in the open
- 6 stopes or the demolition landfill that's proposed.
- 7 So approximately 191 cubic metres of rock material
- 8 at the mine site will be consolidated together to limit
- 9 the total area disturbed and having to be reclaimed.
- 10 There will be a soil cover of approximately 300,000
- 11 square metres, and a contour area of rock left in place
- 12 roughly about the same, so same square metres.
- Again, the photo on the left is showing the opened
- 14 crown pillar area where some of the demolition waste
- 15 will be disposed of, and the photo on the right is
- 16 including waste rock piles and showing where the
- 17 previous Lupin baseball field used to -- used to lay,
- 18 which will be -- all this material would be removed and
- 19 consolidated in one main area.
- 20 So chemicals and contaminated soils, the plan is
- 21 to decontaminate removal of all oil, fuel, glycol
- 22 systems. A large amount of this work was carried out
- 23 in 2018 during the summer and work program. All tanks
- 24 not in use outside the main tank -- tank farm have been
- 25 cleaned and signed off by a professional engineer.
- 26 There's going to be removal of asbestos-containing

- 1 materials and disposed of as per guidelines and
- 2 Environment and Climate Change Canada recommendations.
- Removal of hazardous materials, throughout 2015
- 4 through to 2018, there's been a lot of waste removal
- 5 from the site, waste oils, fuels, batteries, machine
- 6 shop paints, solvents. The majority of these wastes
- 7 have already been collected and removed from the site.
- 8 Lab reagents have been removed in 2016, '17, and '18,
- 9 and item at -- items currently at the site will be
- 10 required to be removed during final closure activities.
- 11 The plan for contaminated soils, and that's
- 12 generally petroleum hydrocarbon contaminated soils,
- 13 will be collected, removed, and -- collected, removed,
- 14 and deposited or -- or disposed of in the opened crown
- 15 pillar.
- 16 For all buildings, equipment, and infrastructure,
- 17 I won't go through the list here. Basically, it lists
- 18 off all the major buildings and infrastructure at the
- 19 main mine site, so all these facilities will be
- 20 removed, taken down, and disposed of in either the
- 21 opened crown pillars or the demolition waste landfill.
- 22 A few photos from the mine site, just to have
- 23 everybody familiar with some of the terminology, the
- 24 headframe, so access for the -- for the shaft and
- 25 access to the mine, warehouse, engineering offices,
- 26 shops, and the like, the main fuel tank farm, and

- 1 probably one of the largest buildings infrastructure
- 2 on-site is the mill building, which housed all the
- 3 milling, crushing, and processing of ore
- 4 infrastructure.
- 5 Another picture of some of the -- some of the
- 6 equipment at the site, the powerhouse. I believe
- 7 there's upwards of ten -- ten generators at the -- at
- 8 the site, diesel generators, and another picture of the
- 9 mills, the grinding area of the mines -- of the mill.
- 10 So there's, proposed, a landfill for the
- 11 demolition waste, reclaiming of approximately 12
- 12 kilometres of roads, access roads for the mine site,
- 13 and one of the other main activities is to grade and
- 14 contour the main esker -- esker source area out at
- 15 Fingers Lake.
- 16 The photo's a little -- a little dark, but the
- 17 main access road from the mine site to the tailings
- 18 area is along this side here, and mine site on the
- 19 crest of the hill with the Upper Sewage Lake on the
- 20 right-hand side here, so the proposed location for the
- 21 demolition landfill site is just off the side of this
- 22 hill, working its way down to the Upper Sewage Lake,
- 23 which, incidentally, will be drained on closure, so the
- 24 water levels will be minimal in this area here and the
- 25 likelihood of some of this area having to be covered
- 26 up, as well, with the -- with the waste landfill.

- 1 Short-term water treatment and management, so
- 2 there will be a decommissioning of the freshwater
- 3 supply and pumphouse, the 6-inch water supply line, and
- 4 then for ongoing water management at the -- at the
- 5 tailings area, further water treatment during 2020, and
- 6 discharged to the environment.
- 7 Interim care and maintenance, so during 2019, LMI
- 8 carried out a number of activities. The -- as
- 9 mentioned earlier, the final EEM study under the Metal
- 10 and Diamond Mines Effluent Regulations took place in
- 11 August of 2019. There were geotechnical and
- 12 geophysical surveys that took place during the summer,
- 13 the test pitting of the covered tailings cells, as
- 14 mentioned earlier for one of the commitments. Overall
- 15 general water management to the tailing -- tailings
- 16 area took place, and that's mostly water moving around,
- 17 making sure there's going to be volume available,
- 18 storage volume available for spring freshet in 2020.
- 19 There was maintenance that took place for repairs
- 20 of the KDam in Cell Number 4 divider dike. Water
- 21 quality monitoring, there was a number of
- 22 water-monitoring programs that took place in
- 23 anticipation of treatment and release for next year,
- 24 and the sewage lakes' facility was discharged to allow
- 25 for capacity over the spring freshet in 2020.
- Some items on post-closure monitoring and

- 1 maintenance under the final closure plan, annual
- 2 geotechnical studies will take place during the initial
- 3 terms of the licence, or years of the licence. Regular
- 4 monitoring, including maintenance, and overall site
- 5 water quality management or monitoring, which would
- 6 take place under the water licence conditions.
- 7 A few recent photos from last summer, just to show
- 8 some of the reclamation work that has taken place over,
- 9 you know, the last, I guess, 20 -- 20 years or so.
- 10 This is a photo of Cell 1, and, you know, originally,
- 11 when it was covered back in 1995 or so, it would have
- 12 been bare esker material at that point, and you can see
- 13 a lot of -- a lot of vegetation has naturally worked
- 14 its way into the area. A lot of small shrub growth,
- 15 birch growth, that sort of thing.
- 16 This is a fairly surprising area here. This is
- 17 Dam 3 along Cell -- Cell 1, and this is the -- this is
- 18 an access road, and the area in between the two roads
- 19 has nearly fully grown in with a little bit of
- 20 vegetation along the access road.
- 21 And this is another area of Cell 1 with some
- 22 naturally standing water, and you can see a lot of
- 23 the -- a lot of vegetation growth in and around the
- 24 water's edge and throughout, throughout the covered
- 25 cell area.
- 26 THE CHAIR: Before you continue on with

- 1 your presentation, we need a short break before you go
- 2 on to final closure requirements of your presentation.
- 3 We'll take a five-minute break for now.
- 4 MR. HOHNSTEIN: Thanks, Mr. Chair.
- 5 (ADJOURNMENT)
- 6 THE CHAIR: We shall continue on with the
- 7 presentation for Applicants.
- 8 Okay. Dave, go ahead. Continue with your
- 9 presentation.
- 10 MR. HOHNSTEIN: Thank you, Mr. Chair. Again,
- 11 David Hohnstein, Lupin Mines Incorporated.
- 12 Continuing on with the -- with the closure
- 13 presentation here, the last item there was mobilization
- 14 and demob.
- So the plan currently is to bring additional
- 16 equipment into the site in early 2020 on a planned
- 17 winter road, and that would include equipment, some
- 18 additional fuel, tools and equipment, so transportation
- 19 and flights are planned to and from the site during
- 20 operation, during the closure activities for supplies
- 21 and manpower and so forth, and at the mine site, the
- 22 accommodations area will be open for workers at the
- 23 site, along with maintenance shops that are required
- 24 for maintaining of equipment during the -- during
- 25 activities.
- 26 So as a -- as a historical photo here, I think

- 1 this was in a framed picture hung at the Lupin mine
- 2 site for quite some time. I took a photograph of it
- 3 last time I was at the site, and this is an actual
- 4 photograph of the area prior to the mine site being
- 5 constructed, so the actual portal going underground was
- 6 started in front here, heading down underground. The
- 7 mine infrastructure was constructed on the top of the
- 8 hill here, and you can see the one sewage lake in the
- 9 background and the access roads throughout the initial
- 10 site.
- 11 Then, again, a little larger photograph of the
- 12 conceptual closure of the -- of the mine site and
- 13 tailings area, so all areas of -- that were used to
- 14 deposit tailings will be covered with esker material.
- 15 The natural drainage of the area will be allowed to
- 16 take place. Original Pond 1 and Pond 2 will naturally
- 17 drain to the environment, and Cell 4 here will have a
- 18 connection through the back here that naturally flows
- 19 right now, but there's a control structure on Cell 4.
- The area on the far lower right here is the esker
- 21 area where the material is acquired for covering of the
- 22 tailings area and the mine site.
- 23 So for two thousand, I have, nineteen here through
- 24 to '22, Mandalay Resources has finalized the contract
- 25 with Nahanni Construction Limited for all the closure
- 26 and reclamation work at Lupin related to the final

- 1 closure and reclamation plan.
- 2 Prior to 2019 season, unfortunately, due to a
- 3 delay in obtaining a return of security and some
- 4 permitting, the care and maintenance program was
- 5 continued on through 2019. Some work, as mentioned,
- 6 was carried out during the 2019 season by Nahanni.
- 7 Mandalay anticipated having the final closure and
- 8 reclamation plan renewal licence to be completed in the
- 9 first quarter of 2020.
- 10 So as mentioned, mobilization will start early in
- 11 2020 via the winter road. The full reclamation
- 12 program, as updated during the NWB's final closure and
- 13 reclamation licencing process, will take place during
- 14 2020 through 2021, with the demobilization of equipment
- from site in 2022 on the winter road.
- 16 A picture of the original Lupin manager cabin.
- 17 Historically, for those who are unaware, this building
- 18 was transported Echo Bay's original mine in -- at Port
- 19 Radium for the owner of Echo Bay Mines at the time, and
- 20 reconstructed at -- at Lupin. The plans are to leave
- 21 this building in place as long as possible to allow for
- 22 accommodation of summer rotational staff during care
- 23 and maintenance and monitoring activities through the
- 24 licence term.
- 25 So this is where I was going to take a break, but
- 26 Mr. Chair beat me to it, so we'll continue on at the --

- 1 at this point. This is the second half of LMI's
- 2 presentation where we planned to go through all the
- 3 pre-hearing conference decision commitments and
- 4 identify where submissions were made, where the further
- 5 comments were addressed, and hopefully identify that
- 6 the majority of the commitments have been met and have
- 7 been resolved.
- 8 So under the commitment list, Commitment Numbers 1
- 9 and 7, the HHERA report, the Human Health Ecological
- 10 Risk Assessment report, was completed by Golder
- 11 Associates and submitted on October 15th, 2019. In
- 12 there, in final comments on the -- on the commitments,
- 13 CIRNAC submitted comments, and their Comment Number 1
- 14 included the need for an updated monitoring plan and
- 15 comment that the HHERA should include the tailings
- 16 containment area.
- 17 LMI responded indicating that the post-closure
- 18 monitoring plan has been committed to under Number 14
- 19 and that the TCA was addressed separately through the
- 20 ecological risk assessment submitted with the 2014
- 21 renewal application, and LMI considered the item to be
- 22 resolved.
- 23 Commitment Number 2, the updated security estimate
- 24 reclaim model, this was filed in -- on November 1st,
- 25 2019, and additional comments were received from --
- 26 from CIRNAC on December 6th.

- 1 LMI provided additional details on the estimate
- 2 and indicated that they were based on a signed contract
- 3 with the contractor, which is a firm price for the work
- 4 to be carried out and considered to be more accurate
- 5 than an estimate -- the estimated unit rates of
- 6 reclaim.
- 7 I believe this and the item of the security
- 8 framework are still being discussed with CIRNAC, and,
- 9 you know, LMI anticipates the item to be resolved prior
- 10 to the end of the hearing.
- 11 Commitment Number 3 and 4, LMI was to review
- 12 records and provide a historical data analysis with
- 13 respect to ARD potential of tailings dams and roadways.
- 14 This was submitted to the Water Board on August
- 15 15th, 2019, and through comments received from CIRNAC,
- 16 LMI provided a response in a memo dated August 14th
- 17 evidencing that the historical data has been reviewed
- 18 and that an accurate account of the ARD potential is
- 19 reflected in the closure plan, and as such, there would
- 20 be no requirement for further work under Commitment 4.
- 21 Commitment Number 5 was to provide preliminary
- 22 design level explanation of waste -- of the waste rock
- 23 storage dome design, including typical cross-sections,
- seepage, topography, geochemistry, and storm-water
- 25 draining estimates. This was provided by LMI on
- 26 October 15th, and CIRNAC provided comments December

- 1 6th; and further to that, LMI provided a technical memo
- 2 with typical cross-sections with a commitment to
- 3 provide detailed grading plans and specifications in
- 4 Quarter 1 of 2021.
- 5 Post-closure impacts of any waste rock seeps are
- 6 addressed in the HHERA and will be addressed in the
- 7 ongoing long-term monitoring plans, and LMI considers
- 8 this item to be resolved.
- 9 Commitment Number 6, LMI provide geotechnical
- 10 analysis to provide confirmation of long-term dam
- 11 stability and erosion control. This was filed by LMI
- on November 15th, 2019. CIRNAC commented requesting
- 13 LMI to provide more specific information on the
- 14 location where embankment stabilization work would be
- 15 carried out and design details.
- 16 Following this, in LMI's final response of January
- 17 3rd, LMI provided information that additional
- 18 information on the slope stability and where resloping
- 19 would apply included resloping of Dam K and Dam M as
- 20 required.
- 21 Commitment Number 6 response included conceptual
- 22 drawing for surface drainage of Cells Number 3 and 5,
- as well as out -- outlooked structure cross-sections,
- 24 and I believe there's some additional information that
- 25 will be provided either prior to the end of the hearing
- 26 or within the first term of the licence regarding some

- 1 additional long sections that CIRNAC was discussing
- 2 with LMI last night with regards to design of the
- 3 drainage and erosion control.
- 4 Commitment Number 7, LMI was to provide a
- 5 geochemical source term and load model for seepage from
- 6 the waste rock dome. CIRNAC commented that the
- 7 documentation provided by LMI is a seepage model,
- 8 rather than a source term model; however, CIRNAC is
- 9 satisfied with the response conditional on seepage
- 10 samples being collected and modelling updated.
- 11 LMI indicated in their response January 3rd that
- 12 they're committed to providing the post-closure
- 13 monitoring plan for the site and the area, which would
- 14 include this information. LMI considered this item to
- 15 be resolved.
- 16 Commitment Number 8, a decision matrix tree that
- 17 determines how exposed tailings will be handled on a
- 18 case-by-case basis when lowering the water level in the
- 19 tailings containment area. This was filed by LMI
- 20 October 15th, and CIRNAC responded with their Comment
- 21 Number 8 in their December 6 response.
- 22 LMI has provided, with its final submission, a
- 23 revised contingency containment contaminants management
- 24 decision matrix, and I believe through further
- 25 discussions yesterday evening, that this will be
- 26 updated and further information provided prior to the

- 1 end of the hearing.
- 2 Commitment Number 9, joint submission on framework
- 3 for the progressive release of security, as I mentioned
- 4 earlier under the closure cost estimate, these
- 5 discussions are ongoing, and LMI is committed to work
- 6 with CIRNAC and provide final information prior to the
- 7 end of the hearing.
- 8 Moving on to some of the commitments that were
- 9 developed and requested by Environment and Climate
- 10 Change Canada. Commitment Number 10 was to provide a
- 11 one-time inspection or test pitting to ground-truth the
- 12 status of cover of nearby one of the installed
- 13 standpipes.
- 14 ECCC commented in their final submission that the
- 15 request for field investigations have been resolved and
- 16 recommends that the details of TCA monitoring be
- 17 included in a post-closure monitoring plan. LMI and
- 18 ECC [sic], I believe, consider this item to be
- 19 resolved.
- 20 Commitments Number 11 and 12, LMI conduct a
- 21 one-time geophysical survey along two selected dams to
- 22 confirm the condition of frozen cores. ECCC, in their
- 23 final submission, commented that the commitment made
- 24 has provided the required information regarding the
- 25 dams and that further analysis was done on slope
- 26 stability. They also recommended that ongoing

- 1 monitoring of the dams and that dam stability
- 2 monitoring be included in the post-closure monitoring
- 3 plan, and LMI has committed to this and considers this
- 4 item to be resolved.
- 5 Commitment Number 13, climate change modelling,
- 6 LMI to use a range of emission scenarios, low to high
- 7 future forcing [phonetic], from multiple climate models
- 8 and considering multiple parameters for consideration
- 9 in the final closure and reclamation plan.
- 10 ECCC commented that LMI consider both the high and
- 11 low emission scenarios along with the average emission
- 12 scenario for the thermal modelling and contingency
- 13 plans. LMI also considered the high and low emission
- 14 scenarios for thermal modelling and developed
- 15 contingency plans that consider both.
- 16 LMI's final submission of January 3rd clarified
- 17 that the work carried out under Commitments Numbers 12
- 18 and 13, which included that under the high emissions
- 19 scenario with the higher risks -- highest risks
- 20 indicated that the Lupin TCA will perform as intended,
- 21 and, therefore, does not require contingency planning
- 22 under proposed climate risk scenarios. LMI considered
- 23 this item to be resolved.
- 24 Commitment Number 14, post-closure monitoring
- 25 plan, following discussion with all stakeholders. This
- 26 commitment was identified to be filed by LMI one year

- 1 following approval of the licence by the Minister.
- 2 ECCC commented in their final submission, specifically
- 3 under Item 4, but also under Items 2, 3, 5, and 6, and
- 4 recommending monitoring requirements, frequency,
- 5 locations, and instrumentation for the post-closure
- 6 monitoring plan. CIRNAC also commented that HHERA
- 7 results be included and considered in the required
- 8 monitoring plan.
- 9 In their final response, LMI confirmed in its
- 10 response to parties regarding the post-closure
- 11 monitoring plan under Commitments Numbers 1, 3, and 5,
- 12 that the concerns would be addressed in the proposed
- 13 post-closure monitoring plan. LMI, therefore,
- 14 considers this item to be resolved.
- And, finally, Commitment Number 15, LMI was to
- 16 provide a draft licence framework identifying suggested
- 17 amendments to the existing licence. This was filed
- 18 with LMI's final submission dated January 3rd.
- 19 ECC provided their Comment Number 8, and
- 20 recommended LMI note the proposed new criteria under
- 21 Schedule 4 of the MDMER in the event of discharges in
- 22 2021 and forward and also recommended that LMI update
- 23 the definition of "recognized closed mine".
- In LMI's final response, LMI acknowledged ECCC's
- 25 comments and provided additional recommended text to
- 26 the NWB in their submission. LMI considers this item

- 1 to be resolved.
- 2 LMI wishes to note for the reviewers a few minor
- 3 licence condition changes that were included in the
- 4 draft water licence framework with respect to water use
- 5 and water discharge. As noted earlier, water-use
- 6 requirements have been converted in the draft licence
- 7 framework from the original requested metres-cubed-
- 8 per-day amount to a metres cubed per year for the
- 9 initial closure activities of 250,000 -- 25 metres
- 10 cubed per year. This is -- this is to be consistent
- 11 with the care and maintenance units of 5,000 cubic
- 12 metres per year.
- 13 LMI has included, in their final submission, a
- 14 licence condition for use of water from sources other
- 15 than Contwoyto Lake and recommends the use of roadside
- 16 ponds and lakes for the use of industrial purposes such
- 17 as dust control on the roads during construction. This
- 18 would allow for an easier access to water sources and
- 19 avoid a lot of unnecessary travel on the road
- 20 connecting the mine site and Contwoyto Lake to the
- 21 tailings containment area.
- 22 And as a final note, LMI has included conditions
- 23 for waste discharge regarding the tailings containment
- 24 area effluent, Part E, Item 3, to allow for maximum
- 25 discharge of 125,000 cubic metres per day to allow for
- 26 full discharge of the TCA water during the 2020

- 1 open-water season. The current licence allows for a
- 2 discharge of 70,000 cubic metres per day, and I noticed
- 3 there's a typo on the screen there. LMI considers the
- 4 item of the draft water licence framework to be
- 5 resolved.
- 6 So outside of the comments received regarding the
- 7 commitments listed off in the pre-hearing conference
- 8 decision, there was some additional comments received
- 9 from CIRNAC regarding some items in the application, so
- 10 the first comment was regarding the renewed -- or
- 11 renewal licence term.
- 12 CIRNAC had no comment on the seven-year term
- 13 requested, and LMI would like to reconfirm and note to
- 14 the Water Board that on November 15th, in their
- 15 submission, a requested changed licence term was added
- 16 to request the term to 12 years, which would include
- 17 the time required for closure activities, post-closure
- 18 monitoring, and then the final year to year and a half
- 19 or so required to apply and process a licence renewal.
- 20 LMI considers this item or comment to be resolved.
- 21 CIRNAC provided, in a second comment, water-use
- 22 requirement, CIRNAC had no comment on the requested
- 23 water use, and in response, LMI refers the NWB to its
- 24 final submission January 3rd in the draft licence --
- 25 water licence framework which clarifies the water-use
- 26 requirements needed under the licence for the closure

- 1 activities.
- 2 CIRNAC Comment Number 3 in their final submission,
- 3 CIRNAC had no further comment on waste disposal, and,
- 4 again, LMI refers the NWB to the draft water licence
- 5 framework submitted.
- 6 CIRNAC Comment Number 4 was regarding the status
- 7 of Commitments Number 3, 4, 5, 7, and 8. CIRNAC
- 8 commented that with the exception of Commitment 7,
- 9 CIRNAC requires additional information. LMI provided,
- 10 in their final submission, a response. Further
- 11 discussion with CIRNAC has resulted in resolution and
- 12 additional requests to be provided in advance of or at
- 13 the hearing in the form of exhibits. Some of those
- 14 exhibits have been submitted and distributed. They
- 15 will be presented here, I believe, later on in this
- 16 hearing process, and LMI continues talks with CIRNAC
- 17 regarding any further additional information required
- 18 prior to the end of the hearing.
- 19 CIRNAC Comment Number 5 and 6, draft water licence
- 20 regarding the draft water licence framework and
- 21 management plans and reports. CIRNAC had no concerns,
- 22 and LMI refers the NWB to the list of issues that will
- 23 be discussed during this licence process and public
- 24 hearing.
- 25 CIRNAC Comment Number 9 is with regards to the
- 26 reclamation security cost estimate, Commitment Number

- 1 2, and the framework for progressive release of
- 2 security, Number 9. CIRNAC commented and required that
- 3 provided -- or they provided further comment to the
- 4 initial submission requesting clarity on several items
- 5 in the LMI cost estimate, and LMI provided a proposal
- 6 for a framework and will provide -- CIRNAC will provide
- 7 comment regarding -- or with regards to a draft.
- 8 LMI's response, in their final submission, under
- 9 Items Number 2 and Number 8, LMI referred CIRNAC and
- 10 the NWB to the draft water licence framework Attachment
- 11 C, security framework agreement, which was developed
- 12 under Commitment Number 15, and I'd like to note that
- 13 LMI and CIRNAC have been in discussions since the above
- 14 submission on January 3rd and have committed to further
- 15 discussions in advance and at the public hearing, with
- 16 a summary to be provided as exhibits.
- 17 Some additional comments from ECCC, in their final
- 18 submission, the duration -- regarding the duration of
- 19 permanent monitoring and timing and clarification.
- 20 ECCC commented that LMI include thresholds for water
- 21 quality and tailings cover performance that would
- 22 trigger moving to reduce monitoring frequency or
- 23 intensity in the proposed post-closure monitoring plan.
- 24 Monitoring of the TCA cover and water quality to be
- 25 done over a duration that is sufficient to demonstrate
- 26 physical and chemical stability and acceptable quality

- 1 for the long term.
- 2 LIM's response was that thresholds would be
- 3 included in the proposed post-closure monitoring plan
- 4 and that monitoring will be undertaken until physical
- 5 and chemical stability is achieved. Final duration of
- 6 monitoring will be dependent on those water-quality
- 7 results.
- 8 ECC commented, as well, on the waste rock
- 9 consolidation and rock dome. ECCC recommended sampling
- 10 of adjacent lakes, water quality of visible seeps or
- 11 flows, and identify thresholds that would require
- 12 remedial measures.
- 13 LMI provided a response in their final submission
- 14 of January 3rd that they will develop and implement a
- detailed surface water monitoring program for the
- 16 adjacent lakes. An adaptive approach to the seepage
- 17 and lake monitoring program will enable the
- 18 implementation of additional remedial options if
- 19 required to mitigate seepage discharge to the adjacent
- 20 lakes.
- 21 LMI did include, in its final submission, under
- 22 Attachment 2, a proposed general monitoring table of
- 23 changes, and that table of changes included monitoring
- 24 locations at those lakes identified by ECCC.
- 25 ECCC's Comment Number 7 was with respect to
- 26 asbestos disposal, and LMI commits to following

- 1 appropriate guidelines for the disposal of
- 2 asbestos-containing materials, and ECCC considered this
- 3 item to be resolved.
- 4 As a quick final summary of the list of
- 5 commitments and resolution, under Appendix D of the
- 6 pre-hearing conference decision, CIRNAC provided a
- 7 request of eight commitments, six which have been
- 8 resolved or considered resolved by LMI. Commitment
- 9 Number 2 remains outstanding regarding the updated
- 10 security estimate, and Commitment Number 6 regarding
- 11 geotechnical -- oh, sorry, I missed Commitment Number
- 12 2, updated security estimate, to provide conceptual
- 13 grading plans for Dams K and 'M' and would be discussed
- 14 further under -- during the public -- the public
- 15 hearing. Commitment Number 6, geotechnical details of
- 16 engineered structures, LMI to provide conceptual
- 17 drawings with respect to drainage pathways on these
- 18 covers from Cell 3 and 5.
- 19 Commitments requested by ECCC, five were requested
- 20 at the pre-hearing conference decision, or in the
- 21 pre-hearing conference decision, and five have been
- 22 resolved. Commitments requested by LMI, there was one
- 23 regarding the joint submission with CIRNAC on
- 24 security -- the security framework for return of
- 25 security, and that item is currently under discussion.
- 26 Commitments requested by the NWB, one, and that

- 1 was with regards to the draft licence -- draft water
- 2 licence framework, and that's resolved, so there's none
- 3 remaining.
- We've summarized, initially, potential exhibits to
- 5 be submitted at the public hearing. One of them would
- 6 be the conceptual design of the waste rock dome concept
- 7 to satisfy CIRNAC's Commitment Request Numbers 5 and 6,
- 8 and Stantec preliminary design level explanation of
- 9 waste rock storage dome design, again, CIRNAC
- 10 Commitment Numbers 5 and 6.
- 11 Exhibit Number 3, the decision matrix under
- 12 Commitment 8, and I believe that is still under further
- 13 discussion for agreement prior to the end of the public
- 14 hearing, and LMI's framework for progressive release of
- 15 security under Commitment 9 to be further discussed and
- 16 agreed upon and submitted prior to the end of the
- 17 public hearing, and a final exhibit was with regards to
- 18 a proposed updated implementation schedule for closure
- 19 activities.
- 20 Final slide, just a summary of contact information
- 21 for both Mandalay Resources and Lupin Mines
- 22 Incorporated.
- 23 I'd like to take this opportunity to thank the
- 24 Board, Mr. Chair, NWB Staff, the Intervenors, CIRNAC,
- 25 and Environment and Climate Change Canada, and those
- 26 members of the public that have come in to join us at

- 1 this meeting for the opportunity to present on behalf
- 2 of LMI, and we invite any questions.
- 3 Thanks very much, Mr. Chair.
- 4 THE CHAIR: Thank you, Applicant, for your
- 5 presentation this morning.
- 6 Discussion
- 7 THE CHAIR: So, Stephanie, do we need to
- 8 take care of anything? Or, sorry, Teresa?
- 9 MS. AUTUT: Okay. Thanks, Mr. Chair.
- 10 So, first, I would suggest that we reserve
- 11 questions till after the lunch period, but before we
- 12 close for lunch, Teresa and I would like to just have a
- 13 quick discussion with the parties. I know Teresa
- 14 updated everyone this morning about a potential change
- 15 to the schedule over the next couple days.
- 16 So there has been a death in the community that
- 17 will see a funeral happening tomorrow in the afternoon
- 18 starting at 1:00, so what the Board would like to
- 19 propose is that we -- well, I'll have Teresa --
- 20 basically, we break at lunch tomorrow and reconvene on
- 21 Friday morning, but what that looks like, I'll have
- 22 Teresa walk through what the expectations are of the
- 23 parties by noon tomorrow and then when we return on
- 24 Friday, so Teresa.
- 25 MS. MEADOWS: Thank you, Stephanie. Thank
- 26 you, Mr. Chair. Teresa Meadows, legal counsel for the

- 1 Nunavut Water Board.
- 2 So the expectation is that we have a Community
- 3 Session scheduled for this evening, which will go ahead
- 4 as planned. Then tomorrow morning, our hope is that we
- 5 will be through the majority of the agenda by noon
- 6 tomorrow, subject to closing arguments and the final
- 7 filing of documentation for Friday morning.
- 8 As I'm sure you can appreciate, the Board has to
- 9 take down the sound equipment for a community event in
- 10 the hall starting at 5:00 tomorrow associated with the
- 11 funeral services, and so if we are concluded, if
- 12 every -- all the evidence is in by the end of noon
- 13 tomorrow, we will not reconvene in the morning, would
- 14 not need to do it on Friday, but if we do have to
- 15 reconvene on Friday morning, our hope is, is that it's
- 16 only for closing arguments, and then we will set up a
- 17 more restricted, limited sound and interpretation
- 18 equipment, make that available.
- 19 So that is the tentative plan, so we appreciate --
- 20 the Board appreciates the efforts of all the
- 21 Intervenors and the parties here to be as concise as
- 22 you can and as focused as you can in the questions that
- 23 you're going to ask so that we can hopefully conclude
- 24 things, perhaps, on Thursday, but, again, we have the
- 25 residual plans in place, contingency for Friday morning
- 26 as well.

- 1 So thank you, Mr. Chair. Those are my remarks.
- 2 THE CHAIR: Okay. Thank you. We'll take
- 3 a break now for a break, lunch, but when we come back,
- 4 we'll have -- open up for questions/comments related to
- 5 the Applicant's presentation this morning.
- 6 Okay. We'll come back at 1:15. Thank you. Take
- 7 a break.
- 8
- 9 PROCEEDINGS ADJOURNED UNTIL 1:15 PM
- 10 _____
- 11 (PROCEEDINGS COMMENCED AT 1:17 PM)
- 12 THE CHAIR: Good afternoon. I think we
- 13 can reconvene from the lunch break.
- Before the lunch break, we get into -- we were
- 15 ready to go to questions and answers from -- for
- 16 Applicant's presentation this morning. Before going to
- 17 that, I'd like to have our legal counsel, Teresa, to
- 18 take care of the floor for a minute.
- 19 Go ahead, Teresa.
- 20 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 21 Meadows, legal counsel for the Nunavut Water Board.
- Mr. Chair, it's my understanding that before we
- 23 proceed into questions, Lupin Mines Incorporated has an
- 24 addition to the presentation that they provided this
- 25 morning consisting of further exhibits in relation to
- 26 some ongoing commitments that they've been discussing

- 1 with Crown-Indigenous Relations and Northern Affairs
- 2 Canada, and they have come to some agreement with
- 3 respect to some additional wording in the commitments,
- 4 and so they have provided additional materials to be
- 5 filed electronically to -- in this public hearing, so I
- 6 would like to turn over the mic to legal counsel for
- 7 LMI to address what these additional materials are and
- 8 then to speak to those materials.
- 9 Thank you, Mr. Chair.
- 10 THE CHAIR: Thank you, Teresa.
- 11 Go ahead, Applicant.
- 12 Submissions by Lupin Mines Incorporated
- 13 MS. KOWBEL: Christine Kowbel, legal
- 14 counsel for Lupin Mines Incorporated.
- 15 Yes, Mr. Chair, we propose to file three
- 16 additional exhibits in advance of questions. The first
- 17 document is a Word document. It's titled "Summary of
- 18 Additional Commitments and Issue Resolution", today's
- 19 date, and it's only two-and-a-half pages, and what that
- 20 document does is it gives more detail about the agreed
- 21 commitments that Lupin Mines Incorporated have made to
- 22 Crown-Indigenous Relations and Northern Affairs Canada
- 23 in order to resolve some of those issues that were
- 24 outstanding at the time they filed their presentation,
- 25 and so after I'm finished speaking to these exhibits, I
- 26 would propose for Karyn Lewis from Lupin Mines to read

- 1 that commitment list into the record so that the Board
- 2 has a chance to hear it before we go into questions, so
- 3 that's first document.
- 4 The second document is a schedule. Lupin Mines
- 5 Incorporated mentioned their schedule for carrying out
- 6 the reclamation activities during their presentation
- 7 just now, and so we thought it would be useful to the
- 8 Board to provide the Board with a bit more detail in
- 9 the schedule, so we filed that as another electronic
- 10 exhibit. Unfortunately, just given the time and
- 11 constraints, we weren't able to get a paper copy of
- 12 that, but we have given you an electronic copy.
- 13 And then the third exhibit is one that I will be
- 14 handing to your legal counsel very shortly, and what
- 15 that document is, is a -- it's a document which
- 16 reflects the security milestones that we referenced in
- 17 our presentation, and so what that document is, is that
- 18 Crown-Indigenous Relations and Northern Affairs Canada
- 19 and Lupin Mines Incorporated have had ongoing
- 20 discussions for the last few months about agreed
- 21 milestones and the value of meeting those milestones
- 22 over the course of the reclamation, and so we
- 23 anticipate that those -- that milestones document will
- 24 be part of the security reduction framework, which
- 25 we're still working on, but we thought, in the
- 26 meantime, it was useful for the Board to have that

- 1 milestones document, so with your permission, we'll
- 2 walk that over. We just have it on a stick for Teresa
- 3 Meadows.
- 4 Thank you, Mr. Chair. Those are -- those are the
- 5 three exhibits, and then if it pleases you, Karyn Lewis
- 6 can read in the LMI commitments and issue resolution
- 7 document.
- 8 Thank you.
- 9 THE CHAIR: Thank you, Applicant.
- 10 Teresa.
- 11 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 12 Meadows, legal counsel for the Nunavut Water Board.
- 13 And, Mr. Chair, I also wanted to recognize on the
- 14 record that these electronic materials, the two -- the
- 15 first two documents have been circulated in electronic
- 16 form to the other Intervenors that are present.
- 17 Obviously, Crown-Indigenous Relations and Northern
- 18 Affairs Canada has looked at them, seeing as there's
- 19 agreement, but Environment and Climate Change Canada
- 20 also has been copied on the electronic circulation of
- 21 these materials, but if you are having difficulty
- 22 accessing them for any reason, please come and see us,
- 23 and we can -- we can pull them up so that you can take
- 24 a look at them, and then with respect to the document
- 25 on the stick, we will also -- I will also make that
- 26 available to any of the participants that are here as

- 1 well. Any of the Intervenors who have not received it
- 2 in electronic copy already, please feel free to come
- 3 over and see me at the break, and we will provide that
- 4 to you.
- 5 EXHIBIT 13 Electronic Copy, Summary of
- 6 Additional Commitments and Issue Resolution
- 7 Dated January 15, 2020 (English)
- 8 EXHIBIT 14 Electronic Copy, Updated Lupin
- 9 Mine Remediation Schedule January 2020 Dated
- 10 January 13, 2020 (English)
- 11 EXHIBIT 15 Electronic Copy, Security
- 12 Framework Milestones for draft water licence
- framework (English)
- 14 MS. MEADOWS: So thank you, Mr. Chair.
- 15 Those are my procedural matters.
- 16 THE CHAIR: Thank you, Teresa.
- 17 You want to continue or are you ready for
- 18 questions and answers? Go ahead.
- 19 MS. KOWBEL: Christine Kowbel, Lupin Mines
- 20 Incorporated.
- 21 Mr. Chair, if it's okay with you, we'd like to
- 22 read in the new commitments that Lupin Mines has made
- 23 to Crown-Indigenous Relations before we start
- 24 questions, just so everyone starts with an
- 25 understanding of the additional commitments, if that's
- 26 okay with you.

- 1 THE CHAIR: Yes. I accept that.
- 2 MS. MEADOWS: Mr. Chair, it's Teresa
- 3 Meadows, legal counsel for the Nunavut Water Board.
- 4 Would it will helpful to project it while you're
- 5 speaking to it?
- 6 Okay. Maybe, Mr. Chair, if you can just give us
- 7 two minutes to actually get it from this computer to
- 8 that computer?
- 9 Thank you, Mr. Chair.
- 10 THE CHAIR: Okay. Thank you.
- 11 Thank you. Go ahead, Applicant.
- 12 Presentation by Lupin Mines Incorporated
- 13 MS. LEWIS: Karyn Lewis, LMI.
- 14 So it's the document on the screen, so a summary
- 15 of additional commitments and issue resolution dated
- 16 January 15th, 2020.
- 17 At the time CIRNAC filed its final hearing
- 18 presentation on January 10th, 2020, it identified the
- 19 following three issues as outstanding on Slide 13. We
- 20 do note that it says "two" up there, but it is three.
- Number 1, long-term stability of cover and dams;
- 22 Number 2, management of tailings exposed when water
- 23 levels are lowered; and 3, insufficient information for
- 24 security estimation. What follows provides a summary
- 25 of the discussions and commitments which have since
- 26 resolved these issues.

- 1 CIRNAC Hearing Presentation Regarding Commitment
- 2 Number 1. Background: CIRNAC and LMI had bilateral
- 3 discussions on January 7th, 2020, as well as a call
- 4 with Board Staff, and CIRNAC confirmed that their
- 5 outstanding issues with respect to Commitments 3 and 4
- 6 were resolved with LMI's confirmations respecting
- 7 monitoring. This will be addressed in the monitoring
- 8 plan which will be submitted within one year following
- 9 the issuance of the amended water licence. Status:
- 10 Resolved.
- 11 CIRNAC Hearing Presentation Regarding Commitment 2
- 12 and 9 -- Commitments 2 and 9. Background: This matter
- 13 was further discussed between CIRNAC and LMI on January
- 14 14th, 2020. LMI provided more information responsive
- 15 to CIRNAC's request on January 7th, 2020, and added the
- 16 additional information discussed on January 14th, 2020.
- 17 The updated wording is as filed with the attached,
- 18 which is what we -- which we just gave to Teresa
- 19 Meadows on the stick. Status: Resolved.
- 20 CIRNAC Hearing Presentation Regarding Commitments
- 21 3 and 4. Background: CIRNAC and LMI had bilateral
- 22 discussions on January 7th, 2020, as well as a call
- 23 with Board Staff, and CIRNAC confirmed that their
- 24 outstanding issues with respect to Commitments 3 and 4
- 25 were resolved with LMI's confirmation respecting
- 26 monitoring. This will be addressed in the monitoring

- 1 plan which will be submitted within one year following
- 2 the issuance of amended water licence. Status:
- 3 Resolved.
- 4 CIRNAC Hearing Presentation Concluding Comment 1,
- 5 Commitment 5 and 7. Background: The mine site dome
- 6 cross-section provided on January 10th in response to
- 7 the request for more information to support Commitment
- 8 5 and 7, which was provided -- sorry, which was to
- 9 provide a preliminary design level explanation of the
- 10 waste rock storage dome, LMI provided the
- 11 cross-sections in a memo provided on January 10th,
- 12 2020, and a follow-up discussion was held with CIRNAC
- on January 14th, 2020, where CIRNAC indicated that the
- 14 preliminary design and cross-section meets the intent
- 15 of Commitment 5.
- 16 Commitment: LMI commits to provide additional
- 17 details on the cross-section to identify conceptual
- 18 water features and their slopes along with notes on
- 19 erosion control features and typical locations where
- 20 they would be installed. LMI additionally commits to
- 21 provide the north/south preliminary design level
- 22 cross-section, including these same additional drainage
- 23 and erosion control concepts. Both of these items will
- 24 be provided to CIRNAC within 60 days of the issuance of
- 25 an amended water licence.
- 26 Status: CIRNAC confirms that this commitment

- 1 resolves their outstanding concern respecting
- 2 Commitment 5 and 7, and CIRNAC Hearing Presentation
- 3 Concluding Comment 1 is now considered resolved.
- 4 CIRNAC Hearing Presentation Concluding Comment 1,
- 5 Commitment 6. Background: Following Lupin Mine
- 6 Incorporated's response to Commitment 6, which was to
- 7 provide geotechnical details of the tailings
- 8 containment area, TCA, engineered structures to ensure
- 9 long-term stability and erosion control, a geotechnical
- 10 stability review was performed concluding that Dam M
- 11 and Dam K require resloping for final closure.
- During a call with CIRNAC on January 7th, 2020,
- 13 CIRNAC requested additional resloping details to be
- 14 presented in the form of two cross-sections. LMI
- 15 provided the cross-sections in a memo provided on
- 16 January 10th, 2020, and a follow-up discussion was held
- with CIRNAC on January 14th, 2020.
- 18 Commitment: LMI commits to provide additional
- 19 details on the Dam K and Dam M cross-sections, more
- 20 specifically, a zoomed-in image that more clearly
- 21 identifies the materials used for the resloping, the
- 22 distance that the resloping materials will extend from
- 23 the crest of Dam M and Dam K, and through a break line,
- 24 and with minimums and maximums noted, the distances to
- 25 the closure water levels from each of these two
- 26 resloped structures. In addition, LMI commits to

- 1 provide a perpendicular longitudinal cross-section to
- 2 supplement the typical outflow structure details
- 3 provided in the January 10th memo. The longitudinal
- 4 cross-section, one for Cell 5 and one for Cell 3, will
- 5 provide invert elevations from the cover to the ponds,
- 6 along with a design note to clarify the storm-return
- 7 period that will be used for the detailed design
- 8 features. Both of these items will be provided to
- 9 CIRNAC within 60 days of the issuance of an amended
- 10 water licence.
- 11 Status: CIRNAC confirms that this commitment
- 12 resolves their outstanding concern regarding
- 13 Commitment 6, and CIRNAC Hearing Presentation
- 14 Concluding Comment 1 is now considered resolved.
- 15 CIRNAC Hearing Presentation Concluding Comment 2,
- 16 Commitment 8. Background: Following the submission of
- 17 the Commitment 8 decision matrix and how potential
- 18 contaminants would be managed once the water levels
- 19 have been achieved, a call was held with CIRNAC on
- 20 January 7th, 2020, where CIRNAC requested additional
- 21 details. The details on the decision matrix steps and
- 22 the scientific backing for the cover in place was
- 23 provided by LMI to CIRNAC. This matter was further
- 24 discussed between CIRNAC and LMI on January 14th, 2020.
- 25 Commitment: Based on the decision matrix steps
- 26 and scientific backing considerations provided to

- 1 CIRNAC, LMI has determined that all exposed tailings
- 2 will be covered in place. Relocation is not considered
- 3 appropriate due to the listed environmental and
- 4 operational health and safety risks set out in the
- 5 decision matrix steps. LMI commits to provide
- 6 additional information to CIRNAC to provide further
- 7 rationale to support its view that the in-situ cover is
- 8 effective and robust, including preliminary details and
- 9 typical sections on how the cover will be constructed
- 10 on newly exposed tailings to ensure it is stable and
- 11 protected against long-term erosion. This information
- 12 will be in the form of a memorandum and will be
- 13 provided to CIRNAC within 60 days of the issuance of an
- 14 amended water licence.
- 15 Status: CIRNAC confirms that this commitment
- 16 resolves their outstanding concern regarding Commitment
- 17 8, and CIRNAC Hearing Presentation Concluding Comment 2
- 18 is not considered resolved.
- 19 Thank you, Mr. Chair -- oh, actually, sorry. One
- 20 more thing to comment on.
- In our presentation, we have a typo on page 25.
- 22 The tailings cover, we had put that there was
- approximately 199,000, and then we had covered 10,500,
- 24 so the remaining at the bottom didn't minus out the
- 25 10,500, but our security estimate is correct, with a
- 26 little bit additional of one thousand ninety-five

- 1 hundred, so I just wanted to make sure that that typo
- 2 was noted.
- 3 Thank you, Mr. Chair.
- 4 THE CHAIR: Thank you, Applicant, for
- 5 updating us from our latest agreement.
- 6 Karén, go ahead.
- 7 Nunavut Water Board Staff Questions Lupin Mines
- 8 Incorporated
- 9 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 10 Thank you, Mr. Chair.
- Just for confirmation, there were a number of
- 12 commitments associated between the issuance of licence.
- 13 Just to confirm it, LMI and CIRNAC, whether they did
- mean "issuance", or they did mean "approval"?
- 15 THE CHAIR: Thank you.
- 16 Go ahead, Applicant.
- 17 MS. KOWBEL: Christine Kowbel, legal
- 18 counsel for 'L' -- Lupin Mines Incorporated. Sorry,
- 19 just one moment, Mr. Chair.
- 20 Thank you, Mr. Chair. Just for clarity, we mean
- "on approval".
- Thank you.
- 23 THE CHAIR: Thank you, Applicant.
- Now I think we're, kind of, getting ready to open
- 25 up for questions and answers or questions or comments.
- 26 I'd like to start with Crown-Indigenous Relations and

- 1 Northern Affairs, if you have questions or comments
- 2 related to Applicant's presentation from this morning
- 3 and continuation from just a while ago.
- 4 MR. OKONKWO: Thank you, Mr. Chair. So I'm
- 5 Godwin from Crown-Indigenous Relations and Northern
- 6 Affairs Canada.
- We don't have any questions at this time. We'll
- 8 leave it to for our presentation.
- 9 Thank you.
- 10 THE CHAIR: Thank you, CIRNAC.
- Now, we'll open up for Environment and Climate
- 12 Change Canada.
- 13 Environment and Climate Change Canada Questions Lupin
- 14 Mines Incorporated
- 15 MS. WALKER: Thank you, Mr. Chair. Eva
- 16 Walker with Environment and Climate Change Canada.
- 17 Just a few clarifications for the record, based on
- 18 conversations that we had off the record.
- 19 So can LMI confirm for the record that the
- 20 assumptions for all the climate scenarios assessed
- 21 included precipitation increasing?
- 22 MS. WILKINS: Hello. This is Sara Wilkins
- 23 with Stantec.
- 24 Can I ask you to repeat just the last sentence?
- 25 Sorry.
- 26 MS. WALKER: Can you confirm that the

- 1 climate scenarios that were used assumed that
- 2 precipitation would increase?
- 3 MS. WILKINS: Thank you.
- 4 Yes, I can confirm that in the climate scenarios
- 5 and in our risk assessments, we assumed that
- 6 precipitation would increase.
- 7 MS. WALKER: Eva Walker for Environment and
- 8 Climate Change Canada.
- 9 The other question I had related to the climate
- 10 models was with -- what -- sorry. Can you clarify or
- 11 confirm what future emission scenarios were considered
- 12 for the tailings cover?
- 13 MS. WILKINS: Sara Wilkins with Stantec.
- 14 Thanks for your question.
- We considered the low emissions scenario, the high
- 16 emissions scenario from the Canada's climate
- 17 changing -- sorry, let me get that exact quote. One
- 18 second -- from Canada's changing climate report issued
- 19 in 2019. From those high emission scenario and low
- 20 emission scenario, we additionally calculated an
- 21 average emission scenario, and we modelled all three
- 22 for the tailings containment area.
- 23 MS. WALKER: Hi. This is Eva Walker with
- 24 Environment and Climate Change Canada.
- 25 And just to confirm, you're referring to tailings
- 26 cover?

- 1 MS. WILKINS: For the tailings containment
- 2 area, we conducted a risk assessment, and the risk
- 3 assessment concluded that in recent -- in development,
- 4 excuse me, of the recent climate emissions scenario
- 5 models, that precipitation would increase; therefore,
- 6 the cover assessment previously conducted by Holubec
- 7 would remain valid.
- 8 MS. WALKER: Thank you. I have -- Eva
- 9 Walker with Environment and Climate Change Canada.
- I have no further questions. I will now turn it
- 11 other to my colleague, Anne Wilson.
- 12 MS. WILSON: Thank you. Anne Wilson with
- 13 Environment and Climate Change Canada. I have a few
- 14 questions on monitoring, and then a question on timing,
- 15 so I'll start with the monitoring.
- 16 We appreciate that there's going to be, within the
- 17 year following licence issuance, a long-term monitoring
- 18 plan put in place, and we think a lot is riding on
- 19 this, and it will certainly help alleviate some of our
- 20 concerns. I just wanted to talk a bit about what forum
- 21 this might be taking place under for stakeholder
- 22 involvement.
- 23 MS. WILKINS: Mr. Chair, could we have a
- 24 moment to discuss?
- Thank you.
- 26 THE CHAIR: Yeah. Go ahead.

- 1 MS. LEWIS: Karyn Lewis, LMI.
- 2 THE CHAIR: Okay. Yeah, make sure you
- 3 keep introducing yourself. Make sure you keep saying
- 4 your name before you speak for the record and
- 5 someone's -- there's persons on the phone as well.
- 6 MS. LEWIS: Yes. Yeah, so Karyn Lewis,
- 7 LMI.
- 8 Mr. Chair, we would be putting together a draft
- 9 monitoring plan probably within the six-month mark and
- 10 engaging with CIRNAC and ECCC to go through it before
- 11 we actually submit it to the Board as promised within a
- 12 year, so that gives us some time to go through, that
- 13 everybody's comfortable with it before we send it to
- 14 the NWB, and then I assume once it's with the NWB, it
- 15 would go out for comment, and there could be further
- 16 comment with -- from other parties as well.
- 17 THE CHAIR: Thank you.
- 18 ECCC, go ahead.
- 19 MS. WILSON: Anne Wilson, ECCC. Thank you.
- 20 I think within the six months, that would be very
- 21 helpful, and I don't know if it would be useful to have
- 22 further conversations about the baseline monitoring
- 23 that's to be done for the receiving environment for the
- 24 dome, just a few questions which are of minor details,
- 25 it would be of interest to me if we discuss on that
- one, so I'll just go to my next question at this point.

- 1 In Attachment 2 of the response to the
- 2 Intervenors' submissions, the monitoring is shown as
- 3 being five years with one more monitoring event at Year
- 4 10, and the benchmark noted was until chemical
- 5 stability is achieved, so I have two questions. First
- off, how will "chemical stability" be defined, and just
- 7 the thought that Year 10 might still be too soon to
- 8 call it a wrap, that I would hope that the ICRP
- 9 schedule of up to 25 years would still be on the table.
- 10 THE CHAIR: Thank you, Anne.
- 11 MS. LEWIS: Karyn Lewis, LMI. Can we just
- 12 take a moment to ... thanks.
- 13 THE CHAIR: Make sure you mention your
- 14 name for the record as well, so for the ...
- 15 MR. MCKINLEY: Jim McKinley, Stantec.
- 16 So we were planning on developing those criteria
- for stability and the potential for decreased
- 18 monitoring, if that stability is reached in accordance
- 19 with the different Intervenors, and that would be part
- 20 of what we are submitting as we move forward.
- 21 THE CHAIR: Thank you.
- Go ahead, ECCC.
- 23 MS. WILSON: Thank you. Anne Wilson, ECCC.
- And as far as the time frame, would -- just 10
- 25 years contemplated under this licence term, what would
- 26 the envisioned maximum time frame be following that if

- 1 stability hasn't been reached?
- 2 MR. MCKINLEY: Jim McKinley, Stantec.
- 3 Again, we feel like until we see the results of
- 4 the early monitoring, it's hard to say how long -- how
- 5 long that those monitoring -- how long that the
- 6 monitoring would need to extend into the future to
- 7 determine if stability is reached, so that would need
- 8 to be something that's decided as we start to see
- 9 the -- those initial results.
- 10 MS. WILSON: Anne Wilson, ECCC. Thank you
- 11 for that.
- 12 With apologies to CIRNAC, because this is
- 13 definitely their territory, not ours, would the
- 14 security amount maintain the funding available to do 25
- 15 years of monitoring as was laid out in the ICRP so that
- 16 that would be available in the final version?
- 17 MS. LEWIS: I'm just going to check my
- 18 file, if that's okay?
- 19 Thanks.
- 20 THE CHAIR: Go ahead, Applicant.
- 21 MR. BOCKING: Ken Bocking.
- The cost model has been set up and has an
- 23 allowance for a total of ten sampling episodes spread
- 24 out over a 25-year period.
- 25 THE CHAIR: Thank you, Applicant.
- 26 Go ahead, Environment and Climate Change Canada.

- 1 MS. WILSON: Thank you. Anne Wilson,
- 2 Environment and Climate Change Canada. My last
- 3 question is to do with the timing of some of the works.
- 4 At what point will the syphon removal and the
- 5 spillway construction be done?
- 6 MS. LEWIS: Thank you. Karyn Lewis.
- 7 Can you let me know which spillway you're
- 8 referring to?
- 9 MS. WILSON: Anne Wilson, ECCC.
- 10 That would be the discharge into their receiving
- 11 environment into Seep Creek from Pond 2.
- 12 THE CHAIR: Go ahead.
- 13 MS. LEWIS: I'm just going to take one
- 14 second.
- 15 THE CHAIR: Go ahead, Applicant. Go
- 16 ahead, Applicant.
- 17 MR. MCKINLEY: Jim McKinley, Stantec.
- So the breaching of those spillways would be
- 19 dependent on the monitoring results, so it's hard to
- 20 define an actual year that that would happen.
- 21 THE CHAIR: Thank you.
- 22 Go ahead, Climate Change Canada.
- 23 MS. WILSON: Thank you. Anne Wilson, ECCC.
- You can probably see where I'm coming from on
- 25 this. The Metal Mining and Effluent -- Metal and
- 26 Diamond Mining Effluent Regulations will be in force

- 1 until January 30th, 2022, provided all the recognized
- 2 closed mine requirements are met, and I'm just curious
- 3 as to whether there is a possibility of the discharge
- 4 happening within that time period?
- 5 THE CHAIR: Go ahead, Applicant.
- 6 MR. MCKINLEY: Jim McKinley, Stantec.
- 7 So if the -- if the treatment and discharge goes
- 8 as planned in 2020, this would be the last year that we
- 9 are treating and discharging before the spillways are
- 10 breached, and once that happens, it's expected to be --
- 11 for the site to passively drain.
- 12 THE CHAIR: Thank you.
- Go ahead, Climate Change Canada.
- 14 MS. WILSON: Anne Wilson, ECCC.
- 15 That didn't quite hit the mark. There -- the
- 16 question is, is there a possibility of passive releases
- 17 occurring before you're a recognized closed mine?
- 18 THE CHAIR: Thank you.
- 19 Go ahead, Applicant.
- 20 MR. MCKINLEY: Jim McKinley, Stantec.
- Currently, there's no plan to breach the dams
- 22 between -- before 2022, so there shouldn't be any
- 23 discharge prior to that, any passive discharge prior to
- 24 that.
- 25 THE CHAIR: Thank you.
- Go ahead, Anne.

- 1 MS. WILSON: Thank you, Mr. Chair, and that
- 2 was all our questions.
- 3 Thanks.
- 4 THE CHAIR: Okay. Thank you.
- 5 Applicant, do you want to continue? Go ahead.
- 6 MR. HOHNSTEIN: Thank you, Mr. Chair. David
- 7 Hohnstein, LMI.
- 8 Just a point of clarification for Anne's first
- 9 question on timing of the closure plan and potential
- 10 meetings there. I think the intent for LMI was to
- 11 submit, within six months, a framework for the final --
- 12 or the long-term monitoring plan, which would lead into
- 13 discussions over the next six months prior to the
- 14 requirement to submit a plan to the Water Board.
- I hope that answers the question a little -- a
- 16 little better.
- 17 THE CHAIR: Thank you, Applicant.
- I think we are now ready to open for members of
- 19 public. If there is any questions or comments, you may
- 20 do so, and come to the microphone. You can raise your
- 21 questions or comments.
- Okay. I take that there's nothing from public.
- 23 I'd like to ask the Board Staff, is there any
- 24 questions to the Applicant's presentation?
- 25 Go ahead.
- 26 Nunavut Water Board Staff Questions Lupin Mines

- 1 Incorporated
- 2 MS. AUTUT: Thank you, Mr. Chair.
- 3 Stephanie Autut with the Water Board.
- 4 Mr. Chair, the Staff do have some questions for
- 5 the Applicant, and I'll hand the microphone over to
- 6 Karén.
- 7 MR. KHARATYAN: Thank you, Mr. Chair, thank
- 8 you, Stephanie. Karén Kharatyan from Water Board.
- 9 A few clarifications, and before starting things,
- 10 our reason for asking my question -- I had the same
- 11 question later, that from our understanding that after
- 12 2020 discharge from Pond 2, that all tailings will be
- 13 covered with esker material; then based on the
- 14 assessment of water quality, the company will make the
- 15 decision whether spillways will be constructed or no.
- 16 So from our understanding, and to also mention in
- 17 the final closure reclamation plan, if the water
- 18 quality meets the guidelines, so that means our
- 19 understanding was that if the water quality meets -- if
- 20 it's after 2020, discharge quality meets Metal and
- 21 Diamond Mines Effluent Regulation guidelines, what
- 22 happens if it doesn't meet the guideline at that time?
- 23 After 2020 discharge, if you -- without still
- 24 breaching dike or anything, before constructing the
- 25 spillway, if your monitoring shows that -- or
- 26 assessment shows that you don't still meet the

- 1 guideline or met MDMER, and also taking into account
- 2 that within some time, the mine will be getting the
- 3 status of recognized closed mine, what is the next step
- 4 if the water quality doesn't meet the MDMER?
- 5 MS. LEWIS: Can I take a minute?
- 6 THE CHAIR: Go ahead, Applicant.
- 7 MR. MCKINLEY: Jim McKinley, Stantec.
- 8 So the current plan is that we would leave
- 9 sufficient equipment on site that if the water quality
- 10 did not meet the guidelines that were required, we
- 11 would have equipment on the staff [sic] to potentially
- 12 treat the water again for discharge and then decide on
- 13 a plan forward.
- 14 THE CHAIR: Thank you.
- 15 Karén.
- 16 MR. KHARATYAN: Thank you. This is Karén
- 17 Kharatyan from Water Board.
- With assuming that within some time, Fisheries 36,
- 19 I think, (3) section will be applicable, so it's still
- 20 not clear, for me, whether if you need treatment for
- 21 some time once the -- and we are close to have this
- 22 status provided by ECCC, what will be the -- because
- 23 the requirement under Section 36 may be different.
- 24 That could be different from just MDMER, so how you
- 25 will -- what will be the guideline or regulation to
- 26 comparable to quality, or not just the water quality,

- 1 because 36(3) has more requirement than just MDMER.
- 2 MS. KOWBEL: Thank you, Mr. Chair.
- 3 Christine Kowbel, legal counsel for LMI -- sorry, Lupin
- 4 Mines Incorporated.
- 5 Mr. Chair, I think we're -- I'm not sure what the
- 6 question the Board is asking, but just to confirm if
- 7 this is the question: Lupin Mines is well aware that
- 8 it has to comply with all territorial and federal legal
- 9 requirements, and one of those is that it must -- if it
- 10 is to discharge, it must discharge in compliance with
- 11 the Fisheries Act, including Section 36, and it must
- 12 discharge in compliance with the MDMER, and so -- and
- 13 so Lupin confirms it would -- it would be
- 14 discharging -- it wouldn't -- it couldn't nor would it
- 15 be looking to discharge at levels different than
- 16 permitted under the Fisheries Act or MDMER.
- 17 Thank you, Mr. Chair. I hope that clarifies that
- 18 question.
- 19 MR. KHARATYAN: Karén Kharatyan. Yes, it
- 20 clarifies, and same thing, thank you for response.
- 21 The next clarification I will be looking for is
- 22 with respect to security estimates. One was originally
- 23 included within final closure and reclamation plan, and
- 24 the second revised one was submitted in November, so
- 25 while the general total cost estimate is higher, we
- 26 noticed that there are -- this is higher due to two

- 1 items, mostly, indirect contractor cost estimate, a new
- 2 item, and mobilization/demobilization; and LMI stated
- 3 that the other -- the other environmental liability big
- 4 items decreased sometimes twice or even more, like rock
- 5 piles or tailing, et cetera, and LMI has stated that
- 6 this updated cost estimate is based on the LMI contract
- 7 with contractor, so the question is whether all these
- 8 big items within the summary are based on the LMI
- 9 contract with contractor, or there are changeover
- 10 approach of final closure reclamation.
- 11 THE CHAIR: Thank you.
- 12 Applicant, go ahead.
- 13 MS. LEWIS: Karyn Lewis, LMI.
- We can confirm, in our security estimate, that the
- 15 contractor costs are in there, unless it's something
- 16 that's happening after 2022, which we put in notes,
- 17 which would still be based on estimates that we had in
- 18 our previous version, but the amount did go up based on
- 19 our signed contract with our contractor, and those
- 20 rates are based on what it would cost our contractor to
- 21 carry out that work.
- 22 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 23 So I can assume that LMI confirms that there is no
- 24 any change of final closure reclamation approach that
- 25 was presented within the final closure reclamation
- 26 plan?

- 1 MS. LEWIS: Karyn Lewis, LMI.
- 2 The approach is the same. The cost has just
- 3 changed.
- 4 MR. DONALD: Derek Donald, Nunavut Water
- 5 Board. I've got a couple of quick questions here as
- 6 well.
- 7 I guess the first question has to do with the --
- 8 mainly the Upper Sewage Lake, and I was just wondering
- 9 if sewage sludge was ever considered a potential issue
- 10 there, and if so, how is it going to be managed?
- 11 THE CHAIR: Thank you.
- 12 Go ahead, Applicant.
- 13 MS. LEWIS: Can we just take a minute?
- 14 Thanks.
- 15 THE CHAIR: Go ahead, Applicant.
- 16 MR. MCKINLEY: Jim McKinley, Stantec.
- So the current plan is that part of the sewage
- 18 lagoon would become the landfill, and that portion of
- 19 the -- of whatever sludge was present in the bottom of
- 20 the lagoon would be covered, and a portion of that
- 21 would not be covered by the landfill.
- 22 THE CHAIR: Thank you.
- 23 Water Board Staff, Derek.
- 24 MR. DONALD: Derek Donald, Nunavut Water
- 25 Board. Thank you.
- 26 Just one more question for clarification for

- 1 myself, and this has to do with the volume of waste
- 2 discharged. In the draft licence framework provided,
- 3 the total volume had increased from the previous
- 4 licence. The previous licence, I think, was 70,000
- 5 cubic metres, and it was increased to 125,000, and just
- for my, I guess, own clarity, is that increase in
- 7 volume basically just to do with the discharge from the
- 8 tailings containment area?
- 9 Thank you.
- 10 THE CHAIR: Thank you.
- 11 Go ahead, Applicant.
- 12 MS. LEWIS: We'll just take -- we're just
- 13 going to take one minute here.
- 14 THE CHAIR: Go ahead, Applicant.
- 15 MR. MCKINLEY: Jim McKinley, Stantec.
- So the request for an increased discharge flow
- 17 rate was so that we could comply with the schedule of
- 18 activities this summer and lower the water levels in
- 19 Pond 2 and Pond 1 and Cell 4 to the closure levels as
- 20 quickly as possible to allow for other operations on
- 21 site this summer.
- 22 THE CHAIR: Thank you.
- Okay. Yeah, Karén, go ahead.
- 24 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 25 Thank you, Mr. Chair.
- 26 Just a follow-up to ECCC's question regarding

- 1 post-closure monitoring and agencies involved with a
- 2 review of these post-closure monitoring. So just maybe
- 3 a question to all parties about the approach, if Board
- 4 decide to issue a licence.
- 5 If the post-closure monitoring section within the
- 6 licence monitoring program is -- remained not -- I
- 7 wouldn't say blank, but as per a post-closure
- 8 monitoring plan, would this approach be acceptable
- 9 by -- for agencies and to LMI or no?
- 10 This is -- this is assuming that changes may be
- 11 made within post-closure monitoring plan, so instead of
- issuing another type of post-closure monitoring, just
- incorporate the time of the post-closure monitoring
- 14 requirements and issue at that time, whilst the plan is
- 15 approved.
- 16 MS. LEWIS: Can we take a moment? Thank
- 17 you.
- 18 THE CHAIR: Go ahead, Applicant.
- 19 MR. HOHNSTEIN: Thank you, Mr. Chair. David
- 20 Hohnstein, LMI.
- Just for clarification, we'd like the Staff to, I
- 22 guess, clarify regarding the post-closure monitoring,
- 23 the section you're referring to in the licence, you
- 24 would be referring to the monitoring plan to be
- 25 submitted, and not including any requirements as far as
- 26 post-closure, but there would still be the standard

- 1 requirements for monitoring prior to closure. I guess
- 2 just looking for some clarification as to what may or
- 3 may not be included or wanting to be omitted in that
- 4 section of the licence.
- 5 MR. KHARATYAN: Karén Kharatyan, Water Board.
- This is, Dave, just within monitoring program
- 7 included within the section -- within the schedule, not
- 8 licence conditions, but within the schedule, just
- 9 according to the draft framework, the post-closure
- 10 monitoring is planned to start from 2022, so this part
- is according to draft framework. It goes to 2026.
- 12 While we know that there may be a requirement of
- 13 monitoring after 2026 because the agreement was to have
- 14 a 12-year licence, not seven years, so the approach
- 15 that I am not -- I am -- this is just an idea, if this
- 16 approach would be acceptable, leaving this, that after
- 17 2022, post-closure monitoring as per approved
- 18 post-closure monitoring plan. So once this
- 19 post-closure monitoring is reviewed by parties and
- 20 approved, the table for parameters, frequency, et
- 21 cetera, for post-closure monitoring could be
- 22 incorporated within the approved -- or issued
- 23 separately as this is the post-closure monitoring
- 24 requirements.
- 25 THE CHAIR: Thank you.
- Go ahead, Applicant.

- 1 MR. HOHNSTEIN: Thanks, Mr. Chair. David
- 2 Hohnstein again, LMI.
- 3 Yes, LMI's totally in agreement with replacing the
- 4 proposed monitoring table and schedules that are
- 5 included with the draft water licence framework with
- 6 those that may be included with the approved
- 7 post-closure monitoring plan when it's submitted and
- 8 eventually approved by the Board.
- 9 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 10 Thank you, Mr. Chair. I will also ask parties
- 11 whether they will -- they agree with this approach.
- 12 THE CHAIR: Go ahead, ECCC.
- 13 Response to Nunavut Water Board Question by Environment
- 14 and Climate Change Canada
- 15 MS. WILSON: Anne Wilson, ECCC. I was
- 16 closest to the mic, so I jumped up.
- 17 We would agree with that approach to leave the
- 18 wording to be determined by the plan.
- 19 Response to Nunavut Water Board Question by
- 20 Crown-Indigenous Relations and Northern Affairs Canada
- 21 THE CHAIR: CIRNAC, go ahead.
- 22 MR. OKONKWO: Thank you, Mr. Chair.
- 23 We, CIRNAC, would also, like, be okay with that
- 24 approach; however, I did -- maybe I will speak to it
- 25 later. I will have the opportunity to look at the
- 26 post-closure monitoring plan; right?

- 1 Okay. Thank you.
- 2 THE CHAIR: Thank you.
- 3 Karén, go ahead.
- 4 Nunavut Water Board Staff Questions Lupin Mines
- 5 Incorporated
- 6 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 7 Thank you, Mr. Chair.
- 8 To answer Godwin's question, absolutely, Board
- 9 will issue this plan for review by parties, and I am
- 10 assuming that there will be follow-up question, et
- 11 cetera, and the Board will exercise its power or
- 12 mandate to approve the plan in the end of this review
- 13 process.
- Just one clarification or comments that even with
- 15 leaving the post-closure monitoring as per approved
- 16 post-closure monitoring, just for LMI information, and
- 17 thank you for providing this additional monitoring
- 18 table. These three receiving water bodies will still
- 19 be subject to monitoring for pre-closure monitoring
- 20 requirements.
- 21 Thank you.
- 22 THE CHAIR: Thank you, Karén.
- 23 Applicant, go ahead.
- 24 MS. LEWIS: Karyn, LMI.
- We do agree with that statement.
- 26 THE CHAIR: Thank you, Water Board Staff.

- 1 I'd like to go back to the public. I think
- 2 there's someone who had a question or comment. Yeah,
- 3 come to the microphone, raise your concern.
- 4 Before you speak, state your name, please.
- 5 Questions for Lupin Mines Incorporated by Community
- 6 Representatives
- 7 MR. PALONGYAK: Koana, Ikkhivautaq. My name
- 8 is Jaco Palongyak.
- 9 I've worked at Lupin previously for seven years.
- 10 I live in Kugluktuk, Nunavut. I worked at the Lupin
- 11 Mine for seven years underground, and -- but before I
- 12 started working there, I used to work at surface mine
- 13 there, in the tailings pond area, and I've seen some --
- 14 some dangerous chemicals that go into those tailings
- 15 pond, and some animals contact with the -- with the
- 16 dangerous chemical, and they pass away, or pass away in
- 17 there, but I've never seen a report of animals dying in
- 18 that tailings pond. I wonder why. Why are these
- 19 reports not being reported to the local hunters and
- 20 trappers or to responsible agencies that give out
- 21 licence? Because those animals are -- no matter if
- it's just one or not, that's one too many that pass
- 23 away from these dangerous chemical.
- I want an assurance from -- from the company that
- 25 during reclamation, that a hundred percent of these
- 26 dangerous chemicals will be removed from -- from that

- 1 land, 'cause that was part of my land when I was
- 2 growing up as a young boy, and it quizzes me as to why
- 3 we're not getting any reports as to animals dying in
- 4 those tailings pond; okay?
- 5 Koana. Koana, Mr. Chairman.
- 6 THE CHAIR: Thank you.
- 7 Go ahead, Applicant.
- 8 MS. LEWIS: Hi. Karyn Lewis, LMI.
- 9 Well, historically, before we had -- before I
- 10 worked there in 2011, I have not heard of any animals
- 11 dying in the tailings pond, nor have we encountered any
- 12 animals in the tailings pond. We would have reported
- if something like that's happened.
- We'd also note that in the tailings pond, when we
- 15 treat the water, we treat it just for pH, that the
- 16 criteria for water quality passes everything, when we
- 17 do our sampling. It's the pH that we're treating, to
- 18 bring it up, but the chemicals all meet the criteria
- 19 within Canada.
- 20 And just a little further note, we do have a risk
- 21 assessment on the tailings area. The Human Health
- 22 Ecological Risk Assessment was done and passed by the
- 23 Nunavut Water Board as well.
- 24 THE CHAIR: Thank you.
- 25 If there's no more further questions or comments
- 26 from public, I am willing to move on to Board panel

- 1 members. Is there questions?
- 2 Amanda? Yeah. Okay.
- 3 Applicant, go ahead.
- 4 MS. LABATTE: Thank you, Mr. Chair. Belinda
- 5 Labatte from Mandalay Resources, director of Lupin
- 6 Mines.
- 7 I just would like to echo what Karyn has said, is
- 8 that we have operating mines in two countries,
- 9 Australia and Sweden, as well, and whether they are
- 10 operating mines or is a project in closure, which we
- 11 are here to discuss today, we take our environmental
- 12 stewardship role very seriously. We track any
- 13 situation in which we have wildlife crossing or near
- 14 to, or if anything happens adjacent to or on our mine
- 15 site, these are recorded, and our compliance to
- 16 regulatory authorities, to what the community is
- 17 looking for, is the same whether it's an operating mine
- 18 or a mine going through closure, and I appreciate your
- 19 question. Later this afternoon/this evening, I'll talk
- 20 a little bit about our company and how we conduct our
- 21 business and the values that underlie how we make
- 22 decisions, and I would like to assure you that we are
- 23 going to do our utmost to have a project that we can
- 24 all be proud of when this concludes, including managing
- 25 the hazardous waste in the most appropriate way; and
- 26 with our contractor, they are very well aware of the

- 1 kind of monitoring that we would want to see, including
- 2 wildlife on site, nearby, and worst case, if there is a
- 3 fatality, it would be reported.
- 4 Thank you, Mr. Chair.
- 5 THE CHAIR: Thank you.
- 6 Okay. I think I have to go back to Water Board
- 7 Staff once again.
- 8 Karén, go ahead.
- 9 Nunavut Water Board Staff Questions Lupin Mines
- 10 Incorporated
- 11 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 12 Thank you, Mr. Chair.
- One, maybe, request to LMI. Would it be possible
- 14 to just have this milestone for security projected and
- 15 go through these document? I am just wondering whether
- 16 the goal of this milestone is also to inform the
- 17 progressive reclamation? If yes, how this will be
- 18 informing, yes.
- 19 MS. LEWIS: Sorry.
- 20 THE CHAIR: Okay. Thank you.
- Go ahead.
- 22 MS. LEWIS: Hi, Karén.
- I was just wondering if you could clarify the
- 24 question. Are you talking about the schedule or the
- 25 model, like, to see where -- how it's happening or ...
- 26 MR. KHARATYAN: Karén Kharatyan, Water Board.

- I am referring to a security framework milestone
- 2 for draft water licence framework. While I'm -- we are
- 3 okay with the left side, which is the security,
- 4 actually, the cost estimate; on the right side, we have
- 5 different statement about verification, et cetera; just
- 6 wondering whether this is to inform progressive release
- 7 of security or no? If yes, just wondering how, yes.
- 8 THE CHAIR: Okay.
- 9 MS. LEWIS: Karyn --
- 10 THE CHAIR: Go ahead.
- 11 MS. LEWIS: Karyn Lewis, LMI.
- 12 The stuff on the right-hand side, there was the
- 13 evidence that we went through with CIRNAC that would
- 14 satisfy them to be able to do the progressive releases.
- 15 MR. KHARATYAN: Karén Kharatyan, Water Board.
- So my understanding here about the progressive
- 17 releases, this is to be confirmed by CIRNAC. I'm
- 18 trying to understand the logic of, yes, whether this is
- 19 tied or associated with any environmental liability
- 20 work conducted, or it's based on the timing or general
- 21 logic about, yes.
- 22 MS. LEWIS: Karyn Lewis, LMI.
- 23 This is a document that CIRNAC and LMI worked on
- 24 together, and they have reviewed, and we've submitted
- 25 it, after confirming with them that it was okay to
- 26 submit, that we were all good with everything that was

- 1 in this document. As part of -- I think it's Part C in
- 2 the terms and conditions, there's a table that would be
- 3 inserted in there, and that's the milestones that would
- 4 be part of that.
- 5 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 6 We can just project and go through it because I'm
- 7 just wondering how the licence conditions or licence
- 8 term will actually reflect this schedule.
- 9 THE CHAIR: Yeah, go ahead, Applicant.
- 10 MS. KOWBEL: Thank you, Mr. Chair.
- 11 Mr. Chair, I'd like to suggest that, perhaps,
- 12 Lupin Mines defer this question until after. I think
- 13 that it'll be easier to talk about this whole issue
- 14 once Crown-Indigenous Relations and Lupin Mines
- 15 Incorporated provide their proposed wording for the
- 16 framework as well, I think, and then maybe talk about
- 17 both the milestones document and the framework all at
- 18 once, so if it is okay with Mr. Chair, we would like to
- 19 defer answering that question until we file that, the
- 20 framework document that goes with the milestones
- 21 document, and at this time, that framework document is
- 22 still subject to discussions between CIRNAC and LMI
- 23 before it can be finalized.
- 24 Thank you, Mr. Chair.
- 25 THE CHAIR: Thank you.
- Is that okay? Yeah, thank you. We'll do that.

- 1 (Question Deferred)
- 2 THE CHAIR: Okay. We can continue on.
- Now we are -- Amanda, a panel member, had a
- 4 question.
- 5 Nunavut Water Board Panel Questions Lupin Mines
- 6 Incorporated
- 7 MS. HANSON MAIN: Koana, Ikkhivautaq. Amanda
- 8 Hanson Main, panel member.
- 9 I appreciate the Applicant's presentation, and in
- 10 follow-up, I think, to Karén's question, which was
- 11 around one of the filings made earlier today, can the
- 12 Applicant confirm when we're to expect the joint
- 13 framework to be submitted? From looking through the
- 14 materials, it's been, I think, since August that the
- 15 joint framework has been in development, and so this is
- 16 an issue of central importance to us to have access to
- 17 before the end of the hearing, hopefully before, before
- 18 the end of the hearing so we have a chance to consider
- 19 and question appropriately.
- 20 THE CHAIR: Thank you.
- 21 Applicant, go ahead.
- 22 MS. KOWBEL: Thank you, Mr. Chair.
- 23 Christine Kowbel, Lupin Mines Incorporated.
- Mr. Chair, that is a -- I think it is both the
- 25 intention of Crown-Indigenous Relations and Northern
- 26 Affairs Canada and Lupin Mines to file a joint

- 1 submission before the end of this hearing on the
- 2 framework. We can provide the Board with an update on
- 3 estimated timing of that at the end of the day today.
- 4 One of the challenges is that we are working -- we are
- 5 working with Crown-Indigenous Relations. Some members
- of their team are not able to be with us today, and so
- 7 we need to have time to work with that, but that is our
- 8 intention, to file that with the Board before the end
- 9 of this hearing.
- 10 MS. HANSON MAIN: Koana, Ikkhivautaq. Amanda
- 11 Hanson Main again.
- 12 And further to that, in the first -- one of the
- 13 first exhibits you provided today, the commitments that
- 14 were read out into the record, I believe, and correct
- 15 me if I'm wrong, that you stated all those commitments
- 16 stood resolved, including Numbers 2 and 9, and that
- 17 would include an updated security estimate and the
- 18 joint submission on framework for progressive release
- 19 of security, so I just want to confirm if those things
- 20 are resolved for Crown-Indigenous Relations and for
- 21 Lupin Mines, if we -- if we've missed something, or if,
- indeed, they are confirmed, and they are resolved.
- I note from the Crown-Indigenous Relations, and
- 24 it's unfortunate timing that their presentation hasn't
- 25 come yet, but some of the outstanding issues included,
- 26 for the security estimate, that insufficient

- 1 explanations were provided for reducing costs and that
- 2 the department was unable to create new reclamation
- 3 estimates with the information provided, and so if that
- 4 information has been provided, then, to CIRNAC, and
- 5 you've come to resolution on that issue for the new
- 6 security estimate, I just want to confirm that the
- 7 Board also has that information available.
- 8 Thank you.
- 9 THE CHAIR: Thank you.
- 10 Okay. Go ahead, Applicant.
- 11 MS. LEWIS: Karyn, LMI.
- 12 As far as LMI's aware, we're just waiting to
- 13 finish filing the security framework hopefully
- 14 before -- which we want to file before the end of this
- 15 public hearing, but I can let CIRNAC, when they get
- 16 their presentation, answer for their -- themselves on
- 17 that.
- 18 THE CHAIR: Oh, I forgot to push -- press
- 19 it.
- 20 All right. Thank you. We'll be moving on to
- 21 Intervenors now, but before we do that, I would like to
- 22 have a ten-minute break for now.
- Thank you.
- 24 (ADJOURNMENT)
- 25 THE CHAIR: Just to reconvene from the
- 26 break, now we turn to a presentation by the

- 1 Intervenors. I remind the Intervenors that before they
- 2 begin their presentation, our legal counsel needs you
- 3 to swear or confirm -- affirm, sorry, and verify the
- 4 material you will be presenting and marking as an
- 5 exhibit.
- 6 Teresa, please proceed with the procedural
- 7 matters.
- 8 MS. MEADOWS: Thank you, Mr. Chair. So if I
- 9 can have the witnesses state and spell their name for
- 10 the record, please.
- 11 MR. NOAH: Noah Noah, N-O-A-H N-O-A-H.
- 12 MR. OKONKWO: Godwin Okonkwo, G-O-D-W-I-N
- O-K-O-N-K-W-O. Thank you.
- 14 MR. WIATZKA: Gerd Wiatzka, that's G-E-R-D
- W-I-A-T-Z-K-A.
- 16 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 17 Meadows, legal counsel for the Nunavut Water Board.
- Do the witnesses wish to be sworn or affirmed?
- 19 MR. OKONKWO: Sworn.
- 20 GODWIN OKONKWO, Sworn; GERD WIATZKA, NOAH NOAH,
- 21 Affirmed
- 22 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 23 Meadows, legal counsel for the Nunavut Water Board.
- Mr. Chair, I will be filing the hard copy material
- 25 of the presentation that Crown-Indigenous Relations and
- 26 Northern Affairs Canada is about to present, and I

- 1 don't believe I have any additional exhibits to file in
- 2 respect of the evidence that you are about to give
- 3 here, but I just wanted to confirm that.
- 4 MR. OKONKWO: Yeah, I think it's pretty much
- 5 this and the executive summary. That's what we have.
- 6 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 7 Meadows, legal counsel for the Nunavut Water Board.
- 8 So thank you, Mr. Chair. I will be filing those
- 9 materials as the next exhibits in this public hearing,
- 10 and those are my procedural matters, Mr. Chair.
- 11 THE CHAIR: Thank you, Teresa.
- 12 EXHIBIT 16 Hard Copy PowerPoint
- 13 Presentation, Crown-Indigenous Relations and
- 14 Northern Affairs Canada, Lupin Mine Inc.
- 15 Renewal/Amendment Application for Water
- 16 Licence 2AM-LUP1520 for Lupin Mine Project
- 17 (English/Inuinnagtun)
- 18 EXHIBIT 17 Hard Copy Executive Summary,
- 19 Crown-Indigenous Relations and Northern
- 20 Affairs Canada (English)
- 21 EXHIBIT 18 Hard Copy, Executive Summary
- 22 Crown-Indigenous Relations and Northern
- 23 Affairs Canada (Inuinnaqtun)
- 24 EXHIBIT 19 Hard Copy, Executive Summary
- 25 Crown-Indigenous Relations and Northern
- 26 Affairs Canada (French)

- 1 THE CHAIR: So, CIRNAC, you may go ahead
- 2 with your presentation.
- 3 Presentation by Crown-Indigenous Relations and Northern
- 4 Affairs Canada
- 5 MR. OKONKWO: All right. Thank you,
- 6 Mr. Chair.
- 7 So good evening. Good evening, everyone. My
- 8 name's Godwin Okonkwo. I'm the manager of water
- 9 resources with the Nunavut regional office of
- 10 Crown-Indigenous Relations and Northern Affairs Canada,
- 11 which I will refer to as "the department" with this
- 12 presentation.
- 13 I would like to thank the Nunavut Water Board for
- 14 the opportunity to the -- for us to make this
- 15 presentation at the public hearing regarding Lupin
- 16 Mines Incorporated application to amend its water
- 17 licence.
- I'm joined here today by Noah Noah as a land
- 19 administrator, major projects from CIRNAC, and I'm also
- 20 joined here by Gerd Wiatzka of Arcadis. He's our
- 21 consultant. And on the phone, I have Spencer Dewar,
- 22 who's my director, director of resource management, and
- 23 Dale Kohlenberg, who is supporting us from the
- 24 Department of Justice.
- 25 At this time, I would like to state that our
- 26 presentation had been completed in advance of Lupin

- 1 Mines latest submissions, responses, and dialogues we
- 2 had up until midnight yesterday, so, therefore, some of
- 3 the information being presented, we may have reached --
- 4 we have reached various levels of resolution, and we'll
- 5 speak to this during the presentation.
- I also did want to say that this will be a joint
- 7 presentation, so I will present some materials. When I
- 8 get to some of the technical parts, I will defer to
- 9 Gerd to give more clarification on some of the
- 10 technical areas.
- 11 So throughout this presentation, like I earlier
- 12 said, I will refer to Crown-Indigenous Relations and
- 13 Northern Affairs Canada as "the department", or in some
- 14 cases "CIRNAC", so here's an outline of our
- 15 presentation.
- 16 I'll start with providing an overview of the
- 17 department's -- of the department's responsibility in
- 18 respect to the licence amendment and renewal
- 19 application as well as a list of contributions that
- 20 have been submitted as part of the licencing process so
- 21 far.
- 22 So we did go through many information requests and
- 23 went through the technical meeting, and in all of it,
- 24 to simplify this presentation, we did have a lot of
- 25 technical comments, but we're going to -- for the
- 26 purpose of this presentation, we're going to focus on

- 1 only three, and that would include tailings and waste
- 2 rock management, closure and reclamation planning, and
- 3 then reclamation security cost estimate. Within that
- 4 reclamation cost estimate, we'll speak about the
- 5 reclamation release framework.
- 6 So the department has a broad mandate for
- 7 comanagement of freshwater resources and the management
- 8 of Crown land in Nunavut and following the applicable
- 9 laws and agreements: The Department of
- 10 Crown-Indigenous Relations and Northern Affairs Act,
- 11 the Nunavut Agreement, the Nunavut Land Claims
- 12 Agreement Act, the Nunavut Waters and Nunavut Surface
- 13 Rights Tribunal Act and associated regulations, the
- 14 Nunavut Planning and Project Assessment Act,
- 15 Territorial Lands Act and the associated regulations,
- 16 and Arctic Waters Pollution Prevention Act.
- 17 I'd just like to say the department also
- 18 administers and enforces regulatory authorizations that
- 19 pertain to Nunavut's Crown land and freshwater
- 20 resources, so CIRNAC participates in water licence
- 21 processes administered by the Nunavut Water Board,
- 22 along with other interested parties providing technical
- 23 advice and expertise for the Board's consideration.
- So contributions to the review to date. To date,
- 25 the department has made four submissions to the Nunavut
- 26 Water Board and participated in technical meetings in

- 1 June of -- so we started with an information request.
- 2 We made submissions on March 4th, 2019, and then we
- 3 participated in a technical review phase April 30th,
- 4 2019. We attended -- CIRNAC, or the department,
- 5 attended and did presentations at a technical meeting
- 6 and pre-hearing conference on June 6th and 7th, 2019.
- 7 There was a review of submissions for commitment that
- 8 we handed in by December 6th, 2019, and the final
- 9 submission was made on December 18, 2019. I'd also
- 10 like to add that we've had several meetings with LMI to
- 11 discuss outstanding issues until the midnight of
- 12 January 14, 2019 [sic]. I'm stressing that because I
- 13 need more coffee. I'm a little sleepy.
- 14 MS. MEADOWS: 2020.
- 15 MR. OKONKWO: 2020. So you see, I need more
- 16 coffee.
- 17 Okay. So we had put this slide to show this was
- 18 my staff who was lead on this file, he had taken a
- 19 picture of Lupin mine site, so this, generally -- we
- 20 put it there basically for the Community Session in the
- 21 evening just to give a brief overview of what the Lupin
- 22 mine site is about, what the licence is about, and so I
- 23 may skip this because Lupin has given the rundown of
- 24 what Lupin is, but we'll present this in the evening
- 25 when we do the community presentation.
- 26 So our first issue was with the tailings and waste

- 1 rock management, and so Number 1 was potential
- 2 contamination. Our worry was potential contamination
- 3 from waste rock used across construction materials, and
- 4 so we had asked that historical construction data be
- 5 reviewed to estimate how much waste rock has been used
- 6 for infrastructure such as the dams. Once -- the idea
- 7 was once the volume of waste rock was known, we could
- 8 assess if it was necessary to do geochemical modelling
- 9 and pathway analysis for potential waste rock/acid rock
- 10 drainage.
- 11 The January 3rd comment from LMI, submission from
- 12 LMI: LMI provided additional comments on historic use
- 13 of waste rock in construction of the dams. This
- 14 information noted that significantly more than -- more
- 15 waste rock was used, about 400,000 metres cubed, in the
- 16 construction of dams than estimated in LMI's October
- 17 memo response; however, LMI suggested that much of the
- 18 waste rock would be encapsulated by permafrost and that
- 19 the ABA sampling and conclusion of the URS 2005 was
- 20 still valid.
- 21 LMI also referred to the Golder 2017 updated Phase
- 22 1 and 2 environmental site assessment observation that
- 23 in shallow waste rock, the majority of the sulfur is
- 24 presently in the form of sulphate indicating that the
- 25 waste rock is already with that and oxidizing and that
- 26 on that basis, monitoring should be used in place of

- 1 additional geochemical testing. In this regard, LMI
- 2 restated its commitment to post-closure monitoring, and
- 3 CIRNAC considered that issue resolved.
- 4 So still on the tailings and waste rock, the
- 5 second issue was waste rock storage dome design and
- 6 seepage. We did ask for preliminary plans and sections
- 7 and details on the waste rock dome to provide a better
- 8 understanding of what work is planned, how the dome
- 9 will be done. Our challenge was, you know, to the
- 10 stability, stability of the dome and how it's -- you
- 11 know, if there's going to be any seepages. We're
- 12 satisfied, though, with -- we're satisfied with the
- 13 proposal by LMI to collect seepage samples and update
- 14 the model, so I'll defer to Gerd to give a little more
- 15 details on this.
- 16 MR. WIATZKA: Yes. We were concerned,
- 17 originally, in terms of --
- 18 THE CHAIR: Please state your name --
- 19 MR. WIATZKA: Sorry.
- 20 THE CHAIR: -- for the record.
- 21 MR. WIATZKA: Gerd Wiatzka, Arcadis.
- In reviewing the original concept, basically,
- 23 there was a material change, in terms of leaving all
- 24 the waste rock at the mill site, at the mill site and
- 25 then shaping it into a concentrated dome-type effect,
- 26 and so we were concerned that we had the proper

- 1 information to, both, assess the seepage
- 2 characteristics of that material undercover and also
- 3 that the cover design and the shape would be stable --
- 4 erosionally stable for a longer period of time.
- 5 Back in the technical meeting, LMI's consultants
- 6 provided a concept, in general terms, and that provided
- 7 insights into it, and we'd asked for them to provide a
- 8 little more clarity in terms of how that translated to
- 9 the actual site conditions, and LMI has provided the
- 10 cross-sections, and as per the commitments provided
- 11 earlier, has agreed to providing more information,
- 12 another cross-section and some more details about how
- 13 they would manage the surface runoffs from this site,
- 14 with the primary concern being the long-term stability
- of the cover. So with those commitments, we feel
- 16 comfortable in the proposal.
- There's another element that talked about the
- 18 seepages, and, again, as Godwin had mentioned earlier,
- 19 based on their assessment the materials had oxidized
- 20 and that they were flushing, and the current concept is
- 21 to reduce the materials being flushed out to about 20
- 22 percent of what they're currently doing now, and that's
- 23 what the HHERA provided information on and what the
- 24 potential impacts are from that, so we're satisfied in
- 25 that regard.
- 26 THE CHAIR: Thank you.

- 1 Go ahead. State your name before you speak.
- 2 MR. OKONKWO: Thank you, Mr. Chair. Godwin
- 3 Okonkwo, Crown-Indigenous Relations and Northern
- 4 Affairs Canada.
- 5 So I'll carry on with the presentation. So still
- 6 dealing with the tailing and waste rock, we -- CIRNAC
- 7 requested, from LMI, to provide an approach to
- 8 demonstrate how LMI will deal with tailings that are
- 9 exposed right now and tailings that may be exposed as
- 10 water is lowered in the tailings management area,
- 11 because we were wondering will they be moved to
- 12 contained cells, or will they be left in place and
- 13 covered, or will they just be ignored.
- So LMI responded through a provision of an initial
- 15 decision matrix. CIRNAC's review of the matrix at the
- 16 time found it inappropriate for field determination.
- 17 A revised decision matrix was provided, and by
- 18 which LMI appeared to confirm -- we had a discussion
- 19 yesterday about it, and they confirmed to us that it
- 20 would be left in place and covered, and so we -- what
- 21 we really just wanted with that was for LMI to provide,
- 22 like, a further explanation of how the tailings will be
- 23 managed or how they plan to manage it, and with the
- 24 covered -- with their confirmation that it will be
- 25 covered in -- on site, left on site and covered and
- 26 their agreement, the commitment to -- within 60 days of

- 1 licence approval, to provide, you know, further
- 2 documents, it resolves this issue. We think that issue
- 3 has been resolved.
- 4 And so the second category of issues was closure
- 5 and reclamation planning, so the Human Health
- 6 Ecological Risk Assessment.
- 7 The Human Health Ecological Risk Assessment
- 8 provided at the time did not include cover the tailings
- 9 containment area until we suggest to give clarity on
- 10 the objectives of the Human Health Ecological Risk
- 11 Assessment. It was to evaluate potential risk to human
- 12 health and the environment from the contamination
- 13 associated with the historical operation of the site as
- 14 a gold mine in order to derive site-specific target
- 15 levels for any potential risks identified and to use a
- 16 site-specific target levels to define areas requiring
- 17 remediation or risk management.
- 18 What we would like to say about this because we --
- 19 LMI's response had noted that ecological risk
- 20 assessments of the tailings management area was
- 21 completed in 2004 and resubmitted as part of the 2014
- 22 licence renewal. LMI also noted their commitment to
- 23 provision of a post-closure monitoring plan following
- 24 discussions with stakeholders one year after issuance
- 25 of the licence. CIRNAC has no outstanding issues in
- 26 this regard.

- 1 The second piece on closure reclamation plan is a
- 2 geochemical -- geotechnical details of engineered
- 3 structure. I will defer to Gerd to present this piece,
- 4 and then I can conclude the piece.
- 5 MR. WIATZKA: Yes. With regard to long-term
- 6 stability of the site, there were numerous --
- 7 THE CHAIR: Please state your name --
- 8 MR. WIATZKA: Sorry. Gerd --
- 9 THE CHAIR: -- for the record.
- 10 MR. WIATZKA: Sorry. Gerd Wiatzka, Arcadis.
- 11 With regard to closure planning and the
- 12 achievement of long-term stability, given that there
- 13 were numerous dams on site, it's really important to
- 14 understand which of those dams would require some
- 15 additional work to ensure stability and erosional
- 16 control.
- 17 In the ICRP, there had been commitments made to
- 18 stabilize. Although the dams were deemed to be stable
- 19 for most purposes, there was a commitment made to
- 20 stabilize them using rip rap and at a 2-to-1 --
- 21 2-to-5 -- 2.5-to-1 slope. The current final closure
- 22 plan had said that it would be done slightly
- 23 differently, and so we expressed concerns in wanting to
- 24 understand the details of how that would be done, both,
- 25 from, sort of, a conceptual point of view and also from
- 26 the physical engineering perspective so it can be tied

- 1 into the costing assessment.
- We've gone through a series of iterations with
- 3 LMI, in terms of asking for clarifications and getting
- 4 the stability analysis and so on, and we still said,
- 5 and as late as last night, that we'd like to have a few
- 6 more details, a little more detail on the slopes, but
- 7 in general, I think we're all in agreement that the 'K'
- 8 and the 'M' dams are the ones that need resloping to
- 9 ensure stability.
- 10 We're looking at -- you know, at the kind of
- 11 features. What we would like to do is have enough
- 12 detail on each of the elements that are required to be
- done that we can understand the long-term implications
- 14 of these elements operating in a northern climate, and
- 15 LMI has made commitments to providing those additional
- 16 details to us, at least at the preliminary level, and
- 17 then in the final engineering, whether it's the dome or
- 18 whether it's the dams, in the final engineering
- 19 drawings, there'll be, of course, the other
- 20 opportunities to review those. Again, the main issue
- 21 was long-term stability, that we're looking at, and
- 22 both from an overall point of view and from an erosion
- 23 point of view.
- 24 THE CHAIR: Thank you. Any more? Go
- 25 ahead.
- 26 MR. OKONKWO: So, again, Godwin,

- 1 Crown-Indigenous Relations and Northern Affairs Canada.
- 2 THE CHAIR: State your name.
- 3 MR. OKONKWO: Godwin.
- 4 THE CHAIR: Okay. Oh, sorry.
- 5 MR. OKONKWO: Yeah.
- 6 So my conclusion on this piece, yeah, so we are
- 7 comfortable with LMI providing additional details
- 8 within 60 days of licence approval; however, I do -- I
- 9 do have a few questions -- one question around this.
- 10 So we've received a lot of memos, and so our
- 11 question at this time would be will this information in
- 12 these memos be integrated into the closure plan, into
- 13 the final closure plan, and at what time will that
- 14 happen, and that question is for LMI.
- So, finally, the last issue is the reclamation
- 16 security cost estimate, so we -- okay. We did say --
- 17 CIRNAC did say that we had insufficient explanation and
- 18 information provided by LMI for reducing the costs in
- 19 their last estimate, in the recent estimate they've
- 20 done. Based on that, the department has not been able
- 21 to create a new reclamation estimate with the limited
- 22 information.
- 23 LMI has provided a little more information and has
- 24 promised to provide even more information. In our
- 25 discussions with LMI, they also committed to providing
- 26 a more detailed work plan because all of that ties into

- 1 us being able to do that, you know, independent cost
- 2 estimate.
- I was going to go into what the challenges of the
- 4 cost estimate was, but at this stage, where they have
- 5 agreed to provide more details, I may not go into some
- 6 of the things I have in the presentation.
- 7 The elements, though, I want to speak about is
- 8 regardless of what they -- we -- so we've not done the
- 9 estimating, the independent estimate. We cannot say we
- 10 agree with the estimate that's been done by LMI, and
- 11 then even if -- even if an estimate is done, what
- 12 CIRNAC's position is at this point is CIRNAC feels the
- 13 Crown is undersecured with the site, and so at this
- 14 time, our position will be that we hold the full
- 15 security that we hold currently, and any release --
- 16 because there are a lot of uncertainties. There are a
- 17 lot of details we don't know, and so our position is
- 18 that we hold the security we hold fully, and any
- 19 release that will be done on the security will be done
- 20 based on the elements of the framework, the release
- 21 framework they we're putting forward. We're still
- 22 trying to, you know, conclude that, but the key
- 23 elements that CIRNAC has put in the framework that I
- 24 will want to state at this time is that (1) we're
- 25 requiring that progressive reclamation work is done
- 26 based on milestones, and not just a task, and then when

- 1 the work is done, dependent on what kind of work it is,
- 2 we may need a letter from a mine site inspector, or
- 3 dependent on the work, we will need a validation by,
- 4 you know, through, like, a stamp from an engineer
- 5 registered to practice in Nunavut.
- 6 The other condition for progressive release would
- 7 be that there is a demonstration that environmental
- 8 liability to the Crown is reduced, and at that point,
- 9 we can now consider the release of security.
- 10 The other piece I needed to speak about in this
- is, yes, there is an element of the policy saying that
- 12 the cost -- what it costs a third party to reclaim the
- 13 site or do the work on the site should -- I think
- 14 that's the basis of what the estimate is. This is what
- 15 LMI's contractor has estimated to do the work.
- 16 While that is great for the Crown, the Crown wants
- 17 to be -- the Crown does not want any liability. The
- 18 Crown will not have any liability on the site, so the
- 19 way the Crown sees it is what we hold , we actually
- 20 think we're undersecured, but what it will cost a third
- 21 party to do it, but not just the way that LMI's
- 22 contractor has done it because the estimation of the
- 23 work to be done, that is done right now, does not take
- 24 into consideration the unknowns, does not take into
- 25 consideration, like, you know, some of the long-term
- 26 issues that may happen, the environmental liability and

- 1 all of that, so that -- that's the position that the
- 2 Crown holds. And so, finally, on this, I will say that
- 3 the Crown will retain contingency amounts in case the
- 4 site is not stabilized post-closure.
- 5 So on the framework for progressive release, I
- 6 already touched on that. We're still working on that
- 7 to finalize what that is, so just because I'm on this
- 8 slide, I'll restate what the key CIRNAC positions are:
- 9 The reclamation policy is for release of security to
- 10 happen only upon completion of reclamation work in
- 11 terms of milestones, validation through a stamp by an
- 12 engineer certified to practice in Nunavut, or sometimes
- 13 a letter of confirmation by mine-site inspectors, and a
- 14 reduction of any and all environmental liability to the
- 15 Crown -- yeah, Gerd just reminded me -- for that
- 16 element, so it's not really ... yeah.
- 17 So in conclusion, we had three major outstanding
- 18 issues: The long-term stability of cover and dams, we
- 19 think that's resolved; management of tailings exposed
- 20 when water levels are lowered, we think that's
- 21 resolved; the insufficient information for security
- 22 estimation, that's partially resolved because we're
- 23 getting information. They've committed to providing
- 24 information, but we're still not able, at this time, to
- 25 provide a security estimate, but -- so I consider that
- 26 partially resolved.

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1 So in conclusion, the department will support
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- 2 Lupin Mines renewal/amendment application when all the
- 3 stated outstanding issues are resolved, and two have
- 4 been resolved so far. The last one we're trying to
- 5 resolve, and we're hoping that we'll resolve them --
- 6 the last piece before the end of the hearing.
- 7 Thank you.
- 8 THE CHAIR: Thank you, CIRNAC, for your
- 9 presentation.
- 10 Okay. Open up for questions or comments. Let's
- 11 start with the Applicants.
- 12 MS. KOWBEL: Christine Kowbel, legal
- 13 counsel for LMI. Mr. Chair, can we just have a moment
- 14 to confer?
- 15 THE CHAIR: Applicant, do you want to have
- 16 a short break for your own purpose?
- 17 MS. KOWBEL: Thank you, Mr. Chair. That
- 18 would be very helpful.
- 19 THE CHAIR: Okay.
- 20 MS. KOWBEL: Thank you.
- 21 THE CHAIR: Okay. We'll take a break.
- 22 (ADJOURNMENT)
- 23 THE CHAIR: Okay. Should we continue?
- Okay. CIRNAC had a presentation, and the
- 25 Applicant is supposed to answer -- have questions and
- 26 so on. Go ahead, Applicant.

- 1 Lupin Mines Incorporated Questions Crown-Indigenous
- 2 Relations and Northern Affairs Canada
- 3 MS. KOWBEL: Christine Kowbel, legal
- 4 counsel for Lupin Mines. Thank you, Mr. Chair. We
- 5 just have a few questions for Crown-Indigenous
- 6 Relations.
- 7 I just want to confirm with CIRNAC that based on
- 8 the previous information on this file, that CIRNAC has
- 9 produced at least two reclamation's estimates
- 10 previously based on the information that was on file to
- 11 that date.
- 12 Thank you.
- 13 THE CHAIR: Thank you, Applicant.
- 14 CIRNAC.
- 15 MS. KOWBEL: I should say at least two,
- 16 Mr. Chair.
- 17 THE CHAIR: Okay. Thank you.
- 18 Okay. State your name --
- 19 MR. WIATZKA: Gerd Wiatzka.
- 20 THE CHAIR: -- and speak a bit slower. I
- 21 want to just respect the interpreters.
- Thank you.
- 23 MR. WIATZKA: Gerd Wiatzka, Arcadis.
- I'm aware of one reclamation estimate that we did,
- 25 and that was the basis for the Knight Piésold
- 26 difference between LMI and our company's estimate, the

- 1 Knight Piésold. I'm not aware of a second one that
- 2 we've done.
- 3 THE CHAIR: Thank you.
- 4 Go ahead, Applicant.
- 5 MS. KOWBEL: Christine Kowbel, legal
- 6 counsel for Lupin Mines.
- 7 There was -- Mr. Chair, there was at least one
- 8 other previous estimate, and we can give details of
- 9 those. Those are on part of the Water Board's registry
- 10 as well, and it's just making the point that it is
- 11 possible to provide -- to prepare these reclamation
- 12 estimates. I think that CIRNAC, sort of, misstated it
- 13 a bit when they said it wasn't possible to produce an
- 14 updated estimate. They have done that before on the
- 15 existing information, and so my next question for
- 16 CIRNAC is, you know, I think that CIRNAC and Lupin
- 17 Mines have been able to work together quite a bit in
- 18 the last few years. They've really been able to work a
- 19 lot more collaboratively than the last time the company
- 20 was before the Board on their water licence, and so I
- 21 was just hoping that CIRNAC could agree that
- 22 significant work is -- reclamation work has taken place
- 23 at the Lupin mine site since 2016. CIRNAC has refunded
- 24 at least \$8 million in security since 2016 in
- 25 recognition of that work that has been completed.
- 26 Lupin Mines also has already another \$3 million in work

- 1 that hasn't yet been refunded, and so I'd like to ask
- 2 CIRNAC to confirm that significant work has been
- 3 completed to -- towards reclaiming the Lupin mine site
- 4 since 2016, since the Knight Piésold estimate.
- 5 Thank you, Mr. Chair.
- 6 THE CHAIR: Thank you.
- 7 CIRNAC.
- 8 MR. OKONKWO: I'm aware that CIRNAC has had
- 9 to return some money of some work done, but I can't --
- 10 confirmation, the phrase "confirmation", I do not think
- 11 I'm comfortable to say I will confirm that significant
- 12 work has been done; however, in terms of a return, it
- is based on our policy. We're standing based on our
- 14 policy because we're going into final closure. At this
- 15 time, we're standing on our policy to say that any
- 16 further release of security -- we're not saying we're
- 17 not going to release security, but any further release
- 18 of security has to be done based on the element of a
- 19 framework, which is what we've stated. The work is
- 20 done. There is confirmation the work is done. There's
- 21 validation that the work has been done, and there is
- 22 evidence of reducing environmental liability to the
- 23 Crown. That would be the condition under which
- 24 releases would be considered.
- Thank you.
- 26 THE CHAIR: Thank you.

- 1 Do you have more questions? Go ahead.
- 2 MS. KOWBEL: Christine Kowbel, legal
- 3 counsel for Lupin Mines. Thank you, Mr. Chair. Just
- 4 a few more short questions.
- 5 So with respect to the final closure plan and the
- 6 milestones document, I think those are also, too, two
- 7 good pieces of evidence for the Board of the work that
- 8 CIRNAC and LMI have been able to do together to give
- 9 more detail, the detail that CIRNAC has been asking for
- 10 on closure planning, and so I was hoping that CIRNAC
- 11 could confirm our view that based at this point in
- 12 time, more is known about the Lupin mine site than ever
- 13 before, more is known about the very specific details
- 14 about what would be carried out to reclaim the site,
- and that makes sense because as we've talked about,
- 16 there is a contract in place. There was very specific
- 17 work going on this summer. It's been going on quite
- 18 intensively since 2016, and so I'd like to just ask
- 19 CIRNAC to confirm that more is known about the site
- 20 than ever known -- has been known before,
- 21 notwithstanding that there is some other information,
- that we want to keep working with CIRNAC, and we'll
- 23 keep providing information, but at this point in time,
- 24 they know more than they've ever known before about
- 25 the -- about the site.
- 26 Thank you, Mr. Chair.

- 1 THE CHAIR: Thank you.
- 2 CIRNAC, go ahead.
- 3 MR. OKONKWO: So I'll take a response, and
- 4 then maybe Gerd can support me.
- 5 So, yes, I acknowledge CIRNAC knows more. We have
- 6 more details, we have more information, and then we
- 7 will be able to do our own estimate. You know, that's
- 8 why I said this was partially resolved. Like, you've
- 9 committed to giving us more information. You have
- 10 given us more information, but, however, I just needed
- 11 to make it clear of what CIRNAC's position is in terms
- of the security that we hold because even if we do
- 13 an -- even if we are accepting the estimate they're
- 14 doing for the work they will do, it may not return --
- 15 it may not result in us asking that a difference is
- 16 returned because the Crown has to be fully secured.
- 17 There's a lot of contingency. There's a lot of
- 18 unknowns. There's issues around post-closure
- 19 monitoring. When you find out site is not stable, what
- 20 do you do. There are a few more things that are not --
- 21 we think are not planned or captured, which is the
- 22 reason why we're decide -- we were suggesting or
- 23 recommending that we retain the full security we hold,
- 24 and we release it based on the elements of a security
- 25 framework.
- I think I'll defer to Gerd maybe to add more

- 1 details about some of the unknowns.
- 2 MR. WIATZKA: Gerd Wiatzka, Arcadis.
- 3 Yeah, definitely, you've provided -- done more
- 4 work and provided information addressing some of the
- 5 fundamental concerns with that, so there's -- there's
- 6 no question about that. Having said that, there are
- 7 still some unknowns.
- 8 So, for example, just in the discussions earlier
- 9 in responses to meeting this -- being -- having a
- 10 stable site, water quality objectives being met. It
- 11 was stated that if you don't -- if they're not met, you
- 12 may have to treat again.
- 13 We don't know what the performance measure will be
- 14 when the actual closure works are done and complete.
- 15 If they're done and complete, then the performance
- 16 measurement -- and the performance measure's met, then
- 17 there'll be no more questions, but if they're not met,
- 18 you know, what are the implications of that beyond
- 19 Year 2. What is the capacity in your current water
- 20 management system to contain infer -- contain the
- 21 material? Do you have to put -- do you have to go back
- 22 and do one more campaign of water treatment? Do you
- 23 have to go back and do two more campaigns of water
- 24 treatment? Those are still unknowns at this point in
- 25 time.
- 26 We don't know how much, and I don't think --

- 1 correct me, I can't remember, but I don't think we have
- 2 a cost element for covering potentially exposed
- 3 tailings, so that's not in the current estimate, I
- 4 don't believe, so correct me if I'm wrong on that one,
- 5 but those are the kind of -- that's not a contingency
- on the elements that we're talking about that we agree
- 7 in terms of the framework and that we've agreed in
- 8 terms of the milestones, but there are still unknowns
- 9 with the site in executing the work. There are still
- 10 risks associated with that, and my understanding is
- 11 that those risks are something that the Crown wants to
- 12 be protected against.
- 13 THE CHAIR: Thank you.
- 14 Applicant, go ahead.
- 15 MS. KOWBEL: Christine Kowbel, legal
- 16 counsel for Lupin Mines. Thank you, Mr. Chair.
- 17 So I think those are -- I'm just going to confer
- 18 with my client, but I think those are our questions. I
- 19 just did want to flag something for Mr. Chair, which is
- 20 that we think that there might still be some confusion
- 21 based on something CIRNAC said in their presentation
- 22 about contingencies, and I think their consultant just
- 23 alluded to some of that conclusion now.
- Lupin Mines has included quite a large contingency
- 25 for unknowns, for issues that -- of the type that are
- 26 being raised, but we are mindful in the process that

1 this is our time to ask questions, not give evidence,

- 2 and so we'll -- what we're planning to do is to speak
- 3 to that more in the reply section, when we get to that
- 4 part of the hearing, just to give a bit more detail
- 5 because probably that would help a lot of people to
- 6 explain the contingency and explain how the estimate
- 7 addresses those issues, because we agree those are very
- 8 important issues, and we just wanted to reassure
- 9 everybody that those were covered, we believe, with the
- 10 existing estimate.
- 11 And then the other thing we've been -- I've been
- 12 asked to speak to is that a question was asked in part
- 13 of CIRNAC's presentation. Just for clarity, I want to
- 14 confirm that the additional information is being
- 15 provided to CIRNAC for their information purposes and
- 16 to fulfill their information needs. At this time, the
- 17 company's not proposing to update the closure plan
- 18 based on that additional information, and so those are
- 19 just two statements.
- 20 I just would like a chance to confer before I --
- 21 to confirm if we have any more questions. Thank you,
- 22 Mr. Chair.
- 23 Mr. Chair, those are all of our questions. Thank
- 24 you very much.
- 25 THE CHAIR: Okay. Any more for CIRNAC?
- 26 MR. OKONKWO: So we -- CIRNAC just expects

- 1 that if this is final closure, going into final
- 2 closure, that the final closure plan should be as
- 3 detailed as possible with activities of what you're
- 4 going to do, when you're going to do them, and that
- 5 builds into, also, the cost estimate and all that, too,
- 6 but, however, that's all we need to say.
- 7 Thank you.
- 8 THE CHAIR: Thank you.
- 9 Okay. Applicant, you're done with your
- 10 questioning?
- 11 MS. KOWBEL: Thank you, Mr. Chair.
- We have no further questions for CIRNAC at this
- 13 time, but we will provide additional information upon
- 14 reply.
- 15 Thank you.
- 16 THE CHAIR: Thank you.
- 17 Now I'd like to ask Environment and Climate Change
- 18 Canada if you have questions or comments to CIRNAC
- 19 presentation?
- 20 MS. WALKER: Yeah. Thank you, Mr. Chair.
- 21 Eva Walker of Environment and Climate Change Canada.
- 22 We have no questions.
- 23 THE CHAIR: Thank you, Environment and
- 24 Climate Change Canada.
- Is there any member of the public have any
- 26 questions to Crown-Indigenous Relations and Northern

- 1 Affairs?
- Okay. I take that there's none.
- 3 Does the Water Board staff have questions? Go
- 4 ahead, Karén.
- 5 Nunavut Water Board Staff Questions Crown-Indigenous
- 6 Relations and Northern Affairs Canada
- 7 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 8 Thank you, Mr. Chair. Just a few clarification or
- 9 confirmation from CIRNAC, please.
- Before break, we were provided with this milestone
- 11 framework, including the total cost as 23 million
- 12 600-something thousand, and I heard that CIRNAC is
- 13 still requesting or asking that the current security
- 14 that is included within the licence shall be
- 15 maintained, which is the -- the number is different.
- 16 It's 26 million something, yes.
- 17 Could you confirm, yes, what is the position, INAC
- 18 [sic] position -- CIRNAC position, please?
- 19 MR. OKONKWO: So Godwin, Crown-Indigenous
- 20 Relations and Northern Affairs Canada.
- 21 So that is CIRNAC's position. We want to retain
- 22 the 26, so the -- the milestones document you have,
- 23 we've worked on it based on a framework to release
- 24 security. We haven't worked on it to accept the
- 25 estimate on that -- on that spreadsheet. We don't know
- 26 enough. That's what we're saying. We have some more

- 1 information, but within 24 hours, we wouldn't do an
- 2 estimate; but what we're saying is in terms of -- so
- 3 I'll make it clear. In terms of what we -- the
- 4 reclamation, the whole 26, CIRNAC's position is that we
- 5 retain that 26 and only release it based on the
- 6 elements of the framework, how we decide the -- the few
- 7 things we will check off, and so that spreadsheet was
- 8 done based on, like, the release framework. It wasn't
- 9 done based on this is the estimate, accept the final
- 10 estimate.
- 11 Thank you.
- 12 MR. KHARATYAN: Karén Kharatyan, Water Board.
- 13 To clarify one more time, Mr. Chair.
- 14 So CIRNAC position is that this milestone is used
- 15 for the release of security, also basis for release;
- 16 however, CIRNAC doesn't accept this as status quo, this
- 17 milestone document as a security that should be stated
- 18 as a basis for the licence, potential licence?
- 19 MR. OKONKWO: So thank you. Godwin,
- 20 Crown-Indigenous Relations and Northern Affairs Canada.
- So, like, your question was not very clear, but
- 22 maybe I'll try to answer it this way: So that
- 23 spreadsheet you have, the essence of the spreadsheet
- 24 was to work on, like, a release of security, the
- 25 mechanism for release, and so, like, what kind of
- 26 evidence do we need, what kind of line items are they

- 1 and all of that, but in terms of the estimate, like,
- 2 while we're not saying the estimate is not good. The
- 3 estimate -- like, okay, assuming the estimate is great,
- 4 but what the Crown -- what the Crown -- what we're
- 5 saying is that the Crown does not want to be
- 6 undersecured.
- 7 So, like, even if the estimate is 23 million, and
- 8 we hold 26, CIRNAC wants -- we want to hold that 26 and
- 9 only release any security based on the element of the
- 10 framework such as the work is done, is validated, is
- 11 confirmed. There's a reduction in environmental
- 12 liability, so I -- I'm not -- I don't know if I
- 13 answered your question.
- 14 MR. KHARATYAN: Thank you. Thank you, CIRNAC.
- 15 Karén Kharatyan from Water Board.
- 16 I am still confused a little bit, that CIRNAC
- 17 accept the mechanism of releasing based on this
- 18 milestone, but it seems doesn't accept the number,
- 19 figure, dollar number 23 million, because if your
- 20 position is that 26 should be within the licence, that
- 21 means that this 23 million is not acceptable, okay,
- 22 but I heard you, and now I am going -- I am going to
- 23 ask another confirmation about contingency.
- There is a contingency item when CIRNAC stated
- 25 that this contingency shall be maintained by CIRNAC
- 26 until post-closure monitoring, the question is whether

- 1 they did mean this contingency item included within the
- 2 milestone, or there are other contingency, like, within
- 3 maybe -- within contractor in the Act that we are not
- 4 aware?
- 5 MR. OKONKWO: So thank you. Godwin,
- 6 Crown-Indigenous Relations and Northern Affairs Canada.
- 7 I'll give you the first part of my response, and then
- 8 I'll defer to Gerd to give you some more.
- 9 So what I did say in my presentation was that the
- 10 Crown has to retain money for contingency. The idea is
- 11 for any unknowns. For instance, you do post-closure
- 12 monitoring, if you have any surprises, who does the
- 13 work, like, you know? So -- so I use it as a general
- 14 term of contingencies for all unknowns, but for a
- 15 little more specific contingencies, maybe Gerd can name
- 16 off the ...
- 17 MR. WIATZKA: I think within -- and there
- 18 may be some confusion here, as well, but within the --
- 19 within the model that you were given, there's a
- 20 contingency line which I believe is somewhere in the
- 21 order of 500,000, and I think what we're looking at
- there is releasing that component, because it's tied
- 23 directly to the spreadsheet and the elements, so --
- 24 and, you know, as LMI has pointed out to us, that if
- 25 they're only getting release on funds based on
- 26 verification that an activity has been done, and it

- 1 meets the intended environmental reduction, then
- 2 we're in agreement that you release those elements,
- 3 both the directs, the indirects, on the directs, and
- 4 the general indirects, including contingency. We're
- 5 happy with that.
- I think what INAC's position is saying there is
- 7 some funds in there now that they believe would be
- 8 useful if that -- if the current estimate -- we haven't
- 9 verified the current estimate in and of itself, but if
- 10 that's appropriate, then there's still a comfort --
- 11 they would like to have something there for unknowns,
- 12 which is not in there, and so, you know, you've reduced
- 13 the engineering because you're closer to it. You've
- 14 reduced the contingency because you're closer to it,
- 15 but there is still such items as the water treatment,
- 16 if you needed more, that if -- it would be a
- 17 significant cost, and it would be a significant cost if
- 18 you needed to put in a winter road, if you needed to
- 19 get something in after the fact, so there is some risk
- 20 associated with performance of the works in the long
- 21 term, and I think that's where the Crown is
- 22 uncomfortable.
- 23 And so the elements itself that we've identified
- 24 and talked about, we don't -- we're not uncomfortable
- 25 with those. We think that they're pretty reasonable,
- 26 and the information provided, since our original

- 1 review, which did not give us insights into how those
- 2 numbers were coming about, especially many of the
- 3 larger lump-sum type items, I think we've been provided
- 4 with good information there.
- 5 LMI has broken out, in this particular
- 6 spreadsheet, so, for example, the mob and demob, which
- 7 is a one-line item, has now been broken out so that we
- 8 can assign the mobilization to work that will be done.
- 9 We can assign elements to transport and worker costs to
- 10 work that can be done, and that's what the framework is
- intended to do, and it relieves the Crown of having
- 12 liability for demob, because that has been pulled out,
- 13 so there's a lot of very positive things about the
- 14 framework and the model that it sits now. We just say
- 15 there are still some unknowns in terms, in spite of the
- 16 fact we've gone much further, so there's still some
- 17 unknowns, and there should be some allowance for those
- 18 unknowns.
- 19 THE CHAIR: Okay. Thank you.
- 20 Any further comments/questions?
- 21 MR. KHARATYAN: Karén Kharatyan, thank you
- 22 Mr. Chair.
- One more small clarification about release of
- 24 these progressive security amount, I would say, by
- 25 validation of engineer registered in Nunavut, whether
- 26 you mean a third-party engineer or the engineer could

- 1 be LMI engineer?
- 2 MR. WIATZKA: Well, it depends on what --
- 3 Gerd Wiatzka, Arcadis.
- 4 THE CHAIR: State your name for the
- 5 record. Thank you.
- 6 MR. WIATZKA: It depends on what element it
- 7 is, so, you know, some elements require more stringent
- 8 sign-off, and that's what has been identified in the
- 9 document. Others, we would be satisfied by their
- 10 resident engineers, their comp -- saying that here's
- 11 evidence that it was built in such a manner, and it was
- 12 in -- it was consistent with the drawings, and that's
- 13 where, again, from a CIRNAC point of view, we wanted to
- 14 make sure that we understood the design basis so that
- 15 when the work was done, that we could say, yes, we've
- 16 done it the way it had been planned, and you have
- 17 evidence that's appropriate to the work, and so, again,
- 18 there may be some things that require a stamped
- 19 independent engineer. There may be some things that
- 20 are -- that's fine as long as it's done by someone from
- 21 staff, so -- and we're flexible on that, and I think we
- 22 can work with LMI on that to ensure that those things
- 23 can get addressed in an expedient manner.
- 24 MR. KHARATYAN: Karén Kharatyan, thank you,
- 25 Mr. Chair, and thank you, CIRNAC, for clarification.
- 26 Hopefully, once we have this progressive release

- of security framework, we will get a little more clear
- 2 or less confused.
- 3 Thank you.
- 4 THE CHAIR: Thank you. Okay. Thank you.
- Now we'll move on to Board panel members. Is
- 6 there any comments? Okay. Amanda.
- 7 Nunavut Water Board Panel Questions Crown-Indigenous
- 8 Relations and Northern Affairs Canada
- 9 MS. HANSON MAIN: Koana, Ikkhivautag. Amanda
- 10 Hanson Main, panel member. Thank you to CIRNAC for the
- 11 presentation.
- Godwin, you'd mentioned you -- that the department
- 13 hasn't been able to do -- to conduct its own
- 14 independent cost estimate, reclamation estimate, and
- 15 we've heard that there's some information that's been
- 16 provided and more is yet to come, including a work
- 17 plan. Can you clarify, with a bit more detail, what is
- 18 required to allow the department to conduct its own
- 19 estimate?
- 20 Koana.
- 21 THE CHAIR: Thank you. State your name,
- 22 for the record.
- 23 MR. WIATZKA: Gerd Wiatzka, Arcadis.
- I think we've got to agreement with LMI that the
- 25 items that had been listed earlier, some of the design
- 26 details. I mean, they provided us with quite a bit of

150

- 1 additional information in the last 15 days, so -- and
- 2 we've identified what we'd still like to see, and the
- 3 bottom line is what we're -- what we'd like to know
- 4 is -- we have to be able to independently say, okay, if
- 5 they're doing this, this is the quantities. This would
- 6 be the cost independent, and how does it tie in, and so
- 7 in some of the -- in some of the -- in some of the
- 8 earlier documents, there was a lack of that, and in
- 9 some cases, we also had a difference of opinion of what
- 10 to do, but I think all those have been materially
- 11 addressed, and we're closer now than -- subject to
- 12 getting some more information to being able to do that.
- 13 MS. HANSON MAIN: Thank you for the response.
- Are you able to provide that information to the
- 15 Board? Is that something that you have discussed --
- 16 sorry, Mr. Chair, Amanda Hanson Main.
- Are these requirements something that LMI and
- 18 CIRNAC have discussed outside of the Board's Public
- 19 Registry, and if so, is it something that you could
- 20 provide to us for our information, if there is a list
- 21 of items that have been considered and items that you
- 22 still deem necessary and that both parties are in
- 23 agreement to?
- 24 Thank you.
- 25 THE CHAIR: Thank you.
- 26 MR. WIATZKA: Gerd Wiatzka, Arcadis.

151

- 1 I think what we've discussed are the elements that
- 2 we're looking to get information on. We have not
- 3 discussed, actually, any specifics of us doing our own
- 4 independent. We've been looking more at the framework
- 5 and identifying those elements that LMI has identified
- 6 and coming through and saying, yes, this is the kind of
- 7 thing they're looking for, and here's the release
- 8 mechanism, and so we've been focusing, as Godwin said,
- 9 on the release mechanisms for that and information
- 10 needed to help us understand what that is, so we
- 11 haven't looked at in the context of doing an
- 12 independent estimate at the moment.
- 13 MS. HANSON MAIN: Thank you.
- 14 MS. KOWBEL: Excuse me, Mr. Chair? Sorry.
- 15 THE CHAIR: Go ahead, Applicant.
- 16 Submissions by Lupin Mines Incorporated
- 17 MS. KOWBEL: Christine Kowbel, legal
- 18 counsel for Lupin Mines.
- 19 I just thought to clarify what CIRNAC just said,
- 20 the outstanding items are very specifically described
- 21 and agreed between Lupin Mines and CIRNAC in the
- 22 exhibit that we filed that was read in by Ms. Lewis at
- 23 the beginning of this session, and so those are the
- 24 very specific items that CIRNAC has told LMI that were
- 25 outstanding, and we've fulfilled all of those -- all
- 26 those -- we made commitments to fulfill those

- 1 information requirements; and so if you look at
- 2 those -- if you look at that exhibit, and you heard
- 3 Ms. Lewis earlier, those are -- they got into guite a
- 4 bit of detail about longitudinal and technical aspects
- 5 that CIRNAC's consultant is looking for, so just to
- 6 clarify it, I think -- I think maybe what was said was
- 7 a bit of misspoke. I think we do have agreement on
- 8 what was outstanding. Thank you.
- 9 And for clarity, the one thing that is still
- 10 outstanding that we have not provided to the Board yet
- 11 because it is still a work in progress is the agreed
- 12 joint submission on the framework, which, certainly,
- 13 the parties are still working on and will endeavour to
- 14 get to the Board as soon as possible.
- 15 Nunavut Water Board Panel Questions Crown-Indigenous
- 16 Relations and Northern Affairs Canada
- 17 MS. HANSON MAIN: Thank you for that response,
- 18 and once I have a chance to look at the laptop, I will
- 19 certainly --
- 20 THE CHAIR: State your name.
- 21 MS. HANSON: Amanda Hanson Main, panel
- 22 member, thanks.
- 23 You'll appreciate that once I get back to the
- 24 computer to have a look at that commitment list, I will
- 25 certainly be able to confirm that. Thank you.
- 26 So another question to CIRNAC. It was mentioned

- 1 during the presentation that the Crown feels unsecured
- 2 with respect to the site and therefore a wish to hold
- 3 the full security that you have currently. I just want
- 4 to confirm or have you confirm for me with the current
- 5 security and given the reclamation plan as it stands
- 6 now, the Crown feels unsecured with its current
- 7 holding? Is that correct, or are you looking at -- the
- 8 Crown feels that it's unsecured going forward without a
- 9 cost estimate in place or without certain aspects.
- 10 That statement was made, and I just to clarify what the
- 11 context was and how that could be rectified.
- 12 THE CHAIR: Go ahead, Teresa.
- 13 Discussion
- 14 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 15 Meadows, legal counsel for the Nunavut Water Board.
- 16 It's my understanding that the phone line has just
- 17 gone down, so we may want to take a pause until we can
- 18 verify that the phone line is back up, given that
- 19 Crown-Indigenous Relations and Northern Affairs
- 20 Canada's legal counsel is on that phone line, and we
- 21 are asking questions of them, so, Mr. Chair, perhaps we
- 22 should just take a brief adjournment until the
- 23 phone-like access is restored.
- 24 Thank you, Mr. Chair.
- 25 THE CHAIR: Yeah, thank you. Let's take a
- 26 break for a minute to get this up and running.

- 1 (ADJOURNMENT)
- 2 THE CHAIR: Okay. We should continue on.
- 3 Now I think the telephones are hooked up now, working
- 4 now. All right.
- 5 Okay. Yeah, technical issues a bit. Okay.
- 6 There's someone on the line, so I believe it's legal
- 7 counsel for INAC -- CIRNAC, sorry, so go ahead, please.
- 8 MR. KOHLENBERG: Dale Kohlenberg, Justice
- 9 counsel. Hello.
- 10 MS. MEADOWS: Thank you, Mr. Chair. Teresa
- 11 Meadows, legal counsel for the Nunavut Water Board.
- Hello, Dale. We can hear you. Thanks very much
- 13 for bearing with us while we get the phone line
- 14 restored, so we'll now go to the response from
- 15 Crown-Indigenous Relations and Northern Affairs Canada.
- 16 MR. OKONKWO: So Godwin, Crown-Indigenous
- 17 Relations and Northern Affairs Canada. I'm trying to
- 18 get Gerd to come up with the records of when we had
- 19 done an estimate -- an estimate before, but the two
- 20 past estimates that were done before now, so there was
- 21 the -- the Knight Piésold estimate. It was -- it was
- 22 higher than what we're holding right now, I think about
- 23 40 something, and the one that Arcadis had done for us
- 24 at the time I think was 30 something, so --
- 25 MR. WIATZKA: I think it was the other way
- 26 around.

- 1 MR. OKONKWO: Oh, the other way around,
- 2 yeah, well, but it was still higher, though, so -- and
- 3 then to correct my statement, I didn't say that the
- 4 Crown was unsecured. The Crown was undersecured.
- 5 Like, we feel that way, and so at this point, we don't
- 6 really have -- we don't have any quarrels with the
- 7 estimate that LMI has done. We're just saying that we
- 8 haven't done our own independent estimate. That's what
- 9 that is, but, however, what we're comfortable with is
- 10 that we hold onto the entire security estimate we have,
- 11 security we have at this stage, and the release would
- 12 be upon the element of release, progressive release
- 13 framework; and I mentioned some of those elements.
- So one is the work is done. There's a validation,
- 15 and validation -- I mentioned the ways that validation
- 16 can happen, and the part I forgot to add to it is we
- 17 also committed to have our inspectors, our field
- inspectors, acknowledge what has been done, and then
- 19 environmental liability is reduced, we can consider a
- 20 release of security.
- 21 I don't know if Dale wants to add anything else,
- 22 but thank you.
- 23 MR. KOHLENBERG: No, I have nothing to add to
- 24 that, Godwin.
- 25 THE CHAIR: Thank you.
- So we have a panel member on questioning, to

- 1 continue on questioning. Go ahead, Amanda.
- 2 MS. HANSON MAIN: Koana, Ikkhivautaq. Amanda
- 3 Hanson Main, panel member.
- I thank you for that response, and I appreciate
- 5 also the clarification. You did say "undersecured" and
- 6 not "unsecured". I apologize.
- 7 If I can just confirm that the current holding at
- 8 26 million security does not have the Crown feeling
- 9 undersecured at 26 million, subject to the progressive
- 10 release framework, that you are not feeling
- 11 undersecured in general?
- 12 Thank you.
- 13 MR. OKONKWO: Okay. Godwin,
- 14 Crown-Indigenous Relations and Northern Affairs Canada.
- So I'll choose to answer it this way: At 26,
- 16 we're not feeling undersecured, but the idea is if we
- 17 have to go with an estimate that gets us to reduce that
- 18 right off the bat, before -- like, even at the point,
- 19 we're uncomfortable with -- so if an estimate has been
- 20 done for 20 million, for instance, we now say, oh,
- 21 we're holding too much, so we now have to refund 6
- 22 before you even start. The Crown would be very
- 23 uncomfortable with that. That's the position I'm
- 24 trying to state.
- 25 MS. KOWBEL: Excuse me, Mr. Chair.
- 26 THE CHAIR: Okay. Go ahead, Applicant.

- 1 Submissions by Lupin Mines Incorporated
- 2 MS. KOWBEL: Christine Kowbel, legal
- 3 counsel for Lupin Mines.
- I just thought it might be helpful. LMI isn't
- 5 asking for a \$20 million estimate. I'll just ask Karyn
- 6 to confirm the number. Just so everybody's clear on
- 7 the number, it's not -- it's not 20 million and asking
- 8 for 6 back, it's --
- 9 MS. LEWIS: He wasn't. He was just making
- 10 a ...
- 11 MS. KOWBEL: Yeah, but just clarify for
- 12 everybody what the -- what the number is.
- 13 MS. LEWIS: It's approximately 23.3, I
- 14 believe. My computer just died. Sorry.
- 15 Nunavut Water Board Panel Questions Crown-Indigenous
- 16 Relations and Northern Affairs Canada
- 17 MS. HANSON MAIN: Thank you for the reply.
- 18 Koana, Ikkhivautaq. Amanda Hanson Main, again, panel
- 19 member.
- 20 One short follow-up question to that would be if
- 21 the Crown is able to complete its own estimate, and the
- 22 number is lower, that then the amount that you would
- 23 like to hold may be subject to revision; is that
- 24 correct?
- 25 THE CHAIR: Thank you. Go ahead, CIRNAC.
- 26 MR. OKONKWO: At this time, like, if

- 1 we're -- if at any time we're able to do an estimate,
- 2 estimates have been done in the past, though, and
- 3 Arcadis was one of those who had done the estimates for
- 4 us in the past. At the time we did the estimate, I
- 5 don't know -- can I please ask him a question?
- 6 MR. WIATZKA: Hi. It's Gerd Wiatzka from
- 7 Arcadis.
- I was just looking in my files, and I believe
- 9 there have been several estimates starting in 2014.
- 10 The LMI 2014 estimate was 24 million. We, as Arcadis,
- 11 did an estimate in 2015 that was roughly double that,
- 12 at 45 million. Knight Piésold, I think as part of the
- 13 Board's recommendation, was brought in as an
- 14 independent third party and came up with an estimate in
- 15 2016 at 35 million, and now we're -- we've gone through
- 16 a couple of different of iterations from LMI from 21
- 17 million to 20 million to 23.3 million, and so for us,
- 18 the challenge has always been we weren't sure because
- 19 the earlier estimates were based on the ICRP. The
- 20 newer estimates were based a diff -- on a version
- 21 initially of a draft of a final closure plan, and then,
- 22 you know, basically, there was another estimate on that
- 23 draft final closure plan. So one of our struggles was
- 24 always to try to understand what the actual work
- 25 elements are so that we don't bias it one way or
- 26 another thinking what there are, you know; and so --

- 1 so, again, it's not that we can't do an estimate, but
- 2 in the structure, first, we have to understand what
- 3 they're looking at doing so we can compare that, and
- 4 that was partly the big issue between doing nothing on
- 5 the tailings dam, doing something on the tailings dam,
- 6 doing all of the tailings dam, doing part of the
- 7 tailings dam, et cetera, et cetera, so those were the
- 8 numbers that we were wrestling with; and if we do it
- 9 based on the reclaim model, which is independent of
- 10 their activity, the way it's structured for the
- 11 release, then we have to have certain other things we
- 12 have to know about that.
- 13 So it's not that we can't do it, and it's -- it --
- 14 the bigger issues, in our estimate, had been the use of
- 15 fuel and some of the uncertainties, and those have all
- 16 been addressed, so we're not -- we're not talking about
- 17 materially different costs. You know, you're looking
- 18 at, here, you know, CIRNAC saying 26 million is what
- 19 they hold. They'd like to keep holding that, and LMI
- 20 has said we've got 23 million, and we'd like to get
- 21 releases on those, and we've been working on the fact
- 22 that they need releases and focusing on how we can get
- 23 releases on an agreed-to basis, and there's a gap in --
- 24 obviously in the numbers at the moment, without doing
- 25 an independent estimate, between 23.3 and 26, so you're
- 26 looking at that difference.

- I don't think, at the end of the day, that should
- 2 be significant enough to hold things up, but I can't
- 3 say that -- I can't speak for CIRNAC. If I come up
- 4 with an estimate that's 27 million or 25, it would come
- 5 back to a discussion of it. I think the real focus
- 6 should be on what's needed to move ahead with --
- 7 because CIRNAC has the security at the moment. You
- 8 have the elements of release, so you can actually do
- 9 something and get going on it, and then define it as
- 10 you -- as you go further into it.
- 11 Within the first year, your current plan -- and up
- 12 until now, we have not seen your more detailed
- 13 schedule, right, so that just came. That was just done
- 14 now, so now we know that you're looking at dewatering,
- 15 basically doing your water treatment in 2020. So if
- 16 you're doing a water treatment in 2020, you will have
- 17 some understanding of what, if any, spilled tailings
- 18 are outside of the containment. That will inform you,
- 19 in terms of what you need to do there, and is there a
- 20 cost element associated with that, and I think right
- 21 now, it's a zero cost element.
- So, again, there's things we can learn. I don't
- 23 think it should be something that would stop you from
- 24 going ahead and coming to an agreement on the framework
- 25 and then working your way through it as you move, and
- 26 you'll have a substantive amount of work done in

- 1 Year 1, and I think you can move positively ahead with
- 2 that.
- 3 THE CHAIR: Thank you, CIRNAC.
- 4 Amanda, continue.
- 5 MS. HANSON MAIN: Koana, Ikkhivautaq. Amanda
- 6 Hanson Main, panel member. I thank you for the
- 7 response and additional information.
- 8 You mentioned the framework. We heard from your
- 9 representative the three -- sort of, the three items in
- 10 that framework that we'd be looking for release, or
- 11 that you would be considering for a release. The third
- 12 one was a demonstration of -- a demonstratable
- 13 reduction in environmental liability to the -- to the
- 14 Crown, and I'm wondering if, at this point, you can
- 15 walk us through how that demonstration would be --
- 16 would be documented? What type of demonstration in the
- 17 reduction of environmental liability are you looking
- 18 for or would you be looking for? Would that be through
- 19 monitoring results or some other process that we are
- 20 privy to discuss today?
- 21 Thank you.
- 22 MR. WIATZKA: Gerd Wiatzka, Arcadis.
- There's different elements to it, so, for example,
- 24 in demolition of buildings, you would have a specific
- 25 building, and it would say a hundred -- a hundred
- 26 thousand to demolish this building, so that would be a

- line of evidence that, both, on -- on the inspector
- 2 being there, the visual photographs, the building's
- 3 gone, it's been put wherever, that you can release
- 4 that, and that's pretty straightforward; and the things
- 5 that come with that, the indirects and the directs, the
- 6 direct overheads and the indirects of camp and all that
- 7 would be proportionate to that component's value
- 8 against the direct -- all the total direct value as
- 9 defined in the current -- in the current spreadsheet,
- 10 so that hundred thousand would then have some other
- 11 costs that would be released against that, so those are
- 12 pretty straightforward.
- 13 And the -- some of our reasons for getting the
- 14 technical questions and trying to make sure we had
- 15 something there to give it is that when it's in the
- 16 field, when they've done the work, that we can actually
- 17 not argue about what would the work -- and we would
- 18 have liked to have done this way or that way, whatever.
- 19 It's enough that we can say, yes, the work has been
- 20 done, and so we're trying to make that as
- 21 straightforward as possible.
- In other things like the cover, for example, on
- 23 the dome, we physically know that they'll have put the
- 24 cover on. That will be visual evidence. That'll be
- 25 confirmed by their site. I think the release
- 26 criteria's that we said, okay, it's got to be a 1-metre

- 1 cover. You will have evidence of that cover. You will
- 2 have an engineer sign off on that cover, and that will
- 3 provide the evidence that that cover has been built as
- 4 proposed and designed.
- Now, we're still going to have long-term
- 6 monitoring to confirm that the cover is actually
- 7 performing, so on the one hand, we're releasing the
- 8 funds for the cover in that particular case because it
- 9 has been construction [sic], but there is an
- 10 expectation that it will actually perform, but that's
- 11 what the monitoring will verify; and the same with the
- 12 tailings, that we'll say, okay, the tailings were going
- 13 to be the dams that need stabilization. Additional
- 14 materials have been constructed in a way as planned and
- 15 as shown. We can sign off on the fact that they have
- 16 been done, that there's an engineer that's seen it
- 17 being constructed and compacted, and all those things
- 18 that come with normal engineering and construction, and
- 19 then we're happy with that.
- Now, when you stop dropping the water down, the
- 21 fact that it's stable doesn't mean that the whole
- 22 system is geochemically stable. We're talking about
- 23 physical stability, your chemical stability, right, and
- 24 so there's a different level of performance. So we're
- 25 not going to hold LMI on the construction of the dam to
- 26 say, well, until we get this -- we'll pay for that,

- 1 right, because it will have been constructed as
- 2 planned, but if you need a second round of water
- 3 treatment before it stabilizes, there -- that has
- 4 nothing to do with that element. That's an unknown
- 5 right now, and the assumption is that you don't.
- In the current system -- in the current estimate,
- 7 the assumption is a one-time water treatment, and
- 8 that's it. Now, is that sufficient? Maybe. We're not
- 9 arguing it, but -- so it may need -- it may need more,
- 10 but we're not suggesting that in and of itself, but
- 11 those are the other kind of elements to it, so we want
- 12 to get and agree upon a release mechanism with LMI that
- 13 gives them credit for the work they do, and the intent
- 14 of that work, if it's been done right, should be to
- 15 reduce future long-term -- in the case of the dams,
- 16 long-term stability and erosion, minimize that, right.
- 17 And so if they're constructed as planned, they should
- 18 do that, but monitoring will show if something goes, if
- 19 you end up having it sloughed out for whatever reason,
- 20 there was something, there was an ice lens or whatever,
- 21 who knows, that -- your long-term monitoring will
- 22 identify that, and that may be a liability in the
- 23 future. It may not be.
- 24 THE CHAIR: Thank you.
- 25 Any further questions? Alex? No. Okay. Thank
- 26 you.

Okay. Thank you, CIRNAC, for your presentation.
I think, yeah, we're done. We're done. I think
everybody's already gone through questioning on that.
Okay. The timing is, kind of we'll have a
night session tonight at 7:00, so we'll have to call
Environment and Climate Change Canada for next to have
a presentation, but should we take a break now before
we take the Community Session tonight?
So for Environment and Climate Change Canada, you
will have your presentation in the morning at 9:00.
That will be your time because the time for today is,
kind of, getting tight now.
Okay. Yeah, we might as well take a break now to
get ready for tonight. Thank you.
PROCEEDINGS ADJOURNED UNTIL 7:00 PM

1	CERTIFICATE OF TRANSCRIPT:
2	
3	I, Julie Albert, certify that the foregoing pages
4	are a complete and accurate transcript of the
5	proceedings, taken down by me in shorthand and
6	transcribed from my shorthand notes to the best of my
7	skill and ability.
8	Dated at the City of Calgary, Province of Alberta,
9	this 26th day of January 2020.
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12	
13	4 Macdonald
14	Julie Albert, CSR(A)
15	Official Court Reporter
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		1	<u> </u>	
	14:20 16:10	155:21,23	75:9 165:16	afternoon/this (1)
A-L-V-I-N (1)	60:4,18 166:4	added (2) 67:15	adjournment (6)	108:19
33:24	achieve (1) 35:22	81:15	28:6 56:5	agencies (4) 27:11
ABA (1) 121:19	achieved (3) 70:5	addition (7) 14:9	114:24 132:22	102:1,9 106:20
abbreviations (1)	84:19 91:5	18:19 37:13	153:22 154:1	agenda (7) 20:12
16:7	achievement (1)	40:19 43:10	administered (1)	21:7 23:19
ability (1) 166:7	126:12	75:24 83:26	119:21	27:18 44:12,26
able (21) 14:19	acid (2) 22:7 23:2	additional (51)	administers (1)	74:5
26:15 29:8	acknowledge (3)	6:11 17:16,18	119:18	agendas (2) 15:16
37:19 77:11	24:6 137:5	18:13 20:22	administration	21:5
110:14 113:6	155:18	23:1 43:11,11	8:16 13:22 14:4	ago (2) 39:12 87:3
128:20 129:1	acknowledged (1)	56:15,18 59:25	administrator (2)	agree (8) 104:11
131:24 134:17	65:24	60:1 61:17,24	10:5 117:19	104:17 105:25
134:18 136:8	acquired (1)	62:1 65:25 67:8	advance (5) 44:16	129:10 134:21
137:7 149:13	57:21	68:9,12,17	68:12 69:15	139:6 140:7
150:4,12,14	Act (12) 13:4,10	69:17 70:18	76:16 117:26	164:12
152:25 157:21	21:3 98:11,16	76:3,4,7,16,18	advice (1) 119:23	agreed (9) 17:24
158:1	119:10,12,13,14	79:6,25 80:15	advised (1) 25:3	72:16 76:20
absolutely (1)	119:15,16 145:3	81:16 82:16,22	advisor (3) 8:19	77:20 123:11
105:8	active (7) 12:4	83:13,18 84:20	14:7 24:17	129:5 139:7
accept (6) 80:1	16:21 21:20,24	85:6,26 105:17	Affairs (47) 2:24	151:21 152:11
142:24 143:9,16	22:24 40:15	116:1 121:12	3:12,14,17,20	agreed-to (1)
144:17,18	41:5	122:1 126:15	3:24 4:3 6:23	159:23
acceptable (4)	activities (25)	127:15 128:7	7:2,6,10 10:3	agreement (19)
69:26 102:8	11:22 12:9	140:14,18	19:21 25:12,20	12:20,22 13:9
103:16 144:21	22:15 36:4	141:13 150:1	76:1,22 77:18	69:11 72:13
accepting (1)	42:16,24 43:7	161:7 163:13	78:18 87:1,6	76:2 78:19 86:5
137:13	43:24 44:3	additionally (2)	104:20 112:26	103:13 104:3
access (14) 21:15	46:18,19 47:6	82:20 88:20	115:26 116:14	119:11,12
36:16 42:7	52:10 53:13	address (1) 76:7	116:20,23,26	124:26 127:7
43:15 52:24,25	54:8 56:20,25	addressed (14)	117:4,10 118:13	146:2 149:24
53:12,17 55:18	58:23 66:9	21:17 38:1	119:10 124:4	150:23 152:7
55:20 57:9	67:17 68:1	44:12 46:20	128:1 133:2	160:24
66:18 112:16	72:19 77:6	59:5,19 61:6,6	142:1,6,20	agreements (2)
153:23	101:18 141:3	65:12 81:7,26	143:20 145:6	23:11 119:9
accessible (1)	activity (2)	148:23 150:11	149:8 152:16	ahead (67) 27:20
36:19	145:26 159:10	159:16	153:19 154:15	28:10 31:8
accessing (1)	actual (10) 39:9	addresses (1)	154:17 156:14	34:13 44:2 56:8
78:22	39:11 41:4	140:7	157:16	74:3 75:19
accommodation	47:13 57:3,5	addressing (1)	affirm (1) 115:3	76:11 79:18
42:5 58:22	93:20 123:9	138:4	affirmed (7) 2:9	80:11 86:6,16
accommodation	138:14 158:24	adequate (1) 20:2	3:10 33:8,9 34:7	89:26 90:18
56:22	adaptive (1)	adjacent (4)	115:18,21	91:22 92:20,26
account (2) 60:18	70:16	70:10,16,19	afternoon (3)	93:12,15,16,22
97:1	add (5) 120:10	108:14	2:12 73:17	94:5,13,19,26
accurate (5)	137:26 155:16	ADJOURNED	75:12	95:5,25 97:6
	•	•	•	•

99:12 100:12,15	112:3,7 113:10	95:15	95:24 112:9	approval (8)
101:11,14,23	149:6,9 150:16	anticipate (1)	Applicants (4)	35:23 44:1,2
102:18 103:26	152:21 156:1,2	77:23	23:20,22 56:7	65:1 86:14,21
104:12,21 105:3	157:18 161:4,5	anticipated (1)	132:11	125:1 128:8
105:23 107:7	amend (3) 11:13	58:7	application (54)	approve (1)
108:3 109:8,21	12:2 117:16	anticipates (2)	1:9 4:12 6:25	105:12
110:10 111:9	amended (5) 81:9	38:10 60:9	11:22 12:2,7,26	approved (10)
112:21 114:10	82:2,25 84:9	anticipation (2)	13:12,23 14:23	19:10 37:2,5
117:1 124:1	85:14	40:9 54:23	16:13,15,18	102:15 103:17
			1 ' '	
127:25 132:26	amendment (13)	apologies (2)	17:1,5,6,7,12	103:20,22 104:6
134:4 136:1	1:9 4:12 13:2,13	30:25 92:12	18:18,22,23	104:8 105:15
137:2 139:14	16:16 17:1,8	apologize (3)	19:1,5,13,18	approximately
142:4 151:15	19:5 23:17	37:18 42:16	20:3,5,5,20	11:24 12:5
153:12 154:7	31:16 35:21	156:6	21:10 23:17	21:21 36:18
156:1,26 157:25	37:10 118:18	appeared (1)	26:22,24 27:7	48:25 51:7,10
160:6,24 161:1	amendments (4)	124:18	27:15 28:14	53:11 85:23
air (1) 36:19	22:11,15,17	Appendix (2)	31:15 34:24	157:13
airstrip (1) 42:7	65:17	44:14 71:5	35:20 37:9,10	April (2) 20:8
Albert (4) 11:1	amount (7) 51:22	applicable (2)	37:11,14 42:8	120:3
14:22 166:3,14	66:8 92:14	97:19 119:8	42:11,20,21,26	Arcadis (15) 10:7
Alberta (1) 166:8	99:18 147:24	applicant (59) 9:1	59:21 67:9	25:24 117:20
Alex (2) 13:19	157:22 160:26	13:1 15:12 17:3	116:15 117:16	122:21 126:10
164:25	amounts (1)	17:4,11,15,18	118:19 132:2	133:23 138:2
alleviate (1) 89:19	131:3	17:21,26 18:7	apply (2) 61:19	148:3 149:23
allow (16) 23:12	analysis (5) 60:12	18:11 19:19,24	67:19	150:26 154:23
43:15 46:13,14	61:10 63:25	25:7 27:19,20	appreciate (9)	158:3,7,10
47:13,14 48:14	121:9 127:4	28:9 34:13 73:4	15:15 16:8 74:8	161:22
49:5 50:26	animals (6)	76:11 78:9	74:19 89:16	Arctic (1) 119:16
54:24 58:21	106:15,17,21	80:11 86:4,16	108:18 112:9	ARD (2) 60:13,18
66:18,24,25	107:3,10,12	86:23 92:20,25	152:23 156:4	area (71) 12:21,24
101:20 149:18	Anne (13) 26:11	93:15,16 94:5	appreciated (1)	14:5 17:23
allowance (2)	89:11,12 90:19	94:19 95:5,17	35:14	19:10 40:5,23
92:23 147:17	91:10,23 92:10	96:5 97:6 99:12	appreciates (2)	41:12 42:4
allowed (2) 46:3	93:1,9,23 94:14	100:12,15	15:11 74:20	43:18,20 45:6,7
57:15	94:26 104:15	101:11,14	approach (12)	45:12,15,18,25
allows (2) 42:19	Anne's (1) 95:8	102:18 103:26	70:16 99:10,24	46:1,4,21 47:11
67:1	annual (1) 55:1	105:23 107:7	100:2 102:3,8	47:12 48:10,18
alluded (1)	answer (5) 105:8	108:3 111:9	103:14,16	48:21 49:2,6,8,9
139:23	114:16 132:25	112:12,21	104:11,17,24	49:11,16,18,21
Alvin (13) 2:8 5:5	143:22 156:15	114:10 132:15	124:7	50:12 51:9,11
5:12 6:4 25:2	answered (1)	132:25,26	appropriate (5)	51:14,19 53:9
29:19 30:4,10	144:13	133:13 134:4	71:1 85:3	53:14,18,24,25
32:5,11,26	answering (1)	139:14 141:9	108:25 146:10	54:5,16 55:14
33:23 34:6	111:19	151:15 156:26	148:17	55:16,18,21,25
	answers (4) 75:15			
Amanda (14) 13:18 108:2	79:18 86:25	Applicant's (5) 75:5,16 87:2	appropriately (1) 112:19	56:22 57:4,13 57:15,20,21,22
13.10 100.2	17.10 00.43	13.3,10 01.4	114.17	37.13,40,41,44
<u> </u>				

		I		ı
59:16 62:13,19	19:14 38:20	audio (2) 14:16	75:3,6 106:1	batteries (1) 52:5
66:21,24 83:8	88:5 125:20	15:9	109:6 123:5	Bay (2) 14:14
88:22 89:2	assign (2) 147:8,9	August (5) 17:21	138:21,23	58:19
101:8 106:13	assist (1) 16:4	54:11 60:14,16	152:23 153:18	Bay's (1) 58:18
107:21 124:10	assistance (3)	112:14	157:8 160:5	bearing (1)
125:9,20	14:19 16:8	Aurora (1) 38:19	backfill (1) 47:15	154:13
areas (9) 41:6,20	21:12	Australia (1)	backfilled (1)	beat (1) 58:26
45:9 46:2,14	associated (16)	108:9	48:2	beginning (1)
49:22 57:13	11:16,23 12:8	authorities (1)	background (9)	151:23
118:10 125:16	13:5 16:23	108:16	12:16 23:16	behalf (4) 12:14
argue (1) 162:17	18:14,17 74:10	authorization (2)	57:9 81:2,12,21	23:26 35:20
arguing (1) 164:9	86:12 110:19	11:13 12:7	82:5 83:5 84:16	73:1
arguments (2)	119:13,15	authorizations (backing (2) 84:22	believe (19) 39:24
74:6,16	125:13 139:10	119:18	84:26	44:11,25 53:6
arrangement (1)	146:20 160:20	authorize (2)	bare (1) 55:12	60:7 61:24
42:2	Associates (8)	11:22 13:4	baseball (1) 51:17	62:24 63:18
arsenic (1) 22:3	5:19,26 9:10	Autut (7) 8:13	based (33) 60:2	68:15 72:12
Article (2) 12:19	32:17,23 38:22	13:25,25,26	84:25 87:17	113:14 116:1
13:8	39:21 59:11	73:9 96:2,3	96:13 99:6,8,17	139:4 140:9
asbestos (2) 22:4	Association (1)	available (15)	99:18,20 110:20	145:20 146:7
70:26	39:21	14:9 15:2,17	123:19 128:20	154:6 157:14
asbestos-contai	associations (2)	18:18,20 21:11	129:20,26 133:7	158:8
51:26 71:2	25:8 27:12	30:24 36:7	133:10 135:13	Belinda (5) 2:7
asked (6) 33:9	assume (2) 90:14	54:17,18 74:18	135:13,18	24:10 33:14
35:19 121:4	99:23	78:26 92:14,16	136:11 137:24	34:5 108:4
123:7 140:12,12	assumed (2) 88:1	114:7	139:21 140:18	Ben (2) 14:3,12
asking (9) 96:10	88:5	average (2) 64:11	142:23 143:5,8	benchmark (1)
98:6 127:3	assuming (5) 31:4	88:21	143:9 144:9,17	91:4
136:9 137:15	97:18 102:10	avoid (2) 16:7	145:25 158:19	berm (1) 41:14
142:13 153:21	105:10 144:3	66:19	158:20 159:9	bermed (1) 41:12
157:5,7	assumption (2)	aware (7) 98:7	baseline (1) 90:22	best (1) 166:6
aspects (2) 152:4	164:5,7	108:26 114:12	basically (7)	better (5) 43:23
153:9	assumptions (1)	133:24 134:1	52:17 73:20	48:14 50:26
assess (2) 121:8	87:20	135:8 145:4	101:7 120:20	95:16 122:7
123:1	assurance (1)	B	122:22 158:22	beyond (1) 138:18
assessed (1) 87:20	106:24		160:15	bias (1) 158:25
assessment (22)	assure (1) 108:22	B (3) 8:15 9:5 10:22	basis (8) 62:18	Bible (1) 27:25
17:13 18:1,8	attached (1)	B-E-L-I-N-D-A	121:26 130:14	big (3) 99:3,8
23:4 26:10	81:17	33:15	133:25 143:15	159:4
38:22 59:10,20	Attachment (3)	B-O-C-K-I-N	143:18 148:14	bigger (1) 159:14
89:2,3,6 96:14	69:10 70:22	33:19	159:23	bilateral (2) 81:2
96:26 107:21,22	91:1	back (21) 14:5	bat (1) 156:18	81:21
119:14 121:22	attendance (1)	15:17,23 36:21	bathymetric (1)	birch (1) 55:15
123:19 125:6,7	16:12	37:21 38:9	38:14	bit (18) 35:16
125:11 127:1	attended (2)	41:26 49:26	bathymetry (1)	40:18 42:6
assessments (4)	120:4,5	55:11 57:18	38:24	55:19 77:8
] 33.11 37.10		
<u> </u>				

	·	i	i	i
85:26 89:20	119:21,26	158:13	87:6,12,13,16	125:4
108:20 133:20	134:20 136:7	building (5) 53:2	88:8,24 89:9,13	cause (1) 107:1
134:13,17 140:4	142:3,5,7	58:17,21 161:25	92:26 93:2,22	cell (45) 16:2
144:16 149:17	143:12 144:15	161:26	94:13 104:14,20	38:25 39:1,3,4
149:26 152:4,7	149:5,7 150:15	building's (1)	107:19 112:26	40:6,6,8,15,17
154:5	152:10,14,15	162:2	115:26 116:14	40:17,24 41:1,8
blank (1) 102:7	153:15 154:11	buildings (8) 46:6	116:20,23,26	41:15 45:10,13
blasted (3) 47:10	157:15	46:24 48:4 51:4	117:4,10 118:13	45:13,14,16
47:12,12	Board's (5) 16:9	52:16,18 53:1	124:4 128:1	46:2 49:8,8,9,11
blocked (1) 47:20	119:23 134:9	161:24	133:2 141:18,21	49:20,24,24
Board (129) 1:3	150:18 158:13	builds (1) 141:5	141:24 142:6,20	50:1,2,2,4,5
2:15,19,21,23	Bocking (16) 2:8	built (2) 148:11	143:20 145:6	54:20 55:10,17
3:1,5,7,16,19,23	5:19,25 9:10	163:3	149:8 152:16	55:17,21,25
4:2 8:6,11,15	24:21,23 29:25	business (1)	154:15,17	57:17,19 71:18
11:19,21 12:15	30:10 32:17,22	108:21	156:14 157:16	84:4,4 101:19
12:17,18 13:10	33:18,18,19		165:6,9	cells (7) 38:14,16
13:15,15,18	34:6 92:21,21	C	Canada's (3)	45:12 49:8
14:4,8,13 15:11	bodies (1) 105:18	C (3) 9:7 69:11	88:16,18 153:20	54:13 61:22
16:14 17:2,2	bottom (3) 85:24	111:1	capacity (2) 54:25	124:12
18:17 19:2 24:6	100:19 150:3	C' (1) 30:21	138:19	central (1) 112:16
24:13 25:4	boy (1) 107:2	cabin (1) 58:16	capital (1) 46:25	centre (6) 40:14
26:23,24 27:3,7	breach (1) 94:21	calculated (1)	captured (1)	41:11,23 47:18
27:15,22 29:5	breached (1)	88:20	137:21	47:25 48:6
29:16 30:4,9,19	94:10	Calgary (1) 166:8	captures (1) 19:2	certain (3) 46:13
30:23 33:5 34:4	breaching (2)	call (9) 19:21	care (11) 12:1	153:9 159:11
34:9 37:2 38:1	93:18 96:24	20:10 34:17	22:14 39:15	certainly (4)
60:14 67:14	break (24) 27:24	81:3,22 83:12	42:24 47:1 54:7	89:19 152:12,19
72:24 73:18	28:4,5,8 34:17	84:19 91:8	58:4,22 66:11	152:25
74:1,8,20 75:21	56:1,3 58:25	165:5	73:8 75:18	Certificate (2) 4:5
77:1,8,8,26	73:20 75:3,3,7	Cambridge (1)	carried (13) 37:4	166:1
78:12 80:3 81:4	75:13,14 79:3	14:14	38:20,25 39:18	certified (1)
81:23 86:7,9	83:23 114:22,26	camp (1) 162:6	40:4 43:19	131:12
90:11 95:14,23	132:16,21	campaign (1)	51:22 54:8 58:6	certify (1) 166:3
95:26 96:3,8	142:10 153:26	138:22	60:4 61:15	cetera (7) 27:12
97:17 98:6	165:7,13	campaigns (1)	64:17 136:14	99:5 103:21
99:22 100:5,23	breaks (1) 15:24	138:23	carry (2) 99:21	105:11 110:5
100:25 101:24	brief (3) 18:26	Canada (75) 2:17	124:5	159:7,7
102:3 103:5	120:21 153:22	2:22,25 3:12,15	carrying (1) 77:5	chair (228) 8:7
104:8,9,13,19	bring (2) 56:15	3:18,21,25 4:4	case (4) 109:2	11:7,20 12:14
105:4,6,8,11,26	107:18	6:24 7:3,7,11	131:3 163:8	23:25 24:12,20
107:23,26 109:6	broad (1) 119:6	10:3,13 12:22	164:15	25:7,16 26:4,6
109:9,11,26	broadcasting (1)	20:10 25:20	case-by-case (1)	26:14 27:21,23
110:15 111:5	15:7	26:5,11 31:11	62:18	28:1,2,7,15,17
112:5 113:2,8	broken (2) 147:5	31:11 37:15,16	cases (2) 118:14	28:21,22,25
114:7 115:17,23	147:7	40:3 52:2 63:10	150:9	29:1 30:8,25
116:7 117:13	brought (2) 15:24	72:25 76:2,22	category (1)	31:1,7,9 33:4,6
		77:18 78:18,19		
	1	1	1	1

33:16,18,23	136:3,26 137:1	67:15 100:3	68:2,3,6,7,9,11	City (1) 166:8
34:3,8,10,12,20	139:13,16,19	changeover (1)	68:16,19,21,25	Claims (1) 119:11
35:12 55:26	140:22,23,25	99:9	69:2,6,9,13 71:6	clarification (12)
56:4,6,10 58:26	141:8,11,16,20	changes (5) 39:11	71:23 72:9,24	69:19 95:8
72:24 73:3,4,7,9	141:23 142:8	66:3 70:23,23	80:17 81:1,2,4	98:21 100:26
73:26 75:1,2,12	143:13 147:19	102:10	81:11,13,20,21	102:21 103:2
75:20,22 76:9	147:22 148:4,25	changing (2)	81:23 82:4,12	105:14 118:9
76:10,15 78:4,9	149:4,21 150:16	88:17,18	82:13,24,26	142:8 147:23
78:11,13 79:14	150:25 151:14	Channel (3) 15:5	83:2,4,12,13,17	148:25 156:5
79:16,21 80:1,2	151:15 152:20	15:6,6	84:9,11,13,15	clarifications (3)
80:6,9,10 85:19	153:12,14,21,24	characteristics	84:19,20,23,24	87:17 96:9
86:3,4,10,15,19	153:12,14,21,24	123:2	85:1,6,13,15,17	127:3
1 ' ' ' '	155:25 156:25	check (3) 21:13	86:13 87:10	clarified (1) 64:16
86:20,23 87:4		92:17 143:7		` /
87:10,15 89:23	156:26 157:25		90:10 92:12	clarifies (3) 67:25
89:26 90:2,8,17	161:3 164:24	chemical (7)	104:21,23	98:17,20
91:10,13,21	chairing (1) 13:17	69:26 70:5 91:4	110:13,17,23	clarify (10) 84:6
92:20,25 93:12	Chairman (7)	91:6 106:16,23	111:22 114:4,15	88:10 102:22
93:15,21 94:5	25:3,17 28:11	163:23	117:1,19 118:14	109:23 143:13
94:12,18,25	34:22 35:6,9	chemicals (5)	119:20 120:4	149:17 151:19
95:1,4,6,17 96:2	107:5	46:23 51:20	122:3 124:6	152:6 153:10
96:4,7 97:6,14	chairperson (1)	106:14,26	125:25 128:17	157:11
98:2,5,17 99:11	11:19	107:18	129:12,23 131:8	clarity (7) 69:4
100:11,15,22	challenge (2)	chief (2) 9:5 24:10	132:8,24 133:7	86:20 101:6
101:10,14,22,25	122:9 158:18	choose (1) 156:15	133:8,14 134:12	123:8 125:9
102:18,19	challenges (2)	Christine (14)	134:16,16,21,23	140:13 152:9
103:25 104:1,10	113:4 129:3	24:15 30:16	135:2,7,8 136:8	cleaned (1) 51:25
104:12,21,22	chance (4) 77:2	76:13 79:19	136:9,10,19,22	clear (7) 48:16
105:2,7,22,26	112:18 140:20	86:17 98:3	137:2,5 139:21	97:20 137:11
107:6,24 108:4	152:18	112:23 132:12	140:15,25,26	143:3,21 149:1
109:4,5,12,20	change (36) 2:17	133:3 134:5	141:12,18 142:9	157:6
110:8,10 111:9	2:22 10:13	136:2 139:15	142:12,18	clearly (3) 16:6
111:10,11,18,24	20:10 22:13,19	151:17 157:2	143:14,16 144:8	26:15 83:20
111:25 112:2,20	23:4 26:5,11	circulated (1)	144:14,16,24,25	client (1) 139:18
112:22,24 114:9	37:16 40:2 52:2	78:15	148:13,25	climate (43) 2:17
114:18,25 115:8	63:10 64:5	circulating (1)	149:10 150:18	2:22 10:13,18
115:16,22,24	72:25 73:14	31:5	151:19,21,24	20:10 23:4 26:5
116:6,8,10,11	78:19 87:12,13	circulation (1)	152:26 154:7	26:10,13 37:15
117:1,6 122:18	87:16 88:8,24	78:20	157:25 159:18	40:2 52:2 63:9
122:20 123:26	89:9,13 92:26	CIRNAC (149)	160:3,7 161:3	64:5,7,22 72:25
124:2 126:7,9	93:2,22 94:13	19:21,26 20:1,9	165:1	78:19 87:11,13
127:24 128:2,4	99:24 104:14	25:12,21,23	CIRNAC's (9)	87:16,20 88:1,4
132:8,13,15,17	122:23 141:17	26:4 59:13,26	72:7 81:15	88:8,9,16,18,24
132:19,21,23	141:21,24 165:6	60:8,15,26	124:15 129:12	89:4,9,13 92:26
133:4,13,16,17	165:9	61:12 62:1,6,8	137:11 140:13	93:2,22 94:13
133:20 134:3,7	changed (5) 22:13	62:20 63:6 65:6	142:21 143:4	104:14 127:14
135:5,6,26	42:17 45:24	67:9,12,21,22	152:5	141:17,21,24
100.0,0,20	,	,,		
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

				ı
165:6,9	158:21,23	82:4 83:3,4	44:14,21 54:14	159:3
close (3) 50:10	coffee (3) 15:23	84:14,15 85:17	59:3,6,12 63:8	complete (9)
73:12 97:21	120:13,16	85:20 90:15,16	63:20 64:17	15:15 16:10
closed (7) 37:17	coffer (2) 41:2,12	106:2 121:11	65:11 67:7 68:7	20:2 21:9 26:26
47:8,20 65:23	coincide (1) 42:16	commented (11)	71:5,7,19,22,26	138:14,15
94:2,17 97:3	collaboratively	61:12 62:6	75:26 76:3,18	157:21 166:4
closer (4) 49:18	134:19	63:14,23 64:10	76:21 78:6 79:6	completed (16)
146:13,14	colleague (2)	65:2,6 68:8 69:2	79:22,25 80:15	22:15 37:13
150:11	25:22 89:11	69:20 70:8	80:25 81:5,12	38:3,15,19,21
closest (2) 20:17	collect (1) 122:13	comments (25)	81:20,24 86:12	39:20,20 44:15
104:16	collected (6)	16:8 17:19 20:9	113:13,15	47:6 58:8 59:10
closing (2) 74:6	38:17 45:19	27:6 59:5,12,13	123:10,15	117:26 125:21
74:16	52:7,13,13	59:25 60:15,26	126:17 127:15	134:25 135:3
closure (95) 4:17	62:10	65:25 67:6,8	151:26	completely (3)
4:21,25 5:2	collectively (1)	69:17 86:25	commits (6) 70:26	45:14 50:11,12
11:16,23 16:23	48:6	87:1 95:19,21	82:16,20 83:18	completeness (4)
17:9 21:21,25	comanagement	105:14 107:25	83:26 85:5	19:18,22 23:15
22:14,24,24	119:7	118:25 121:12	committed (9)	37:12
23:1,5,7,10	come (19) 15:5,13	132:10 141:18	59:18 62:12	completion (4)
29:15 31:19,22	43:13 72:26	149:6	63:5 64:3 69:14	23:15 39:1,25
31:25 32:2	75:3,6 76:2	comments/ques	128:25 131:23	131:10
34:26 35:22,24	78:22 79:2	147:20	137:9 155:17	Complex (1) 8:1
36:4,23 37:1,8	95:20 106:3	commitment (58)	communication	complexes (1)
37:11 41:26	113:25 114:5	20:9 38:15 39:1	8:17 14:4	42:5
42:16,24 43:6	149:16 154:18	39:14 59:8,8,23	communities (1)	compliance (5)
43:24 44:1,2	160:3,4 162:5	60:11,20,21	35:3	17:13 19:14
45:1,1,8,23,26	163:18	61:2,9,21 62:4	community (18)	98:10,12 108:15
46:15,17 48:7	comfort (1)	62:16 63:2,10	3:4 15:17 20:18	comply (2) 98:8
48:17 49:22	146:10	63:23 64:5,24	20:25 21:6,8	101:17
50:10 52:10	comfortable (5)	64:26 65:15	23:18 27:5,8	component (1)
53:23 55:1 56:2	90:13 123:16	68:8,26 69:12	35:2 73:16 74:2	145:22
56:12,20 57:12	128:7 135:11	71:8,10,11,15	74:9 106:5	component's (1)
57:25 58:1,7,12	155:9	72:7,10,12,15	108:16 120:20	162:7
60:19 63:4 64:9	coming (4) 93:24	77:1 81:1,11	120:25 165:8	components (1)
66:9 67:17,26	147:2 151:6	82:5,7,15,16,26	comp (1) 148:10	45:8
72:18 83:11,25	160:24	83:2,5,6,18	compacted (1)	comprehensive
95:9 96:17	COMMENCE	84:11,13,16,17	163:17	46:16
98:23 99:10,24	11:5 75:11	84:25 85:15,16	company (7) 36:6	computer (4) 80:7
99:25 101:19	commencement	120:7 122:2	39:20 40:4	80:8 152:24
103:1 108:10,18	20:6	124:26 125:22	96:14 106:24	157:14
119:2 125:4	comment (28)	126:19 152:24	108:20 134:19	concentrated (1)
126:1,11,21	59:13,15 62:20	commitments (company's (2)	122:25
128:12,13	65:19 67:10,12	6:11 17:23	133:26 140:17	concept (4) 72:6
135:14 136:5,10	67:20,21,22	18:14 20:21	comparable (1)	122:22 123:6,20
138:14 140:17	68:2,3,6,19,25	37:26 38:3,5,10	97:26	concepts (1)
141:1,2,2	69:3,7 70:25	38:12 44:7,13	compare (1)	82:23

		<u> </u>		
conceptual (12)	89:2,6 110:20	19:8	70:9	5:9 30:6 32:8
5:22 18:2 30:1	confer (3) 132:14	confused (2)	constraints (1)	62:23 84:18
32:20 45:24	139:17 140:20	144:16 149:2	77:11	contaminated (5)
57:12 61:21	conference (15)	confusion (2)	constructed (8)	22:3 46:23
71:12,16 72:6	17:25 20:14,17	139:20 145:18	57:5,7 85:9	51:20 52:11,12
82:17 126:25	20:19 21:18	connected (1)	96:15 163:14,17	contamination (
concern (5) 83:1	37:25 42:13	45:6	164:1,17	121:2,2 125:12
84:12 85:16	44:5,10 59:3	connecting (1)	constructing (1)	contemplated (1)
106:3 123:14	67:7 71:6,20,21	66:20	96:24	91:25
concerned (2)	120:6	connection (1)	construction (14)	content (1) 22:3
122:16,26	confirm (33)	57:18	9:18 24:25	CONTENTS (1)
concerns (5)	20:13 30:12,18	consider (7) 63:18	36:21 49:4	2:1
65:12 68:21	31:10 63:22	64:10,15 112:18	57:25 66:17	context (2) 151:11
89:20 126:23	86:13 87:19.26	130:9 131:25	93:5 121:3,4,13	153:11
138:5	88:4,11,25 98:6	155:19	121:16 163:9,18	contingencies (3)
concise (1) 74:21	99:14 112:12	considerably (1)	163:25	139:22 145:14
conclude (3)	113:19 114:6	45:17	consultant (5) 9:8	145:15
74:23 126:4	115:3 116:3	I	25:25 117:21	contingency (22)
129:22	124:18 133:7	consideration (4) 64:8 119:23	139:22 152:5	5:9 30:6 32:8
concluded (2)				62:23 64:12,15
74:11 89:3	135:2,11 136:11 136:19 140:14	130:24,25	consultants (3) 24:16 25:4	
		considerations (64:21 74:25
concludes (1)	140:21 142:17	84:26	123:5	131:3 137:17
108:24	152:25 153:4,4	considered (21)	Consulting (14)	139:5,24 140:6
concluding (7)	156:7 157:6	20:23 38:5,5	5:6,13 6:2,5,8	144:23,24,25
82:4 83:3,4,10	163:6	59:21 60:4	9:12,14,16 30:5	145:1,2,10,20
84:14,15 85:17	confirmation (10)	62:14 64:13,22	32:5,11,25 33:1	146:4,14
conclusion (5)	61:10 81:25	65:7 71:2,8 83:3	33:3	continuation (1)
121:19 128:6	86:11 124:24	84:14 85:2,18	contact (3) 22:9	87:3
131:17 132:1	131:13 135:10	88:11,15 100:9	72:20 106:15	continue (13)
139:23	135:10,20 142:9	122:3 135:24	contain (3) 41:3	22:26 28:7
condition (6)	144:23	150:21	138:20,20	55:26 56:6,8
22:18 63:22	confirmations (1)	considering (3)	contained (2)	58:26 79:17
66:3,14 130:6	81:6	11:22 64:8	39:13 124:12	95:5 112:2
135:23	confirmed (11)	161:11	containing (2)	132:23 154:2
conditional (1)	20:1 42:14,15	considers (7)	41:14 48:22	156:1 161:4
62:9	65:9 81:4,23	44:21 61:7 64:3	containment (17)	continued (1)
conditions (8)	110:17 113:22	65:14,26 67:3	17:23 40:5,23	58:5
22:11 43:23	124:19 144:11	67:20	45:7,12,16	continues (1)
55:6 66:22	162:25	consistent (3)	59:16 62:19,23	68:16
103:8 111:2,7	confirming (1)	43:2 66:10	66:21,23 83:8	continuing (2)
123:9	110:25	148:12	88:22 89:1	41:16 56:12
conduct (6) 13:14	confirms (5)	consisting (1)	101:8 125:9	contour (2) 51:11
19:17 63:20	82:26 84:11	75:25	160:18	53:14
108:20 149:13	85:15 98:13	consolidated (3)	contains (2) 49:20	contract (6) 57:24
149:18	99:23	46:12 51:8,19	49:20	60:2 99:6,9,19
conducted (3)	conformity (1)	consolidation (1)	contaminants (5)	136:16
	1	I	1	ı

	ı	ı	1	1
contractor (11)	116:12,18,21,24	153:20 154:7,9	crest (4) 40:23	119:10 124:3
60:3 99:1,7,9,15	core (1) 24:6	154:11 157:3	41:7 53:19	128:1 133:1,5
99:19,20 108:26	cores (1) 63:22	countries (1)	83:23	141:26 142:5,19
130:15,22 145:3	corner (2) 49:11	108:8	criteria (4) 65:20	143:20 145:6
contributed (1)	49:21	couple (5) 45:3	91:16 107:16,18	149:7 152:15
13:21	Corporation (2)	50:7 73:15	criteria's (1)	153:19 154:15
contributions (2)	24:1 36:26	100:5 158:16	162:26	154:16 156:14
118:19 119:24	correct (7) 85:25	course (4) 21:25	cross-section (7)	157:15
control (12) 23:7	113:14 139:1,4	36:5 77:22	82:6,14,17,22	crushing (1) 53:3
40:25 41:9	153:7 155:3	127:19	84:1,4 123:12	CSR(A) (2) 11:1
43:16 57:19	157:24	court (5) 11:1	cross-sections (8)	166:14
61:11 62:3	correspondence	14:21,22 16:4	60:23 61:2,23	cubed (4) 48:26
66:17 82:19,23	18:17 19:16	166:15	82:11 83:14,15	66:8,10 121:15
83:9 126:16	20:13 21:5	cover (32) 5:16	83:19 123:10	cubic (14) 12:3,6
controls (1) 41:1	cost (32) 17:10	17:6 21:20	crossing (1)	16:19,20,21
Contwoyto (5)	23:9,10 38:6	29:21 32:14	108:13	43:4,5,5,8 51:7
11:25 43:13,17	44:19 63:4	39:7,10 51:10	crown (42) 41:23	66:11,25 67:2
66:15,20	68:26 69:5	63:12 69:21,24	41:23 46:8 47:8	101:5
convenience (3)	92:22 98:25	80:21 84:5,22	47:9,18,24 48:2	culvert (3) 41:1
29:6,17,24	99:1,6,20 100:2	85:7,9,22 88:12	48:8 51:14	41:12,13
conveniently (1)	110:4 119:3,4	88:26 89:6	52:14,21 119:8	curious (1) 94:2
29:9	128:16 129:1,4	123:3,15 125:8	119:19 129:13	current (25)
conversations (2)	130:12,20 139:2	131:18 162:22	130:8,16,16,17	34:25 35:21
87:18 90:22	141:5 142:11	162:24 163:1,1	130:18,19 131:2	36:1,9 37:11
converted (2)	146:17,17	163:2,3,6,8	131:3,15 135:23	45:4 48:10 67:1
43:4 66:6	149:14 150:6	covered (34) 18:2	137:16 139:11	97:8 100:17
conveyed (1) 44:9	153:9 160:20,21	22:6 38:16 39:3	144:4,4,5	123:20 126:21
coordinator (2)	costing (1) 127:1	39:4 41:25	145:10 146:21	138:19 139:3
10:15 26:10	costs (7) 99:15	45:13,14,17	147:11 153:1,6	142:13 146:8,9
copied (1) 78:20	114:1 128:18	46:2,12 48:3,8	153:8 155:4,4	153:4,6 156:7
copies (5) 18:16	130:12 147:9	49:9,10,12,22	156:8,22 157:21	160:11 162:9,9
18:22 29:15	159:17 162:11	49:26 53:25	161:14	164:6,6
30:8 35:6	counsel (38) 8:12	54:13 55:11,24	Crown-Indigen	currently (10)
copy (51) 4:11,16	9:7 13:23 14:8	57:14 85:2,23	2:24 3:11,14,17	36:24 45:8,11
4:20,24 5:1,5,12	24:15 27:22	96:13 100:20,21	3:20,24 4:3 6:23	52:9 56:15
5:18,25 6:1,4,7	28:17 30:13,17	124:13,20,24,25	7:2,6,10 10:3	71:25 94:21
6:10,14,18,22	33:5 34:4,9	124:25 140:9	19:20 25:11,20	123:22 129:15
7:1,5,9 18:21	73:26 75:17,21	covering (4)	31:11 76:1,22	153:3
29:6,24 30:23	76:6,14 77:14	39:12 50:1	77:18 78:17	CVs (2) 25:4 30:8
30:24 31:3,10	78:12 80:3	57:21 139:2	79:23 86:26	
31:14,18,21,24	86:18 98:3	covers (1) 71:18	87:5 104:20	D
32:1,4,10,16,22	115:2,17,23	create (2) 114:2	111:14 112:25	D (5) 8:19 9:8
32:24,26 33:2	116:7 132:13	128:21	113:5,20,23	10:10 44:14
35:7 36:7 77:11	133:4 134:6	created (1) 12:19	115:25 116:13	71:5
77:12 79:2,5,8	136:3 139:16	credit (1) 164:13	116:19,22,25	D-A-V-I-D (1)
79:11 115:24	151:18 153:15	Creek (1) 93:11	117:3,10 118:12	33:17
		, ,		Dale (5) 26:1
	1	1	I	I

117:23 154:8,12	102:19 104:1	122:14 126:3	depends (2) 148:2	138:1 149:26
155:21	day (9) 15:26	137:26 145:8	148:6	determination (2)
dam (33) 5:15	16:20 43:1,4	Deferred (1)	deposit (5) 11:16	19:9 124:16
29:20 32:14	66:25 67:2	112:1	12:8 13:5 16:23	determine (1)
38:18,19 41:2,7	113:3 160:1	define (3) 93:20	57:14	92:7
41:12 45:16,16	166:9	125:16 160:9	deposited (2)	determined (3)
48:15,21 49:5	days (9) 11:21	defined (2) 91:6	48:23 52:14	48:12 85:1
50:4,14,23,25	44:24 73:15	162:9	depth (1) 47:26	104:18
55:17 61:10,19	82:24 84:9	definitely (2)	Derek (4) 14:6	determines (1)
61:19 64:1	85:13 124:26	92:13 138:3	100:4,23,24	62:17
83:10,11,19,19	128:8 150:1	definition (1)	derive (1) 125:14	develop (1) 70:14
83:23,23 159:5	deal (1) 124:8	65:23	described (1)	developed (6)
159:5,6,7	dealing (3) 18:3	delay (1) 58:3	151:20	44:7 45:2 46:22
163:25	46:23 124:6	delegated (1)	description (3)	63:9 64:14
dams (22) 18:5,8	dealt (2) 44:18	13:11	2:3 4:9 16:13	69:11
38:18 48:20	49:13	demob (4) 47:4	design (24) 5:16	developing (1)
60:13 63:21,25	death (1) 73:16	56:14 147:6,12	5:22 18:2 22:6	91:16
64:1 71:13	December (5)	demobilization	29:21 30:1	development (4)
80:21 94:21	59:26 60:26	58:14	32:14,20 60:22	9:5 24:10 89:3
121:6,13,16	62:21 120:8,9	demolish (1)	60:23 61:15	112:15
126:13,14,18	decide (4) 97:12	161:26	62:2 72:6,8,9	Dewar (3) 10:8
127:8,18 131:18	102:4 137:22	demolished (1)	82:9,14,21 84:6	25:26 117:21
163:13 164:15	143:6	51:4	84:7 122:5	dewatering (1)
dangerous (4)	decided (1) 92:8	demolition (7)	123:3 148:14	160:14
106:14,16,23,26	decision (25) 5:9	46:8 51:6,14	149:25	dialogues (1)
dark (1) 53:16	18:3 20:20 30:7	52:21 53:11,21	designed (1)	118:1
data (3) 60:12,17	32:9 38:1 42:14	161:24	163:4	Diamond (5)
121:4	44:5,10,15 59:3	demonstratable	detail (9) 76:20	37:16 39:23
date (6) 17:3	62:16,24 67:8	161:12	77:8 127:6,12	54:10 93:26
18:24 76:19	71:6,20,21	demonstrate (2)	136:9,9 140:4	96:21
119:24,24	72:11 84:17,21	69:25 124:8	149:17 152:4	Dicta (1) 14:22
133:11	84:25 85:5	demonstration	detailed (6) 61:3	died (1) 157:14
dated (17) 5:7,14	96:15 124:15,17	130:7 161:12,15	70:15 84:7	diesel (1) 53:8
5:20 6:11,15	decisions (1)	161:16	128:26 141:3	diff (1) 158:20
29:19,25 30:4	108:22	department (15)	160:12	difference (4)
32:6,12,18	decommissioni	10:10 26:2	details (30) 18:7	133:26 137:15
60:16 65:18	54:2	114:2 117:11,24	21:9 60:1 61:15	150:9 159:26
79:7,9 80:15	decontaminate	118:13 119:6,9	63:16 71:15	different (10)
166:8	51:21	119:17,25 120:4	82:17 83:7,13	91:19 97:23,24
dates (2) 38:4	decreased (2)	128:20 132:1	83:19 84:2,21	98:15 110:5
44:16	91:17 99:4	149:12,18	84:21 85:8	142:15 158:16
Dave (4) 24:17	deem (1) 150:22	department's (2)	90:24 122:7,15	159:17 161:23
35:9 56:8 103:6	deemed (1)	118:17,17	123:12 126:2,24	163:24
David (7) 2:7	126:18	dependent (4)	127:6,16 128:7	differently (1)
33:16 34:5	defer (7) 111:12	70:6 93:19	129:5,17 134:8	126:23
56:11 95:6	111:19 118:8	130:1,3	136:13 137:6	difficulties (1)

14:18	62:1 75:26	161:16	121:10	east (3) 41:24
difficulty (1)	discussion (14)	documents (7)	drained (1) 53:23	48:1,8
78:21	2:11 3:26 22:11	16:26 17:5	draining (1)	ECC (3) 63:18
digitally (1) 45:24	64:25 68:11	18:23 21:15	60:25	65:19 70:8
dike (2) 54:20	71:25 72:13	78:15 125:2	drawing (2) 45:24	ECCC (24) 20:10
96:24	73:6,13 82:12	150:8	61:22	26:14 63:14,22
direct (3) 162:6,8	83:16 124:18	doing (13) 123:22	drawings (3)	64:10 65:2
162:8	153:13 160:5	137:14 150:5	71:17 127:19	69:17,20 70:9
directly (1)	discussions (15)	151:3,11 159:3	148:12	70:24 71:2,19
145:23	38:8 43:1 62:25	159:4,5,6,6,24	drawn (2) 50:18	90:10,18,19
director (13) 8:13	63:5 69:13,15	160:15,16	50:21	91:22,23 92:10
8:14,15 10:7,8	77:20 80:25	dollar (1) 144:19	drop (1) 12:5	93:9,23 94:14
14:1,1,4 24:11	81:3,22 95:13	dome (19) 5:22	dropping (1)	97:22 104:12,15
25:26 108:5	111:22 125:24	18:3 22:7 30:1	163:20	ECCC's (3) 65:24
117:22,22	128:25 138:8	32:21 60:23	due (5) 39:24	70:25 101:26
directs (3) 146:3,3	dismantling/de	62:6 70:9 72:6,9	40:23 58:2 85:3	echo (3) 58:18,19
162:5	46:24	82:5,10 90:24	98:26	108:7
discharge (24)	disposal (5) 22:1	122:5,7,8,10	duly (1) 31:2	ecological (10)
39:16 40:10,13	47:14 68:3	127:17 162:23	duration (4)	18:1 23:4 38:21
66:5,23,25,26	70:26 71:1	dome-type (1)	69:18,18,25	59:9,20 107:22
67:2 70:19	dispose (1) 13:11	122:25	70:5	125:6,7,10,19
93:10 94:3,7,23	disposed (7) 46:7	Donald (6) 8:19	dust (2) 43:16	edge (1) 55:24
94:23 96:12,20	49:3 51:5,15	14:7 100:4,4,24	66:17	EEM (1) 54:9
96:23 97:12	52:1,14,20	100:24	Dwyer (4) 8:18	effect (1) 122:25
98:10,10,12,15	distance (1) 83:22	door (1) 15:5	14:5 18:20	effective (1) 85:8
101:7,16	distances (1)	double (1) 158:11	21:14	effects (2) 23:5
discharged (7)	83:24	downstream (3)	dying (3) 106:17	39:22
45:21 48:17	distributed (3)	40:26 41:6,10	107:3,11	effluent (7) 37:17
49:16,17 54:6	20:12 21:7	draft (27) 6:19	107.5,11	39:23 54:10
54:24 101:2	68:14	18:8 20:12 21:5	$\overline{\mathbf{E}}$	66:24 93:25,26
discharges (1)	disturbed (1) 51:9	22:12 39:26	E (3) 10:14,18	96:21
65:21	divider (1) 54:20	65:16 66:4,6	66:24	efforts (1) 74:20
discharging (2)	division (1) 25:23	67:4,24 68:4,19	earlier (15) 15:1,2	eight (1) 71:7
94:9 98:14	document (24)	68:20 69:7,10	54:9,14 63:4	either (5) 44:15
discuss (5) 89:24	76:17,17,20	72:1,1 79:12	66:5 112:11	46:8 51:5 52:20
90:25 108:11	77:3,4,15,15,17	90:8 101:2	118:11 123:11	61:25
120:11 161:20	77:23 78:1,7,24	103:9,11 104:5	123:18 138:8	Elder (2) 26:21
discussed (14)	80:14 109:15	110:2 158:21,23	149:25 150:8	26:23
44:11,23,25	110:23 111:1,17	drain (2) 57:17	152:3 158:19	Elders (1) 26:20
60:8 68:23	111:20,21,21	94:11	early (4) 41:24	electronic (18)
71:13 72:15	136:6 142:22	drainage (13)	56:16 58:10	6:7,10,14,18
81:13,16 84:24	143:17 148:9	22:7 23:2 40:24	92:4	18:21 30:23
150:15,18 151:1	documentation	41:8 46:1,13	earpieces (2) 15:4	31:2,4 33:2 77:9
151:3	18:25 20:22	49:5 57:15	15:9	77:12 78:14,15
discussing (4)	21:13 62:7 74:7	61:22 62:3	easier (2) 66:18	78:20 79:2,5,8
16:15 23:17	documented (1)	71:17 82:22	111:13	79:11
10.13 23.17	ascumented (1)	, 1.1, 02.22	easily (1) 29:9	12.11
	<u> </u>		<u> </u>	<u> </u>

	_			_
29:5 76:5	131:12 147:25	environmental	121:5 128:16,19	120:21,24
element (11)	147:26,26 148:1	10:14 22:18	128:19,21 129:2	event (3) 65:21
123:17 130:11	148:19 163:2,16	26:9 39:22 85:3	129:4,9,10,11	74:9 91:3
131:16 135:18	engineered (5)	99:3 108:11	130:14 131:25	eventually (2)
139:2 144:9	18:7 47:21	110:19 121:22	133:24,26 134:8	48:2 104:8
148:6 155:12	71:16 83:8	130:7,26 131:14	134:14 135:4	everybody (6)
160:20,21 164:4	126:2	135:22 144:11	137:7,13 139:3	35:14,15 36:7
elements (20)	engineering (6)	146:1 155:19	140:6,10 141:5	52:23 140:9
127:12,14 129:7	52:25 126:26	161:13,17	142:25 143:2,9	157:12
129:20,23	127:17,18	envisioned (1)	143:10 144:1,2	everybody's (3)
137:24 139:6	146:13 163:18	91:26	144:3,3,7 146:8	90:13 157:6
143:6 145:23	engineers (1)	episodes (1) 92:23	146:9 149:14,14	165:3
146:2,23 147:9	148:10	equipment (15)	149:19 151:12	evidence (13)
148:7 151:1,5	English (30) 4:14	22:5 46:25 47:4	153:9 154:19,19	74:12 110:13
155:13 158:25	4:18 5:10,16,23	47:5 52:16 53:6	154:21 155:7,8	116:2 135:22
160:8 161:23	5:26 6:2,5,8,12	56:16,17,18,24	155:10 156:17	136:7 140:1
164:11	6:16,20 7:3 15:3	58:14 74:9,18	156:19 157:5,21	143:26 148:11
elevated (1) 22:2	15:6 17:7 29:14	97:9,11	158:1,4,10,11	148:17 162:1,24
elevations (2)	31:17,20 32:9	erosion (15) 23:6	158:14,22 159:1	163:1,3
50:13 84:5	32:15,21,23,25	40:24,26 41:6	159:14,25 160:4	evidencing (1)
Elgin (1) 37:6	33:1,3 79:7,10	41:10 50:23	164:6	60:17
email (1) 31:12	79:13 116:20	51:1 61:11 62:3	estimated (4) 60:5	exact (1) 88:17
embankment (2)	English/Inuinn	82:19,23 83:9	113:3 121:16	example (5) 22:19
51:1 61:14	6:26 116:17	85:11 127:22	130:15	138:8 147:6
emission (8) 64:6	ensure (7) 14:20	164:16	estimates (12)	161:23 162:22
64:11,11,13	26:25 83:8	erosional (1)	60:25 98:22	excavated (1)
88:11,19,20,21	85:10 126:15	126:15	99:17 114:3	40:24
emissions (4)	127:9 148:22	erosionally (1)	133:9 134:12	excavation (2)
64:18 88:15,16	entire (2) 36:20	123:4	154:20 158:2,3	41:8 49:4
89:4	155:10	esker (11) 39:10	158:9,19,20	exception (3) 38:6
Emma (1) 26:13	environment (38)	46:12 48:3,9	estimating (1)	44:17 68:8
empty (1) 37:22	2:17,22 10:13	49:26 53:14,14	129:9	excuse (4) 28:15
enable (1) 70:17	20:9 26:5,10	55:12 57:14,20	estimation (3)	89:4 151:14
encapsulated (1)	31:10 37:15,15	96:13	80:24 130:22	156:25
121:18	39:17 40:2	especially (1)	131:22	executing (1)
encountered (1)	45:22 46:5	147:2	et (7) 27:12 99:5	139:9
107:11	49:17 52:2 54:6	essence (1) 143:23	103:20 105:10	executive (20)
endeavour (1)	57:17 63:9	estimate (84)	110:5 159:7,7	4:16,20,24 5:1
152:13	72:25 78:19	17:10 23:9,10	Eva (6) 26:9	7:1,5,9 8:13
enforces (1)	87:11,13,16	38:7 44:19	87:15 88:7,23	13:26 17:6,13
119:18	88:7,24 89:9,13	59:23 60:1,5	89:8 141:21	29:15 31:18,21
engaging (1)	90:23 92:26	63:4 68:26 69:5	evaluate (1)	31:24 32:1
90:10	93:2,11 104:13	71:10,12 85:25	125:11	116:5,18,21,24
engineer (13)	125:12 141:17	98:25 99:1,6,14	evening (8) 44:24	exercise (1)
9:13 24:22 25:2	141:21,23 165:6	110:4 113:17,26	62:25 74:3	105:11
51:25 130:4	165:9	114:6 119:3,4	108:19 117:7,7	exhibit (45) 4:11
		'	'	•

			I	ı
5:12,18,25 6:1,4	124:22 128:17	153:8	65:2,9,18,24	flattened (2)
6:7,10,14,18,22	explanations (1)	field (5) 51:17	66:13,22 67:18	48:13 50:25
7:1,5,9 31:14,18	114:1	63:15 124:16	67:24 68:2,10	flexible (1) 148:21
31:21,24 32:1,4	exposed (11) 18:3	155:17 162:16	69:8,17 70:5,13	flights (1) 56:19
32:10,16,22,24	49:21,25 62:17	figure (1) 144:19	70:21 71:4	floor (2) 15:6
32:26 33:2	80:22 85:1,10	file (14) 20:15	72:17,20 74:6	75:18
72:11,17 77:10	124:9,9 131:19	21:19 30:12	80:17 83:11	flow (4) 39:19
77:13 79:5,8,11	139:2	31:2 76:15	92:16 95:11	41:1 46:3
115:5 116:12,18	expressed (2)	92:18 111:19	96:17 98:23	101:16
116:21,24	35:4 126:23	112:26 113:8	99:10,24,25	flows (3) 50:5
151:22 152:2	extend (2) 83:22	114:14 116:1	120:8 126:21	57:18 70:11
exhibits (18) 4:8	92:6	120:18 133:8,10	127:17,18	flushed (1) 123:21
27:24 29:2,7		filed (21) 12:26	128:13 135:14	flushing (1)
30:11,15,18	F	17:4 21:13 29:5	136:5 141:1,1,2	123:20
68:13,14 69:16	face (1) 40:26	29:10,16,23	143:9 158:21,23	focus (2) 118:26
72:4 75:25	facilities (2) 12:9	30:3,9,15 59:24	finalize (1) 131:7	160:5
76:16,25 78:5	52:19	61:11 62:19	finalized (2)	focused (1) 74:22
113:13 116:1,9	facility (1) 54:24	64:26 65:17	57:24 111:23	focusing (2) 151:8
existing (7) 12:2	fact (5) 146:19	76:5,24 77:9	finally (6) 16:4	159:22
13:2 16:16	147:16 159:21	80:17 81:17	30:8 40:1 65:15	follow (1) 15:18
22:16 65:17	163:15,21	151:22	128:15 131:2	follow-up (6)
134:15 140:10	fairly (5) 35:26	files (1) 158:8	find (1) 137:19	82:12 83:16
exits (1) 15:21	36:11,11 46:16	filing (6) 25:4	finding (1) 21:12	101:26 105:10
expect (2) 14:24	55:16	31:4 74:7	fine (1) 148:20	112:10 157:20
112:12	familiar (1) 52:23	114:13 115:24	Fingers (1) 53:15	followed (2) 12:5
expectation (2)	far (7) 45:18	116:8	finish (1) 114:13	16:21
74:2 163:10	57:20 91:24	filings (1) 112:11	finished (1) 76:25	following (21)
expectations (1)	102:25 114:12	fill (1) 38:12	firm (1) 60:3	16:25 17:5,12
73:22	118:21 132:4	filling (1) 47:23	first (23) 15:1,1	22:1 39:25
expected (1)	farm (3) 42:4	final (88) 4:17,21	21:22 29:1	42:12,24 43:7
94:10	51:24 52:26	4:25 5:2 11:23	35:26 42:17	61:16 64:25
expects (1) 140:26	farms (1) 36:15	16:23 17:9 21:7	43:6 58:9 61:26	65:1 70:26
expedient (1)	fatality (1) 109:3	23:7,10 31:19	67:10 73:10	80:19 81:8 82:1
148:23	features (4) 82:18	31:22,25 32:2	76:16 77:3	83:5 84:16
expenditures (1)	82:19 84:8	34:26 35:22,23	78:15 91:5 95:8	89:17 91:26
46:25	127:11	37:8,11 39:21	100:7 113:12,13	119:8 125:23
experience (1)	February (4)	41:26 43:26	120:26 145:7	follows (2) 16:19
14:18	17:11 19:8,12	44:1,2 45:1,23	159:2 160:11	80:24
expert (3) 10:16	19:16	45:26 46:15	Fisheries (3)	force (1) 93:26
30:20,22	federal (1) 98:8	48:7,16 49:22	97:18 98:11,16	forcing (1) 64:7
expertise (1)	feedback (1) 15:9	50:10 52:10	five (5) 21:22	foregoing (1)
119:23	feel (4) 79:2 92:3	54:9 55:1 56:2	47:11 71:19,21	166:3
explain (2) 140:6	123:15 155:5	57:26 58:7,12	91:3	forget (1) 37:18
140:6	feeling (3) 156:8	59:12 61:16	five-minute (1)	forgot (2) 114:18
explanation (5)	156:10,16	62:22 63:6,14	56:3	155:16
60:22 72:8 82:9	feels (5) 11:12	63:23 64:9,16	flag (1) 139:19	form (7) 17:6 31:3
	129:12 153:1,6			
	•	'	'	'

	I	İ	I	I
68:13 78:16	22:20	62:24,26 63:25	60:24	go (90) 25:8 27:20
83:14 85:12	frequency (3)	68:3,10,17 69:3	geophysical (5)	28:9,10 31:8
121:24	65:4 69:22	69:14 71:14	18:4,7 38:18	34:13 35:10
formal (2) 21:1	103:20	72:12,15 75:25	54:12 63:21	42:21 52:17
27:2	freshet (2) 54:18	81:13 84:23	Geosciences (1)	56:1,8 59:2 74:3
forth (1) 56:21	54:25	85:6 89:10	38:19	75:15,19 76:11
forum (1) 89:20	freshwater (4)	90:15,22 107:20	geotechnical (13)	77:2 79:18
forward (5) 65:22	12:24 54:2	107:25 113:12	9:13 23:6 24:22	80:11 86:6,16
91:20 97:13	119:7,19	124:22 125:1	25:2 38:20	89:26 90:10,12
129:21 153:8	Friday (6) 73:21	135:16,17	54:11 55:2 61:9	90:15,18,26
forward-lookin	73:24 74:7,14	141:12 147:16	71:11,15 83:7,9	91:22 92:20,26
36:6	74:15,25	147:20 160:10	126:2	93:12,15,15,22
found (1) 124:16	front (2) 14:6	164:25	Gerd (25) 3:9	94:5,13,19,26
four (1) 119:25	57:6	furthest (1) 50:17	25:24 115:14,20	95:5,25 97:6
frame (2) 91:24	frozen (2) 39:8	future (6) 36:3	117:20 118:9	99:12,18 100:12
91:26	63:22	64:7 88:11 92:6	122:14,21 126:3	100:15 101:11
framed (1) 57:1	frozen-core (1)	164:15,23	126:8,10 131:15	101:14,23
framework (65)	18:5		133:19,23 137:4	102:18 103:26
6:18,19 18:9,10	FTP (2) 18:19	G	137:26 138:2	104:12,21 105:3
22:12 38:7	21:11	G (2) 10:4,7	145:8,15 148:3	105:23 106:1,14
44:20 60:8 63:2	fuel (6) 36:15	G-E-R-D (1)	149:23 150:26	107:7 108:3
65:16 66:4,7	42:3 51:21	115:14	154:18 158:6	109:6,8,15,21
67:4,25 68:5,20	52:26 56:18	G-O-D-W-I-N (1)	161:22	110:10 111:6,9
69:1,6,10,11	159:15	115:12	getting (10) 35:16	112:21 114:10
71:24 72:2,14	fuels (1) 52:5	gap (1) 159:23	86:24 97:2	117:1 118:22
77:24 79:12,13	fulfill (3) 38:12	gate (1) 40:26	107:3 127:3	124:1 127:24
95:11 101:2	140:16 151:26	gated (1) 41:12	131:23 145:25	129:3,5 132:26
103:9,11 104:5	fulfilled (2) 44:21	general (12) 27:1	150:12 162:13	134:4 136:1
110:1,2 111:16	151:25	39:15 42:2	165:12	137:2 138:21,23
111:17,20,21	full (9) 20:3 37:19	54:15 70:22	give (16) 26:20	139:14 142:3
112:13,15 113:2	42:16 49:15	98:25 110:20	80:6 106:20	151:15 153:12
113:18 114:13	58:11 66:26	123:6 127:7	116:2 118:9	154:7,14 156:1
119:5 129:20,21	129:14 137:23	145:13 146:4	120:21 122:14	156:17,26
129:23 131:5	153:3	156:11	125:9 134:8	157:25 160:10
135:19 137:25	fully (3) 55:19	generally (3)	136:8 140:1,4	goal (1) 109:16
139:7 142:11,23	129:18 137:16	16:19 52:12	145:7,8 147:1	Godwin (18) 3:9
143:6,8 144:10	fundamental (1)	120:19	162:15	25:18 87:5
147:10,14 149:1	138:5	generated (2)	given (9) 23:16	115:12,20 117:8
151:4 152:12	funding (1) 92:14	38:13 39:6	77:10,12 120:23	123:18 124:2
155:13 156:10	funds (3) 145:25	generators (2)	126:12 137:10	127:26 128:3
160:24 161:8,10	146:7 163:8	53:7,8	145:19 153:5,18	142:19 143:19
free (1) 79:2	funeral (2) 73:17	geochemical (5)	gives (3) 76:20	145:5 149:12
French (5) 5:3	74:11	23:3 62:5 121:8	90:12 164:13	151:8 154:16
7:11 29:14 32:3	further (36) 40:25	122:1 126:2	giving (2) 34:23	155:24 156:13
116:26	49:26 54:5 59:4	geochemically (1)	137:9	Godwin's (1)
frequencies (1)	60:20 61:1	163:22	glycol (1) 51:21	105:8
		geochemistry (1)		

35:26 94:7 103:11 111:20 164:18 50ing (35) 18:26 46:9 51:26 46:9 5	(=) 0 2 4 0 4 0		,		
103:11 111:20 growth (3) 55:14 55:15,23 29:6,24 31:14 83:48 43:13,15 35:10,12 56:4 46:9 51:26 46:9 51:26 45:23 55:9 100:7 101:6 32:24,26 35:7 100:221 103:1 32:24,26 35:7 100:221 103:1 30:222 103:1 36:7 39:5 49:23 116:9 117:15 104:2 100:10 101:13 118:25,26 108:18,23 118:25,26 118:25,25 118:25,14 118:25,26 118:25,25 118:25,14 119:11 129:3 135:14,17 136:17,17 136:17,17 136:17,17 139:17 141:1,4 141:4 144:22,22 153:8 160:9,24 133:17 141:4 144:22,22 153:8 160:9,24 133:17 141:14 144:22,22 153:25 163:57 163:7 139:20 59:10 121:21 129:21 133:20 35:14 130:19 112:78 133:19 112:78 133:19 112:78 133:19 112:78 133:10 115:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 150:16 15:13 163:7 144:2 147:4 129 129:19 129:19 130:10 120:19 149:19 150:13 150:16 15:13 16:3,7 130:10 150:16 150:13 150:16 15:	goes (7) 35:18,18	growing (1) 107:2	4:20,24 5:1,5,12	72:17 76:5	Hohnstein (18)
164:18 going (35) 18:26 46:9 51:26 54:17 57:5 58:25 74:23 100:7 101:6 32:24.26 35:7 32:14,10,16,22 32:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26 35:7 33:24.26		` '	l ' ' '	· · · · · · · · · · · · · · · · · · ·	•
going (35) 18:26 46:9 51:26 46:9 60:24 46:9 60:10 17:18 44:14:144:22,22 153:8 160:9,24 163:5,12,25 gold (2) 1:10 125:14 60ider (10) 5:19 5:26 9:10 24:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:22 32:17,23 38:21 33:10 115:16 151:13 150:16 151:13 15		` '			,
46:9 51:26 54:17 57:5 100:7 101:6 32:24;26 35:7 132:6 140:4 104:2 104:2 104:2 104:2 104:3 104:2 104:4		· /	1	· /	· /
54:17 57:5 58:25 74:23 75:16 89:16 92:17 93:13 96:22 97:1,25 guidelines (5) 96:21 97:10 73:11 96:18 96:21 97:10 73:11 96:18 96:21 97:10 73:17 141:1,4 141:4,44:2,22 153:8,160:9,24 163:5,12,25 gold (2) 1:10 hamlet (1) 12:15 hand (2) 96:5 59:1 67:18 hall (1) 77:14 hamlet (1) 12:15 handled (1) 120:8 handled (1) 150:13 150:16 151:16 150:		()	1 1	·	· · · · · · · · · · · · · · · · · · ·
58:25 74:23 75:16 89:16 96:21 97:1,25 96:22 97:1,25 200:10 101:13 108:18,23 118:25,26 122:11 129:3 135:14,17 136:17,17 136:17,17 136:17,12 121:21 200:10 101:10 125:14 125:14 125:14 125:14 126:16 125:14 126:16 125:14 126:16 12				1	· ·
75:16 89:16 92:17 93:13 96:22 97:1,25 guideline (3) 96:22 97:1,25 guideline (5) 163:18,23 182:5,26 122:11 129:3 135:14,17 136:17,17 139:17 141:1,4 141:422,22 153:8 160:9,24 163:5,12,25 gold (2) 1:10 hamlet (1) 12:15 hand (2) 96:5 163:7 hamlet (1) 12:15 hand (2) 96:5 163:7 hand (2) 96:5 holding (1) 57:6 headsets (1) 14:18 hand (1) 16:17 hand (1) 16:17 Hand (1) 12:15 hand (1) 17:14 hand (2) 96:5 holding (1) 57:6 headsets (1) 14:18 hand (1) 17:14 hand (1) 16:17 hand (1) 16:18 hand (1) 17:14 hand (2) 15:11 hand (1) 17:14 hand (2) 15:11 hand (1) 16:17 hand (2) 15:11 hand (2) 16:11 hand (2) 16:12			1		
99:17 93:13 100:10 101:13 108:18,23 118:25,26 122:11 129:3 135:14,17 139:17 141:1,4 141:4 144:22,22 153:8 160:9,24 163:5,12,25 gold (2) 1:10 125:14 Golder (10) 5:19 5:26 9:10 24:22 32:17,23 38:22 32:17,23 38:22 15:21 10,012 24:12 12:10 121:1 121:10,12 24:12 121:10,12 24:12 124:23 27:10 33:20 35:14 75:12 110:26 133:20 35:14 75:12 110:26 117:7,7 136:7 117:7,7 136:7 144:2 147:4 government (1) 12:19 grade (1) 48:3 grading (3) 46:13 grading (3) 46:13 grading (3) 46:13 grading (3) 46:13 grading (1) 53:9 ground-truth (1) ground-truth (1) ground-truth (1) ground-truth (1) ground-truth (1) ground-truth (1) good (1) 50:13 ground-truth (1) ground-truth (1) ground-truth (1) good (1) 50:13 ground-truth (1) ground-truth (1) ground-truth (1) good (1) 50:13 ground-truth (1) ground-truth (1) ground-truth (1) good (1) 50:13 ground-truth (1) ground-truth (2) ground-truth (1) ground-truth (1) ground-truth (1) ground-truth (1) ground-truth (2) ground-truth (2) ground-truth (2) ground-truth (3) ground-truth (1) ground-truth (1) ground-truth (2) ground-truth (3) ground-truth (1) ground-truth (2) ground-truth (3) ground-truth (1) ground-truth (2) ground-truth (3) ground-truth (3) ground-truth (4) ground-truth (5) ground-truth (5) grou					` ′
100:10 101:13 108:18,23 108:18,23 52:1 71:1 96:18 52:1 71:1 96:18 96:21 97:10 122:11 129:3 135:14,17 136:17,17 136:17,17 141:4,144:22,22 153:8 160:9,24 163:5,12,25 163:1,10 160:2 163:25 160:2,12 153:8 160:9,24 163:5,12,25 163:10 160:2 163:25 160:2,12 153:8 160:9,24 163:5,12,25 163:10 160:2 163:25 160:2,13 16	75:16 89:16	guideline (3)	50:15 92:4	` ′	129:14,15,18,18
108:18,23 18:25,26 122:11 129:3 135:14,17 136:17,17 139:17 141:1,4 141:4,144:22,22 153:8 160:9,24 163:5,12,25 gold (2) 1:10 125:14 163:7,123 38:22 39:20 59:10 24:22 32:17,23 38:22 39:20 59:10 121:12 121:12 good (16) 11:7,8 11:10,12 24:12 24:23 27:10 33:20 35:14 75:12 110:26 17:7,7 136:7 144:2 147:4 12:19 grade (1) 53:13 grading (3) 46:13 grading (4) 48:3 grading (3) 46:13 grading (1) 53:9 ground (1) 50:13 ground-truth (1) 10:013 ground-truth (1) 10:015 10:	92:17 93:13	96:22 97:1,25	93:19 115:24	83:16 84:19	130:19 137:12
118:25,26 122:11 129:3 The control of the con	100:10 101:13	guidelines (5)	116:12,18,21,24	Hello (3) 87:22	137:23 144:8,8
122:11 129:3 135:14,17 136:17,17 136:17,17 136:17,17 136:17,17 136:15,12,25 125:14 125:15 163:7 121:21 121:21 121:21 121:21 121:21 121:21 121:21 121:21 124:12 124:21 125:15 133:10,111 149:9 124:23 27:10 133:20 35:14 150:16 151:13 150:16 150:16 150:16 150:16 150:	108:18,23	52:1 71:1 96:18	hard-copy (1)	154:9,12	153:2 155:10
135:14,17	118:25,26	96:21 97:10	30:11	help (6) 15:15,25	157:23 159:19
Ho-H-N-S-T 139:17 141:1,4	122:11 129:3		haul (1) 43:17	21:15 89:19	160:2 163:25
139:17 141:1,4	135:14,17		hazardous (3)	140:5 151:10	holding (5) 153:7
141:4 144:22,22 153:8 160:9,24 163:5,12,25 gold (2)1:10 hamlet (1) 12:15 hand (2) 96:5 163:7 163:7 handed (1) 12:15 handing (1) 77:14 handed (1) 62:17 121:21 good (16) 11:7,8 11:10,12 24:12 24:23 27:10 33:20 35:14 75:12 110:26 117:7,7 136:7 144:2 147:4 government (1) 12:19 grade (1) 53:13 graded (1) 48:3 grading (3) 46:13 graded (1) 48:3 grading (3) 46:13 ground-truth (1) ground-truth (1) foliage of the first of the fir	136:17,17		22:2 52:3	helpful (4) 80:4	154:22 156:7,21
153:8 160:9,24 163:5,12,25 gold (2) 1:10 hamlet (1) 12:15 hand (2) 96:5 lambet (1) 12:15 hand (2) 96:5 handed (1) 120:8 handing (1) 77:14 handing (1) 77:14 handled (1) 62:17 lamber (2) 32:17,23 38:22 spoid (16) 11:7,8 li1:10,12 24:12 24:23 27:10 33:20 35:14 li2:17,77,7 136:7 124:21 li7:7,7 136:7 124:19 government (1) 12:19 grade (1) 53:13 graded (1) 48:3 graded (1) 48:3 grading (3) 46:13 fl:3 71:13 great (2) 130:16 lamber (3) 98:10 happens (3) 98:10 hamlet (1) 12:25 handled (1) 62:17 happy (3) 26:7 handled (1) 12:25 handled (1) 62:17 handled (1) 62:17 hamon (20) 8:8 li3:10 155:16 handled (1) 62:17 hamon (20) 8:8 li3:10 155:16 handled (1) 62:17 hamon (20) 8:8 li3:10 150:13 li3:10 155:16 happens (3) 98:10 happens (3) 92:7 happens (3) 92:7 happens (3) 92:7 happens (3) 92:7 handled (1) 57:6 haddests (1) 14:18 heading (1) 57:6 headsets (1) 14:18 heading (1) 57:6 headsets (1) 14:18 heading (1) 57:6 headsets (1) 14:18 heading (1) 57:6 high (6) 64:6,10 64:6,10 64:6,10 64:6,10 64:13,18 88:15 high (6) 64:6,10 64:19 higher (5) 64:19 high (6) 64:6,10 hoper (5) 64:19 high (6) 64:6,10 hoper (5) 64:19 high (6) 64:6,10 high (6) 64:6,10 high (6) 64:6,10 high (6) 64:6,10 high (6) 64:19 hi	139:17 141:1,4		108:25	90:21 132:18	159:19
hall (1) 74:10 hamlet (1) 12:15 hand (2) 96:5 lo 24:22 32:17,23 38:22 39:20 59:10 lo 11:7,8 lo 11:10,12 24:12 lo 10:10 13:19 lo 15:12 11:10,12 24:12 lo 15:13 lo 15:16 15:13 lo 15:16 15:13 lo 15:16 15:13 lo 15:16 15:13 lo 12:19 lo 15:13 lo 11:7,7 13:13 lo 11:7,7 13:13 lo 15:16 15:16 lo 17:13 lo 15:16 15:16 lo 17:13 lo 15:16 lo 17:13 lo 17:13 lo 17:13 lo 17:14:21 lo 16:13 lo 15:16 lo 17:13 lo 15:16 lo 17:13 lo 15:16 lo 17:13 lo 17:14 lo 1	141:4 144:22,22	· · · · · · · · · · · · · · · · · · ·	headframe (2)	157:4	
gold (2) 1:10 125:14 Golder (10) 5:19 5:26 9:10 24:22 32:17,23 38:22 39:20 59:10 121:21 good (16) 11:7,8 11:10,12 24:12 11:10,12 24:12 24:23 27:10 33:20 35:14 75:12 110:26 117:7,7 136:7 124:2 147:4 government (1) 12:19 grade (1) 53:13 graded (1) 48:3 grading (3) 46:13 61:3 71:13 great (2) 130:16 61:3 71:13 great (2) 130:16 144:3 ground-truth (1) ground (1) 50:13 ground-truth (1) ground (1) 50:13 ground-truth (1) hamlet (1) 12:15 hand (2) 96:5 handed (2) 96:5 handed (1) 120:8 headsets (1) 14:18 headsets (1) 14:18 123:23 hip (4) 88:23 107:8 109:22 158:6 high (6) 64:6,10 hope (6) 11:7 74:4 74:15 91:8 95:15 98:17 hopefully (6) 35:18 59:5 74:23 112:17 high (6) 64:6,10 high (6) 64:6,10 high (6) 64:6,10 high (6) 64:6,10 hopefully (6) 35:18 59:5 74:23 112:17 hopefully (6) 35:18 59:5 134:21 136:10 hosted (1) 20:16 hour (1) 34:15 hours (1) 143:1 hours (1) 143:1 housed (1) 53:2 high (6) 64:6,10 high (6) 64:6,10 high (6) 64:6,10 hopefully (6) 35:18 59:5 74:23 112:17 hopefully (6) 35:18 59:5 134:21 136:10 hosted (1) 20:16 hour (1) 34:15 hours (1) 143:1 hour (1) 34:15 hours (1) 143:1 hour (1) 34:15 hour (1) 42:2 15:3, 14, 16, 24 15:11, 1, 2, 20 12:11, 7, 25 13:14 14:12, 24 15:3, 14, 16, 24 18:12, 21 20:23 13:14 14:12, 24 18:12, 21 20:23 13:14 14:12, 24 13:17, 18, 26 high (6) 64:6, 10 high (6) 64:6, 10 hopefully (6) 35:18 59:5 higher (5) 64:19 higher (1)	153:8 160:9,24		42:4 52:24	HHERA (5) 59:9	Holubec (1) 89:6
125:14	163:5,12,25	` ,	heading (1) 57:6	59:15 61:6 65:6	hooked (1) 154:3
Golder (10) 5:19 163:7 23:3 38:21 59:9 109:22 158:6 95:15 98:17 32:17,23 38:22 handled (1) 120:8 handled (1) 62:17 han	gold (2) 1:10	` /	headsets (1) 14:18	123:23	hope (6) 11:7 74:4
Size	125:14	` /	health (11) 18:1,1	Hi (4) 88:23 107:8	74:15 91:8
5:26 9:10 24:22 32:17,23 38:22 39:20 59:10 121:21 handled (1) 62:17 handled (1) 62:18 handled (1) 62:17 handled (1) 62:18 handled (1) 62:17 handled (1) 62:18 handled (1) 62:17 handled (1) 62:18 handled (1)	Golder (10) 5:19	'	23:3 38:21 59:9	109:22 158:6	95:15 98:17
Sample S		` '	85:4 107:21	high (6) 64:6,10	hopefully (6)
121:21	32:17,23 38:22	handing (1) 77:14	125:5,7,10,12	64:13,18 88:15	35:18 59:5
121:21	39:20 59:10	` /	hear (3) 11:8 77:2	88:19	74:23 112:17
11:10,12 24:12 113:10,11 149:9 107:10 142:12 155:2 134:21 136:10 24:23 27:10 149:10 150:13 150:16 151:13 150:16 151:13 150:16 151:13 152:2 161:8 highest (1) 64:19 hosted (1) 20:16 75:12 110:26 152:17,21,21 156:2,3 157:17 157:18 161:5,6 hearing (68) 1:16 highlight (1) hours (1) 143:1 117:7,7 136:7 157:18 161:5,6 157:18 161:5,6 happen (5) 93:20 12:11,17,25 hill (3) 53:19,22 housekeeping (2) 12:19 128:14 130:26 131:10 155:16 18:12,21 20:23 hill (3) 53:19,22 14:25 27:9 grade (1) 53:13 happened (2) 20:24 21:1,4,6,8 121:12 107:21 125:5,7 grading (3) 46:13 happening (4) 24:4 25:18 27:4 historical (7) 48:1 106:25 161:25 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 grinding (1) 53:9 happens (3) 94:10 96:22 108:14 60:10 61:25 58:17 107:9 hung (1) 57:1 ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19	121:21		` '	higher (5) 64:19	114:13 148:26
11:10,12 24:12 24:23 27:10 113:10,11 149:9 149:10 150:13 149:10 150:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 151:13 150:16 150:16 151:13 150:16 151:13 150:16 150:16 151:13 150:16 150:	good (16) 11:7,8		heard (7) 34:14	98:25,26 154:22	hoping (3) 132:5
33:20 35:14 75:12 110:26 117:7,7 136:7 144:2 147:4 government (1) 12:19 grade (1) 53:13 graded (1) 48:3 grading (3) 46:13 61:3 71:13 grading (1) 53:9 ground (1) 50:13 ground-truth (1) 150:16 151:13 152:2 161:8 hearing (68) 1:16 11:11,19,20 hearing (68) 1:16 11:11,19,20 highlight (1) 46:16 hours (1) 143:1 housed (1) 53:2 housekeeping (2) housekeeping (2) housekeeping (2) housekeeping (2) hill (3) 53:19,22 14:25 27:9 human (9) 18:1 12:12 107:21 125:5,7 historical (7) 48:1 125:10,11 happens (3) 94:10 99:16 109:25 happens (3) 94:10 96:22 108:14 happy (3) 26:7 hour (1) 34:15 hour (1) 34:15 hours (1) 143:1 housed (1) 53:2 housekeeping (2) hill (3) 53:19,22 14:25 27:9 human (9) 18:1 152:10,11 housed (1) 53:13 housekeeping (2) housekeeping (2) historical (7) 48:1 106:25 161:25 housekeeping (2) housekeeping (3) housekeeping (3) housekeeping (3) housekeeping (3) houseke	11:10,12 24:12	113:10,11 149:9		155:2	1 2 1
33:20 35:14 150:16 151:13 152:2 161:8 highlight (1) 46:16 hours (1) 143:1 17:7,7 136:7 144:2 147:4 157:18 161:5,6 happen (5) 93:20 12:19 12:19 128:14 130:26 131:10 155:16 happened (2) 36:2 107:13 grade (1) 48:3 grading (3) 46:13 great (2) 130:16 144:3 grinding (1) 53:9 ground (1) 50:13 ground-truth (1) happen (3) 94:10 ground-truth (1) happen (3) 26:7 happens (3) 94:10 ground-truth (1) happen (3) 26:7	24:23 27:10	149:10 150:13	144:22 149:15	highest (1) 64:19	hosted (1) 20:16
75:12 110:26 152:17,21,21 hearing (68) 1:16 46:16 hours (1) 143:1 117:7,7 136:7 144:2 147:4 157:18 161:5,6 12:11,17,25 42:8 housekeeping (2) government (1) 12:19 128:14 130:26 13:14 14:12,24 hill (3) 53:19,22 14:25 27:9 grade (1) 53:13 131:10 155:16 18:12,21 20:23 historic (1) 23:3 38:21 59:9 grading (3) 46:13 36:2 107:13 20:24 21:1,4,6,8 121:12 107:21 125:5,7 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 grinding (1) 53:9 42:28 human (9) 18:1 107:21 125:5,7 grinding (1) 53:9 107:21 125:5,7 107:21 125:5,7 107:21 125:5,7 ground (1) 50:13 109:25 42:4 25:18 27:4 50:7 56:26 106:25 161:25 happens (3) 94:10 96:22 108:14 60:10 61:25 125:13 historically (2) hung (1) 57:1 happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19	33:20 35:14	150:16 151:13	152:2 161:8	\ \ \ \	` '
117:7,7 136:7 156:2,3 157:17 157:18 161:5,6 highlights (1) housed (1) 53:2 government (1) 12:19 128:14 130:26 13:14 14:12,24 hill (3) 53:19,22 14:25 27:9 grade (1) 53:13 13:10 155:16 18:12,21 20:23 historic (1) 23:3 38:21 59:9 grading (3) 46:13 36:2 107:13 21:17 23:18,21 historical (7) 48:1 125:10,11 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 grinding (1) 53:9 point (1) 50:13 96:22 108:14 60:10 61:25 125:13 historically (2) hung (1) 57:1 ground-truth (1) 42:8 housekeeping (2) 14:25 27:9 human (9) 18:1 12:11,17,25 57:8 historic (1) 23:3 38:21 59:9 12:11 107:21 125:5,7 125:10,11 12:11 50:7 56:26 hundred (5) 86:1 12:17,18,26 12:13 12:12 12:11 106:25 161:25 16:25 162:10 12:11 106:25 162:10 125:13 12:11 125:13 125:13 12:11 125:13 125:13 12:11		152:17,21,21	hearing (68) 1:16		
144:2 147:4 157:18 161:5,6 12:11,17,25 42:8 housekeeping (2) government (1) 12:19 128:14 130:26 13:14 14:12,24 13:14 14:12,24 14:25 27:9 grade (1) 53:13 131:10 155:16 18:12,21 20:23 13:14 14:12,24 14:25 27:9 grading (3) 46:13 131:10 155:16 18:12,21 20:23 12:17 23:18,21 12:112 107:21 125:5,7 grading (3) 46:13 36:2 107:13 21:17 23:18,21 15:3,14,16,24 12:112 107:21 125:5,7 great (2) 130:16 73:17 94:4 24:4 25:18 27:4 50:7 56:26 106:25 161:25 144:3 99:16 109:25 44:12,17,18,26 125:13 161:25 162:10 ground (1) 50:13 96:22 108:14 60:10 61:25 125:17 107:9 106:19 ground-truth (1) 142:12 106:19		156:2,3 157:17		•	` '
government (1) happen (5) 93:20 13:14 14:12,24 hill (3) 53:19,22 14:25 27:9 grade (1) 53:13 131:10 155:16 18:12,21 20:23 historic (1) 23:3 38:21 59:9 grading (3) 46:13 36:2 107:13 20:24 21:1,4,6,8 121:12 107:21 125:5,7 grading (3) 46:13 36:2 107:13 21:17 23:18,21 historical (7) 48:1 125:10,11 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 144:3 99:16 109:25 44:12,17,18,26 125:13 106:25 161:25 grinding (1) 53:9 happens (3) 94:10 60:10 61:25 60:10 61:25 historically (2) hung (1) 57:1 ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19	,	157:18 161:5,6			
12:19 128:14 130:26 15:3,14,16,24 57:8 human (9) 18:1 grade (1) 53:13 131:10 155:16 18:12,21 20:23 historic (1) 23:3 38:21 59:9 grading (3) 46:13 36:2 107:13 20:24 21:1,4,6,8 121:12 107:21 125:5,7 grading (3) 46:13 happening (4) 24:4 25:18 27:4 50:7 56:26 hundred (5) 86:1 great (2) 130:16 73:17 94:4 30:24 38:2,11 60:12,17 121:4 106:25 161:25 grinding (1) 53:9 happens (3) 94:10 96:22 108:14 60:10 61:25 historically (2) hung (1) 57:1 ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19	government (1)	happen (5) 93:20		hill (3) 53:19,22	
grade (1) 53:13 131:10 155:16 18:12,21 20:23 historic (1) 23:3 38:21 59:9 grading (3) 46:13 36:2 107:13 21:17 23:18,21 historical (7) 48:1 125:10,11 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 grinding (1) 53:9 happens (3) 94:10 99:16 109:25 44:12,17,18,26 125:13 historically (2) hung (1) 57:1 ground (1) 50:13 p6:22 108:14 happy (3) 26:7 68:18,24 69:15 history (1) 19:1 hunters (1)	· /	128:14 130:26	l '	. , , ,	
graded (1) 48:3 happened (2) 20:24 21:1,4,6,8 121:12 107:21 125:5,7 grading (3) 46:13 36:2 107:13 21:17 23:18,21 historical (7) 48:1 125:10,11 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 grinding (1) 53:9 position (3) 94:10 44:12,17,18,26 125:13 historically (2) hung (1) 57:1 ground (1) 50:13 position (3) 26:7 68:18,24 69:15 58:17 107:9 hunters (1) ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19		131:10 155:16	1 1 1		` /
grading (3) 46:13 36:2 107:13 21:17 23:18,21 historical (7) 48:1 125:10,11 great (2) 130:16 73:17 94:4 30:24 38:2,11 50:7 56:26 hundred (5) 86:1 144:3 99:16 109:25 44:12,17,18,26 125:13 161:25 162:10 grinding (1) 53:9 happens (3) 94:10 96:22 108:14 60:10 61:25 historically (2) hung (1) 57:1 ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19		happened (2)	1	\ \ /	I control of the cont
61:3 71:13 happening (4) 24:4 25:18 27:4 50:7 56:26 hundred (5) 86:1 great (2) 130:16 73:17 94:4 30:24 38:2,11 60:12,17 121:4 106:25 161:25 144:3 99:16 109:25 44:12,17,18,26 125:13 historically (2) hung (1) 57:1 ground (1) 50:13 96:22 108:14 63:1,7 68:13,16 58:17 107:9 hunters (1) ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19	II	36:2 107:13	1 1 1	historical (7) 48:1	· /
great (2) 130:16 73:17 94:4 30:24 38:2,11 60:12,17 121:4 106:25 161:25 144:3 99:16 109:25 44:12,17,18,26 125:13 161:25 162:10 grinding (1) 53:9 happens (3) 94:10 60:10 61:25 historically (2) hung (1) 57:1 ground (1) 50:13 96:22 108:14 63:1,7 68:13,16 58:17 107:9 hunters (1) ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19		happening (4)	·	\ \ \	
144:3 99:16 109:25 44:12,17,18,26 125:13 161:25 162:10 grinding (1) 53:9 happens (3) 94:10 60:10 61:25 historically (2) hung (1) 57:1 ground (1) 50:13 96:22 108:14 63:1,7 68:13,16 58:17 107:9 hunters (1) ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19	II	73:17 94:4			\ /
grinding (1) 53:9 happens (3) 94:10 60:10 61:25 historically (2) hung (1) 57:1 ground (1) 50:13 96:22 108:14 63:1,7 68:13,16 58:17 107:9 hunters (1) ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19		99:16 109:25	· · · · · · · · · · · · · · · · · · ·	•	
ground (1) 50:13 ground-truth (1) 96:22 108:14 happy (3) 26:7 68:18,24 69:15 history (1) 19:1 hunters (1) 106:19		happens (3) 94:10			
ground-truth (1) happy (3) 26:7 68:18,24 69:15 history (1) 19:1 106:19					0 1 7
	11 0	happy (3) 26:7	· ' ' ' '		` /
63:11	63:11	146:5 163:19	71:15 72:5,14	hit (1) 94:15	hydrocarbon (2)
hard (41) 4:11,16		hard (41) 4:11,16			,
		<u> </u>	<u> </u>	<u> </u>	<u> </u>

22:3 52:12	112:16	85:8 98:11	15:2 20:6 42:26	161:7
hydrogeologist	important (5)	102:25 108:24	43:2 60:2 62:11	information/cla
9:15 24:26 25:1	14:25 15:14	109:1 113:16	64:20 82:13	18:13
	24:4 126:13	142:11 146:4	indicates (1) 39:6	informing (1)
I	140:8	149:16	indicating (4)	109:18
ice (1) 164:20	impoundment (3)	incorporate (1)	19:9,23 59:17	infrastructure (
ICRP (4) 91:8	46:21 48:10	102:13	121:24	22:4 36:14 46:7
92:15 126:17	49:7	incorporated (55)	indirect (2) 36:26	47:15 49:2,17
158:19	in-house (1) 14:12	2:10,13,14,16	99:1	51:4 52:16,18
idea (4) 103:15	in-person (2)	2:18,20 3:2,3,6	indirects (4)	53:1,4 57:7
121:6 145:10	20:14,24	3:8,13,22 4:1	146:3,4 162:5,6	121:6
156:16	in-situ (1) 85:7	5:7,14,20 9:3,9	industrial (2)	initial (8) 36:21
identification (1)	INAC (2) 142:17	11:12 12:26	43:15 66:16	37:5 55:2 57:9
27:14	154:7	16:18 23:26	infer (1) 138:20	66:9 69:4 92:9
identified (10)	INAC's (1) 146:6	30:17 32:6,12	influence (1)	124:14
21:17 50:24	inappropriate (1)	32:18 34:19	50:23	initially (5) 11:14
64:26 70:24	124:16	36:25 42:9	inform (3) 109:16	21:19 42:11
80:18 125:15	incidentally (1)	56:11 72:22	110:6 160:18	72:4 158:21
146:23 148:8	53:23	75:23 76:12,14	information (81)	inserted (1) 111:3
150:2 151:5	include (12) 29:12	76:21 77:5,19	5:8,15,21 17:16	insights (2) 123:7
identifies (1)	41:22 44:18	79:20 80:12	17:16,19,22	147:1
83:21	56:17 59:15	86:8,18 87:14	19:19,23,25	inspection (1)
identify (7) 26:17	62:14 67:16	96:1 98:4	20:2 29:20,26	63:11
27:2 59:4,5	69:20 70:21	103:22 105:5	30:6 32:7,13,19	inspector (2)
70:11 82:17	113:17 119:1	106:5 109:10	38:17 39:13	130:2 162:1
164:22	125:8	111:15 112:6,23	61:13,17,18,24	inspectors (3)
identifying (3)	included (30)	117:16 133:1	62:14,26 63:6	131:13 155:17
16:11 65:16	17:9 40:23	151:16 157:1	63:24 68:9,17	155:18
151:5	41:17 42:11,25	Incorporated's	72:20 80:23	installed (3) 41:3
ignored (1)	43:11,13 45:3	83:6	81:14,16 82:7	63:12 82:20
124:13	59:14 61:19,21	increase (5) 42:26	85:6,11 105:16	instance (2)
Ikkhivautaq (7)	63:17 64:2,18	88:2,6 89:5	114:3,4,7 118:3	145:11 156:20
106:7 112:7	65:7 66:3,13,22	101:6	118:22 120:1	institution (1)
113:10 149:9	70:3,23 87:21	increased (4)	121:14 123:1,11	12:19
156:2 157:18	98:23 103:3,7	21:24 101:3,5	123:23 128:11	instrumentatio
161:5	104:5,6 113:25	101:16	128:18,22,23,24	65:5
image (1) 83:20	139:24 142:14	increasing (1)	131:21,23,24	insufficient (4)
imagine (1) 48:4	145:1	87:21	133:8,10 134:15	80:23 113:26
impacts (2) 61:5	includes (1) 42:6	independent (11)	136:21,23 137:6	128:17 131:21
123:24	including (23)	129:1,9 148:19	137:9,10 138:4	intake (1) 40:13
implement (1)	13:14 15:11	149:14 150:6	140:14,15,16,18	intakes (1) 50:16
70:14	17:5 22:1,25	151:4,12 155:8	141:13 143:1	integrated (1)
implementation	24:17 29:4	158:14 159:9,25	146:26 147:4	128:12
70:18 72:18	36:20 44:24	independently (1)	149:15 150:1,12	intended (3)
implications (2)	50:9 51:16 55:4	150:4	150:14,20 151:2	64:20 146:1
127:13 138:18	60:23 82:22	indicated (9) 15:1	151:9 152:1	147:11
importance (1)				
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

69:23	introduction (1)	154:5 159:14	84:3,20,24 94:1	97:15,16 98:19
intensively (1)	23:20	issuing (1) 102:12	120:12 121:11	99:22 101:23,24
136:18	Inuinnaqtun (13)	it'll (3) 41:19	166:9	103:5 104:9
intent (3) 82:14	4:14,26 7:7	47:12 111:13	JDam (1) 49:5	105:3,6,22
95:10 164:13	10:22,24 15:3,7	item (25) 23:19	Jim (15) 2:8 6:1	109:8,11,22,26
intention (2)	17:14 19:13	27:18 51:2 52:9	24:26 30:10	110:15 111:5
112:25 113:8	29:14 31:17,26	56:13 59:21	32:24 33:25	142:4,7 143:12
interest (2) 35:4	116:23	60:7,9 61:8	34:6 91:15 92:2	144:15 147:21
90:25	Inuit (1) 12:20	62:14 63:18	93:17 94:6,20	148:24
interested (3)	Inukitut (3) 17:14	64:4,23 65:3,14	97:7 100:16	Karén's (1)
18:24 19:17	19:13 29:14	65:26 66:24	101:15	112:10
119:22	Inuktitut (2) 4:22	67:4,20 71:3,25	Joe (1) 14:13	Karyn (33) 2:7
interference (1)	31:23	99:2 144:24	join (1) 72:26	5:6,13,19 23:24
15:10	invert (1) 84:5	145:1 147:7	joined (2) 117:18	24:8,19 28:11
interim (3) 37:1	investigations (1)	items (24) 14:25	117:20	32:5,11,17
47:1 54:7	63:15	44:17,23 46:20	joint (8) 63:2	33:12 34:5,20
interpretation (3)	invite (1) 73:2	52:9 54:26 65:3	71:23 112:12,15	35:13,19 76:26
14:11 15:2	involved (1) 102:1	67:9 69:4,9	112:26 113:18	78:5 80:13 90:1
74:17	involvement (1)	82:23 84:8 99:1	118:6 152:12	90:6 91:11 93:6
interpreter (1)	89:22	99:4,8 143:26	Julie (3) 14:21	99:13 100:1
14:13	issuance (9) 81:9	146:15 147:3	166:3,14	105:24 107:8
interpreters (3)	82:2,24 84:9	149:25 150:21	July (5) 17:4 19:4	108:7 110:9,11
14:9 16:5	85:13 86:12,14	150:21 151:20	36:10 37:2,9	110:22 114:11
133:21	89:17 125:24	151:24 161:9	jumped (1)	157:5
INTERPRETE	issue (22) 6:11	iterations (2)	104:16	KDam (8) 40:23
10:21	44:19 46:22	127:2 158:16	June (11) 17:25	40:25,26 41:6,9
interpreting (1)	76:18 78:6 79:6		18:6 20:15,16	48:13 50:20
14:5	80:15 100:9	J	20:19 37:25	54:20
intervening (1)	102:4,14 105:9	J (3) 9:15 10:24	38:13 39:18	keep (5) 90:3,3
25:9	111:13 112:16	11:1	44:6 120:1,6	136:22,23
Intervenors (14)	114:5 120:26	J-I-M (1) 33:25	Justice (4) 10:10	159:19
10:1 15:12	122:3,5 125:2,2	Jaco (1) 106:8	26:2 117:24	keeping (2) 34:15
17:17,20 23:20	127:20 128:15	January (50) 1:26	154:8	43:2
26:16 72:24	159:4	2:5,12 5:7,14,20		Ken (11) 2:8 5:18
74:21 78:16	issued (7) 19:16	6:12,15,15 8:4	K	5:25 24:21
79:1 91:19	20:5,19,26 21:4	18:11 21:4,7	K (9) 8:14 9:4,10	29:25 30:10
114:21 115:1,1	88:18 103:22	29:19,25 30:4	9:17 61:19	32:17,22 33:18
Intervenors' (1)	issues (24) 20:22	32:6,12,18	71:13 83:11,19	34:5 92:21
91:2	21:16 44:9,11	37:14 61:16	83:23	Kenneth (3) 2:9
interventions (1)	44:21 68:22	62:11 64:16	K' (1) 127:7	34:1,7
27:13	76:23 80:19,26	65:18 67:24	K-A-R-Y-N (1)	Kenny (1) 24:24
introduce (5)	81:5,24 113:25	69:14 70:14	33:12	kept (1) 14:21
23:22 24:2,5	120:11 125:4,25	79:7,9,10 80:16	K-E-N (1) 33:19	key (5) 16:25
25:9 26:18	130:26 131:18	80:18 81:3,13	K-E-N-N-E-T	18:23 21:10
introducing (2)	132:3 137:18	81:15,16,22	34:2	129:22 131:8
16:11 90:3	139:25 140:7,8	82:6,11,13	Karén (29) 14:1,3	Kharatyan (38)
		83:12,16,17	86:6,9 96:6,8	
	<u> </u>	I	<u> </u>	I

96:7,8 97:16,17	knows (2) 137:5	lagoon (2) 100:18	learn (1) 160:22	101:18,19 118:4
98:19,19 99:22	164:21	100:20	leave (4) 58:20	125:15,16
99:22 101:24,24	Koana (10) 106:7	laid (1) 92:15	87:8 97:8	131:20
103:5,5 104:9,9	107:5,5 112:7	lake (13) 11:25	104:17	Lewis (60) 2:7 5:6
105:6,6 109:11	113:10 149:9,20	39:17 40:14	leaving (3) 103:16	5:13,19 9:4
109:11,26,26	156:2 157:18	43:13,17 53:15	105:15 122:23	23:24,24 24:8
110:15,15 111:5	161:5	53:19,22 57:8	left (12) 13:19	24:14,21,24
111:5 142:7,7	Kogvik (4) 8:15	66:15,20 70:17	40:12 41:5 45:4	28:11,16,19
143:12,12	10:22 14:3,12	100:8	50:2,14 51:11	32:6,12,18
144:14,15	Kohlenberg (6)	lakes (6) 36:15	51:13 110:3	33:12,12,13
147:21,21	10:10 26:1	66:16 70:10,16	124:12,20,25	34:5,20,21
148:24,24	117:23 154:8,8	70:20,24	left-hand (1) 42:3	76:26 78:5
kilometres (3)	155:23	lakes' (1) 54:24	legal (38) 8:12 9:7	80:13,13 90:1,1
11:25 36:18	Kowbel (37) 9:7	land (7) 10:5	13:23 14:8	90:6,6 91:11,11
53:12	24:15 30:16,16	107:1,1 117:18	24:15 27:22	92:17 93:6,6,13
kind (11) 86:24	31:9 76:13,13	119:8,11,19	28:17 30:13,16	97:5 99:13,13
109:1 127:10	79:19,19 86:17	land-use (1) 19:10	33:5 34:4,9	100:1,1,13
130:1 139:5	86:17 98:2,3	landfill (8) 46:9	73:26 75:17,21	101:12 102:16
143:25,26 151:6	111:10 112:22	51:6 52:21	76:6,13 77:14	105:24 107:8,8
164:11 165:4,12	112:23 132:12	53:10,21,26	78:12 80:3	109:19,22 110:9
Kitikmeot (1)	132:12,17,20	100:18,21	86:17 98:3,8	110:11,11,22,22
35:3	133:3,3,15	lands (2) 25:23	115:2,17,23	114:11 151:22
Knight (5) 133:25	134:5,5 136:2,2	119:15	116:7 132:12	152:3 157:9,13
134:1 135:4	139:15,15	language (3)	133:3 134:5	liability (14) 99:3
154:21 158:12	141:11 151:14	10:22,24 14:10	136:2 139:15	110:19 130:8,17
know (41) 36:1	151:17,17	laptop (1) 152:18	151:17 153:15	130:18,26
39:11 50:23	156:25 157:2,2	large (2) 51:22	153:20 154:6,11	131:14 135:22
55:9,10 60:9	157:11	139:24	157:2	144:12 147:12
73:13 90:21	Kugluktuk (11)	larger (2) 57:11	leisure (1) 36:8	155:19 161:13
93:7 103:12	1:25 8:1,2 11:25	147:3	lengthy (1) 35:26	161:17 164:22
122:9,11 125:1	12:15 20:15,18	largest (1) 53:1	lens (1) 164:20	licence (97) 1:10
127:10 129:1,17	35:3 36:19	late (2) 36:21	Let's (3) 12:12	4:13 6:19,25
129:22 130:4,25	37:25 106:10	127:5	132:10 153:25	11:11,14 12:3
134:16 136:24		latest (2) 86:5	letter (3) 17:6	13:3,13 16:17
137:7 138:13,18	L	118:1	130:2 131:13	16:26 17:7 18:9
138:26 142:25	L (1) 8:7	Law (1) 14:8	level (13) 20:1	19:5,6 21:19
144:12 145:13	L' (1) 86:18	laws (1) 119:9	48:19 50:17,18	22:12,16 23:14
145:24 146:12	L-A-B-A-T-T	Lawson (2) 9:7	50:19,21 60:22	31:16 34:25
148:7 150:3	33:15	24:15	62:18 72:8 82:9	35:20,21 37:11
155:21 158:5,22	L-E-W-I-S (1)	lay (1) 51:17	82:21 127:16	42:10,12,15,20
158:26 159:12	33:13	layer (1) 39:8	163:24	42:22 43:22,23
159:17,18	Lab (1) 52:8	leaching (2) 22:8	level's (1) 48:18	43:25 55:3,3,6
160:14 162:23	Labatte (10) 2:7	23:3	levels (14) 38:16	58:8,24 61:26
known (8) 25:21	9:5 24:10,12	lead (4) 10:16	40:9 50:9 53:24	65:1,16,17 66:3
121:7 136:12,13	33:14,14,15	26:12 95:12	80:23 83:25	66:4,6,14 67:1,4
136:19,20,20,24	34:5 108:4,5	120:18	84:18 98:15	67:11,15,19,24
	lack (1) 150:8			
	1	I	I	I

67:25,26 68:4	listed (4) 44:14	83:14,18,26	location (3) 40:13	89:18 118:24
68:19,20,23	67:7 85:3	84:23,24 85:1,5	53:20 61:14	128:10 129:16
69:10 72:1,2	149:25	86:13 87:19	locations (3) 65:5	129:17 134:19
79:12 81:9 82:2	lists (1) 52:17	90:1,7 91:11	70:24 82:19	
82:25 84:10	\ \ /	1 '		137:17,17 140:5 147:13
	little (27) 25:13	95:7,10 98:3	logic (2) 110:18	
85:14 86:12	35:15,17,17	99:2,5,6,8,13,23	110:21	low (5) 64:6,11,13
89:17 91:25	39:5 40:18	100:1 102:9,20	long (9) 22:25	88:15,19
101:2,4,4 102:4	45:17 49:20,23	104:2 105:16,24	58:21 62:1 70:1	lower (10) 39:17
102:6,23 103:4	49:23 53:16,16	107:8 109:13	92:4,5,5 146:20	40:14,14 41:11
103:8,14 104:5	55:19 57:11	110:11,22,23	148:20	45:10 49:11,23
106:21 110:2	85:26 95:15,16	111:22 114:11	long-term (19)	57:20 101:18
111:7,7 116:16	107:20 108:20	120:10 121:11	47:1 61:7,10	157:22
117:17 118:18	120:13 122:14	121:12,12,17,21	80:21 83:9	lower-right (1)
119:20 120:22	123:8 127:6	122:1,13 123:9	85:11 89:17	45:18
125:1,22,25	128:23 144:16	124:7,8,14,18	95:12 123:14	lowered (4) 48:18
128:8 134:20	145:15 149:1	124:21 125:22	126:5,12 127:13	80:23 124:10
142:14 143:18	live (1) 106:10	127:3,15 128:7	127:21 130:25	131:20
143:18 144:20	living (1) 14:14	128:14,18,23,25	131:18 163:5	lowering (1)
licencing (6) 8:18	LMI (170) 13:1	129:10 132:13	164:15,16,21	62:18
14:6 18:20	19:7,15,25 20:2	133:26 136:8	longer (1) 123:4	lump-sum (1)
21:14 58:13	20:11 22:12	145:24 147:5	longitudinal (3)	147:3
118:20	23:22 24:6,11	148:1,22 149:24	84:1,3 152:4	lunch (6) 73:11
life (1) 36:20	29:2,13 30:13	150:17 151:5,24	look (8) 45:25	73:12,20 75:3
lighting (1) 49:24	33:7 35:6,20	155:7 157:4	48:7 78:24	75:13,14
liked (1) 162:18	37:2,3,13,14	158:10,16	104:25 152:1,2	Lundell (2) 9:7
likelihood (1)	38:10,21 42:14	159:19 163:25	152:18,24	24:16
53:25	42:14 44:20	164:12	looked (2) 78:18	Lupin (128) 1:10
LIM's (1) 70:2	54:7 59:17,21	LMI's (20) 11:22	151:11	2:10,13,14,15
limit (2) 50:26	60:1,9,11,16,25	13:12 24:14	looking (25) 29:8	2:18,19 3:1,3,5
51:8	61:1,7,9,11,13	44:13 59:1	35:22 42:8,9	3:7,13,22 4:1,12
limited (5) 38:19	61:17 62:2,4,7	61:16 64:16	98:15,21 103:2	4:17,21,25 5:2,6
43:8 57:25	62:11,14,19,22	65:18,24 69:8	108:17 112:13	5:13,19,23 6:14
74:17 128:21	63:5,17,20 64:3	72:14 81:6,25	127:10,21	6:24,26 9:3,8
line (13) 28:24	64:6,10,13,22	104:3 114:12	145:21 151:2,4	11:11,24 12:26
36:16 54:3	64:26 65:9,13	121:16 123:5	151:7 152:5	13:6,15 16:17
83:23 143:26	65:15,20,22,24	125:19 130:15	151.7 152.5	16:24 17:22
145:20 150:3	65:26 66:2,13	130:21		19:6 23:26 24:4
153:16,18,20	66:22 67:3,13		159:3,17,26 160:14 161:10	
1 '	1	load (1) 62:5		24:9,17 30:1,17
154:6,13 162:1	67:20,23 68:4,9	lobby (3) 15:20	161:17,18	30:19 31:15,19
list (15) 16:25	68:16,22 69:5,5	15:21,22	looks (2) 49:18	31:22,25 32:2,6
20:21,22 21:16	69:9,13,20	local (2) 25:8	73:21	32:12,18,21
37:26 44:7,8	70:13,21,26	106:19	Lootie (1) 11:18	34:19 35:1 36:2
52:17 59:8	71:8,16,22 73:2	locate (1) 29:9	lot (19) 36:13	36:9,25 41:16
68:22 71:4 77:1	76:7 78:6 80:13	located (6) 15:4	43:18 52:4	41:17 42:7,9
118:19 150:20	81:2,13,14,21	15:13,20,22	55:13,13,14,22	43:10 45:1
152:24	82:10,16,20	36:18 46:10	55:23 66:19	51:17 56:11
	•	-	•	•

	l	I	I	l
57:1,26 58:16	92:14	managing (1)	matter (5) 29:20	measure (1)
58:20 64:20	maintained (2)	108:24	29:26 81:12	138:13
72:21 75:23	142:15 144:25	Mandalay (12)	84:23 106:21	measure's (1)
76:12,14,21,26	maintaining (1)	4:13 9:6 23:26	matters (6) 13:11	138:16
77:4,19 79:8,19	56:24	24:7,11 31:17	28:26 34:11	measurement (2)
79:22 80:12	maintenance (15)	36:26 37:7	79:15 115:7	39:19 138:16
83:5 86:7,18	12:1 22:14	57:24 58:7	116:10	measures (1)
87:13 95:26	39:15 42:25	72:21 108:5	maximum (3)	70:12
98:3,7,13 105:4	43:9 47:1,2 54:7	mandate (2)	48:18 66:24	mechanism (5)
106:5,9,10	54:19 55:1,4	105:12 119:6	91:26	23:11 143:25
108:5 109:9	56:23 58:4,23	manner (2)	maximums (1)	144:17 151:8
111:12,14 112:5	66:11	148:11,23	83:24	164:12
112:23,26	Majesty (1) 12:21	manpower (1)	McKinley (26)	mechanisms (1)
113:21 116:14	major (5) 10:5	56:21	2:9 6:1 9:15	151:9
116:16 117:15	19:2 52:18	March (6) 17:15	24:26 30:10	meet (5) 96:22,26
117:26 120:19	117:19 131:17	19:20,25 20:1,4	32:25 33:25,25	97:4,10 107:18
120:21,23,24	majority (4) 52:6	120:2	33:26 34:6	meeting (16)
132:2 133:1,4	59:6 74:5	mark (2) 90:9	91:15,15 92:2,2	17:24 18:15
134:6,16,23,26	121:23	94:15	93:17,17 94:6,6	20:14,17 21:18
135:3 136:3,12	making (6) 15:15	marking (1)	94:20,20 97:7,7	37:22,24 38:9
139:16,24	16:8 33:7 54:17	115:4	100:16,16	38:13 44:8 73:1
151:16,18,21	134:10 157:9	material (19) 39:7	101:15,15	77:21 118:23
157:1,3	manage (3) 40:8	39:9,10 46:13	MDam (3) 48:13	120:5 123:5
M	123:13 124:23	48:3,9,22 49:26	49:19,20	138:9
·	managed (4)	51:7,18 55:12	MDMER (7)	meeting/pre-he
M (5) 45:16 61:19	35:16 84:18	57:14,21 96:13	65:21 97:1,4,24	44:5
83:10,19,23	100:10 124:23	115:4,24 122:23	98:1,12,16	meetings (6)
M' (2) 71:13	management (29)	123:2 138:21	Meadows (36)	42:13 43:2 44:6
127:8 M.C.K.I.N.I.	5:9 10:8 12:23	materially (2)	8:12 14:7,8	95:10 119:26
M-C-K-I-N-L 33:26	22:8,21 26:1	150:10 159:17	27:21,22 28:22	120:10
	30:6 32:8 40:5	materials (25)	31:1 33:4,5 34:3	meets (5) 82:14
machine (1) 52:5	40:20 46:26	17:12 18:12	34:4,8,9 73:25	96:18,19,20
main (36) 8:8 13:19 17:4	49:12 50:3 54:1	29:4,9,12 30:13	73:26 75:20,21	146:1
36:14 42:4,10	54:4,15 55:5	46:9 48:5 52:1,3	78:3,11,12	member (12) 8:9
45:7 46:1 49:19	62:23 68:21	71:2 76:4,7,8	79:14 80:2,3	24:5 27:5 112:3
50:1,8 51:19,24	80:22 117:22	78:14,21 83:21	81:19 115:8,16	112:8 141:25
52:19,26 53:13	119:2,7 121:1	83:22 112:14	115:17,22,23	149:10 152:22
53:14,17 112:7	124:10 125:17	116:9 118:7	116:6,7 120:14	155:26 156:3
112:8 113:10,11	125:20 131:19	121:3 123:19,21	153:14,15 154:10,11	157:19 161:6
127:20 149:9,10	138:20	163:14	· /	members (16) 13:18,18,21
150:13,16	manager (12) 8:18 9:4,11 10:4	matrix (14) 5:10 18:3 30:7 32:9	mean (7) 86:14,14 86:20 145:1	′ ′
151:13 152:17	14:6 18:19	62:16,24 72:11	147:26 149:26	15:12 24:2,4 27:1 28:3,13
152:21 156:2,3	21:14 24:9 25:1	84:17,21,25	163:21	34:23 35:7
157:17,18 161:5	25:19 58:16	85:5 124:15,15	means (2) 96:18	72:26 95:18
161:6	117:8	124:17	144:21	108:1 113:5
maintain (1)	11/.0	147.1/	177.21	100.1 113.3
. ,		<u> </u>	<u> </u>	

149:5	midnight (2)	46:6,6,21,22	134:17,26 136:3	models (3) 64:7
memo (14) 5:5,12	118:2 120:11	47:7,8,13,15	139:16,24	88:10 89:5
5:18 17:22 30:3	milestone (8)	48:6,7 51:3,5,8	151:16,18,21	models/scenari
32:4,10,16	109:14,16 110:1	52:19,22,25	157:1,3	23:5
60:16 61:1	142:10 143:14	53:12,17,18	minimal (2) 43:14	moment (8) 86:19
82:11 83:15	143:17 144:18	56:21 57:1,4,7	53:24	89:24 91:12
84:3 121:17	145:2	57:12,22 58:18	minimize (1)	102:16 132:13
memorandum (2)	milestones (15)	65:23 66:20	164:16	151:12 159:24
29:22 85:12	6:19 77:16,21	79:9 82:5 83:5	minimum (1)	160:7
memos (3) 29:18	77:21,23 78:1	94:2,17 97:2,3	48:19	money (2) 135:9
128:10,12	79:12 111:3,17	106:11,12	minimums (1)	145:10
mention (4) 27:5	111:20 129:26	108:14,17,18	83:24	monitoring (105)
37:18 91:13	131:11 136:6	116:14,16	mining (6) 10:7	13:6 16:22
96:16	139:8 142:22	120:19,22	11:17 37:6	21:22 22:19,23
mentioned (16)	mill (5) 42:4 53:2	125:14 130:2	41:21 93:25,26	22:23,25,26
36:17 41:19	53:9 122:24,24	134:23 135:3	Minister (1) 65:1	39:19,22,23
44:6 51:3 54:9	milling (1) 53:3	136:12	minor (3) 44:17	42:18 43:9 47:2
54:14 58:5,10	million (21)	mine-site (3) 45:5	66:2 90:24	47:3 54:21,26
63:3 77:5	134:24,26	47:15 131:13	minus (1) 85:24	55:4,5 58:23
123:18 149:12	142:11,16 144:7	mined (3) 41:24	minute (5) 75:18	59:14,18 61:7
152:26 155:13	144:19,21 156:8	46:11 48:2	97:5 100:13	62:13 63:16,17
155:15 161:8	156:9,20 157:5	mines (77) 2:10	101:13 153:26	64:1,2,2,24 65:4
met (7) 59:6 94:2	157:7 158:10,12	2:13,14,15,18	minutes (1) 80:7	65:6,8,11,13
97:1 138:10,11	157.7 158.10,12	2:19 3:1,3,5,7	missed (2) 71:11	67:18 69:19,22
138:16,17	159:18,20 160:4	1 1 1	113:21	· · · · · · · · · · · · · · · · · · ·
	· ·	3:13,22 4:1 9:3		69:23,24 70:3,4
metal (8) 22:7 23:2 37:16	mills (1) 53:9	9:8 12:26 16:17	misspoke (1) 152:7	70:6,15,17,22
39:22 54:9	mind (1) 34:16 mindful (1)	23:26 24:18		70:23 81:7,7,26
	139:26	30:17,19 34:19	misstated (1) 134:12	81:26 89:14,15
93:25,25 96:20	mine (104) 1:10	36:25 37:17 39:23 42:9		89:17 90:9,22 91:2,3,18 92:4,5
metre (3) 39:7 46:12 48:9	4:12,17,21,25	43:11 53:9	mitigate (1) 70:19	92:6,15 93:19
		54:10 56:11	mob (1) 147:6	95:12 96:25
metres (21) 12:3,6			mobilization (4)	
16:19,20,21	6:14,24,26	58:19 72:21	47:4 56:13	102:1,2,5,6,8,11
43:4,5,8 47:11	11:12,24,26	75:23 76:12,14	58:10 147:8	102:12,13,22,24
48:26 49:1 51:7	13:7 16:24	76:21,26 77:4	mobilization/de	103:1,6,10,13
51:11,12 66:8,9	17:22 19:6	77:19 79:19,22	99:2	103:17,18,19,21
66:12,25 67:2	22:24 24:4,9	80:12 86:7,18	model (10) 59:24	103:23 104:4,7
101:5 121:15	25:22 30:2	87:14 95:26	62:5,7,8 92:22	104:26 105:15
metres-cubed- (1)	31:15,19,22,25	96:21 98:4,7	109:25 122:14	105:16,17,19,19
66:7	32:2,6,12,18,21	105:4 106:5	145:19 147:14	109:1 121:26
mic (2) 76:6	35:1,22 36:1,9	108:6,8,10	159:9	122:2 125:23
104:16	36:14,17,20,22	109:9 111:12,14	modelled (1)	137:19 144:26
microphone (6)	36:24 37:17	112:5,23,26	88:21	145:12 161:19
15:8 16:5 26:25	40:21 41:16,17	113:21 117:16	modelling (5)	163:6,11 164:18
95:20 96:5	41:21 42:3,4,7	118:1 132:2	62:10 64:5,12	164:21
106:3	43:24 45:1,5,25	133:1,4 134:6	64:14 121:8	months (4) 77:20
<u> </u>				

	I	Ī	Ī	l
90:20 95:11,13	naturally (5) 50:5	115:20 117:18	notwithstandin	13:8,9,10 17:2
morning (23) 2:5	55:13,22 57:16	117:18	136:21	20:18 21:2,2
8:4 11:7,10	57:18	noon (3) 73:23	November (7)	27:22 33:5 34:4
24:12,23 30:23	near (3) 45:14	74:5,12	18:6 20:26	34:9 37:2 74:1
30:25 33:20	50:16 108:13	Norbert (2) 14:16	38:10 59:24	75:21 78:12
35:14 73:5,14	nearby (2) 63:12	14:19	61:12 67:14	80:3 86:7 95:26
73:21 74:4,7,13	109:2	normal (1) 163:18	98:24	100:4,24 104:13
74:15,25 75:5	nearly (1) 55:19	north/south (1)	NPC (1) 19:8	104:19 105:4
75:16,25 87:2	necessary (2)	82:21	number (79)	106:10 107:23
165:10	121:8 150:22	northern (49)	13:13 16:17	109:9 112:5
motions (1) 27:14	need (24) 21:11	2:24 3:12,14,17	17:1 19:23 37:3	115:17,23 116:7
mouth (1) 25:13	49:3,13 56:1	3:20,24 4:3 6:23	38:15 39:1,2,14	117:9,13 119:8
move (8) 14:23	59:14 73:7	7:2,6,10 10:3	40:15,21,21,25	119:11,11,12,12
21:16 91:20	74:14 92:6,7	19:21 25:12,20	41:1,9,19 42:17	119:14,21,25
107:26 149:5	97:20 113:7	31:11 76:1,22	45:9,9,10,13,13	130:5 131:12
160:6,25 161:1	120:13,15 127:8	77:18 78:17	45:14,16,20,20	142:5 147:25
moved (2) 48:6	130:2,3 141:6	87:1,5 104:20	46:4,4,20 50:5	149:7 152:15
124:11	143:26 159:22	112:25 115:26	54:8,20,21	153:15 154:11
moving (5) 44:2	160:19 163:13	116:14,19,22,25	59:13,18,23	157:15
54:16 63:8	164:2,9,9	117:3,10 118:13	60:11,21 61:9	Nunavut's (1)
69:22 114:20	needed (10) 42:21	119:10 124:3	61:21,22 62:4	119:19
multiple (2) 64:7	47:9 67:26	127:14 128:1	62:16,21 63:2	NWB (29) 12:18
64:8	130:10 137:10	133:2 141:26	63:10,20 64:5	12:22 13:24
	146:16,18,18	142:6,20 143:20	64:24 65:15,19	17:24 19:4,8,12
N	151:10 160:6	145:6 149:8	68:2,6,7,19,25	19:16 20:4,5,8
N (2) 10:5 11:3	needs (5) 34:16	152:16 153:19	68:26 69:2,9,9	20:12,13,16,19
N-O-A-H (2)	49:10 50:25	154:15,17	69:12 70:25	20:26 21:4,7,11
115:11,11	115:2 140:16	156:14 157:16	71:9,10,11,15	38:4 65:26
Nahanni (4) 9:17	never (1) 106:17	note (12) 30:20	72:11 80:21,22	67:23 68:4,22
24:25 57:25	new (7) 42:10	39:3 65:20 66:2	81:2 86:11	69:10 71:26
58:6	65:20 79:22	66:22 67:13	121:1 142:15	72:24 90:14,14
name (24) 13:24	99:1 114:2,5	69:12 80:20	144:18,19 157:6	NWB's (4) 13:22
14:3,17 16:6	128:21	84:6 107:14,20	157:7,12,22	18:18 20:6
24:8 25:18 26:9	newer (1) 158:20	113:23	numbers (9) 59:8	58:12
33:10,21 34:2	newly (1) 85:10	noted (9) 31:2	64:17 65:11	
90:4 91:14	night (3) 62:2	41:18 66:5	72:7,10 113:16	0
106:4,7 115:9	127:5 165:5	83:24 86:2 91:4	147:2 159:8,24	O-K-O-N-K-W
122:18 124:1	nineteen (1) 57:23	121:14 125:19	numerous (2)	115:13
126:7 128:2	ninety-five (1)	125:22	126:6,13	objection (1)
133:18 145:15	85:26	notes (3) 82:18	Nunavut (75) 1:3	27:15
148:4 149:21	Ningark (2) 8:9	99:16 166:6	1:25 2:15,19,21	objectives (2)
152:20	13:20	notice (4) 20:4,5	2:23 3:1,5,7,16	125:10 138:10
name's (2) 11:18	NIRB (1) 19:11	21:1 37:14	3:19,23 4:2 8:2	observation (1)
117:8	Noah (12) 3:9,9	noticed (2) 67:2	8:6,11 11:19,21	121:22
natural (5) 46:1,2	10:5 25:22,22	98:26	12:14,17,20,21	obtained (1) 15:4
49:5 50:13	115:11,11,11,20	notify (1) 27:10	12:22,24 13:3,4	obtaining (1) 58:3
57:15				obviously (3)
	1	I	I	1

		l		
50:20 78:17	3:9 10:4 25:15	openings (3)	71:9 76:24	152:21 155:26
159:24	25:18 87:4	41:22 47:8,13	80:19 81:5,24	156:3 157:15,18
occurred (2)	104:22 115:12	operated (1)	83:1 84:12	161:6
40:21 41:21	115:12,19,20	11:26	85:16 113:25	paper (3) 18:22
occurring (1)	116:4 117:5,8	operating (4)	120:11 125:25	30:24 77:11
94:17	120:15 124:2,3	108:8,10,17	131:17 132:3	parameters (2)
October (5) 17:26	127:26 128:3,5	127:14	151:20,25 152:8	64:8 103:20
59:11 60:26	135:8 137:3	operation (3)	152:10	part (20) 45:10
62:20 121:16	140:26 142:19	36:22 56:20	overall (5) 46:25	47:24 66:24
office (1) 117:9	143:19 145:5	125:13	47:1 54:14 55:4	77:24 91:19
officer (2) 9:5	154:16 155:1	operational (1)	127:22	100:17 103:10
24:10	156:13 157:26	85:4	overheads (1)	107:1 111:1,1,4
offices (1) 52:25	omitted (1) 103:3	operations (2)	162:6	118:20 125:21
Official (2) 11:1	on-site (3) 12:10	39:16 101:20	overview (5)	134:9 140:4,12
166:15	22:4 53:2	opinion (1) 150:9	14:23 19:1 49:7	145:7 155:16
oh (7) 28:16 71:11	once (20) 11:10	opportunities (1)	118:16 120:21	158:12 159:6
85:19 114:18	28:12 34:22	127:20	owned (2) 36:24	partially (4) 49:9
128:4 155:1	47:5 48:4,17	opportunity (12)	36:25	131:22,26 137:8
156:20	50:21 84:18	24:2 25:17 26:7	owner (1) 58:19	participants (1)
oil (1) 51:21	90:14 94:10	27:8 28:12,13	ownership (1)	78:26
oils (1) 52:5	97:21 103:18	34:23,24 72:23	37:5	participate (3)
okay (65) 11:9	109:7 111:14,18	73:1 104:25	oxidation (1)	25:17 26:7,8
25:15 26:16,19	121:6,7 148:26	117:14	39:11	participated (2)
27:17,20 28:3,4	152:18,23	options (1) 70:18	oxidized (1)	119:26 120:3
28:7 56:8 73:9	one-line (1) 147:7	order (3) 76:23	123:19	participates (1)
75:2,6 79:21,26	one-time (4)	125:14 145:21	oxidizing (1)	119:20
80:6,10 90:2	38:17 63:11,21	ore (1) 53:3	121:25	participating (2)
92:18 95:4,22	164:7	organized (1)		23:21 24:3
101:23 104:23	ones (1) 127:8	27:24	P	participation (1)
105:1 107:4	ongoing (6) 54:4	original (9) 42:26	P11 (1) 13:16	29:3
108:2 109:6,20	61:7 63:5,26	43:3 46:4 57:16	package (1) 17:5	particular (2)
110:3,8,25	75:26 77:19	58:16,18 66:7	page (3) 2:3 4:9	147:5 163:8
111:18,26 112:2	open (13) 46:8	122:22 146:26	85:21	parties (25) 16:12
114:10 120:17	47:10,16,18,25	originally (4)	pages (2) 76:19	17:24 18:17
128:4,16 132:10	47:25 51:5	14:14 55:10	166:3	19:17 24:3 25:9
132:19,21,23,24	56:22 75:4	98:22 122:17	paints (1) 52:6	29:7,17,24 31:3
133:17,18	86:24 87:11	Otokiak (2) 10:24	Palongyak (2)	31:5 35:4 44:9
140:25 141:9	95:18 132:10	14:13	106:7,8	65:10 73:13,23
142:2 144:3,21	open-water (2)	outflow (1) 84:2	panel (31) 3:7,19	74:21 90:16
147:19 149:4,6	49:14 67:1	outline (1) 118:14	3:23 4:2 8:9	102:3 103:19
150:4 154:2,5,5	opened (6) 36:24	outlooked (1)	13:14,16,16,17	104:10 105:9
156:13,26	41:22,23 51:13	61:23	13:18 24:2 28:3	119:22 150:22
162:26 163:12	52:14,21	outside (5) 19:10	28:13 33:6	152:13
164:25 165:1,4	opening (7) 2:6	51:24 67:6	34:16,23 35:7	partly (1) 159:4
165:13	11:6 12:13	150:18 160:18	107:26 112:3,5	partner (1) 24:15
Okonkwo (29)	47:11,13,20,23	outstanding (17)	112:8 149:5,7	parts (1) 118:8
			149:10 152:15	
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

	I	I	I	I
130:21 158:14	58:4	40:22 69:26	plan (83) 4:17,21	68:21 71:13
pass (3) 106:16,16	perpendicular (1)	70:4 126:26	4:25 5:2 17:9	74:25 122:6
106:22	84:1	163:23	19:10 23:8	please (20) 12:11
passed (1) 107:22	persons (1) 90:5	physically (3)	29:15 31:19,22	15:8,18 16:1,5
passes (1) 107:16	perspective (1)	50:12,17 162:23	31:25 32:2	18:25 21:13
passive (2) 94:16	126:26	pick (1) 15:18	35:24 37:1,8,12	26:17 33:11
94:23	pertain (1) 119:19	picture (6) 47:24	44:1,1 45:2,8	78:22 79:2
passively (1)	pertaining (1)	53:5,8 57:1	46:15 48:11	106:4 115:6,10
94:11	16:26	58:16 120:19	49:14 51:20	122:18 126:7
pathway (1)	petroleum (2)	PIDO (1) 14:17	52:11 55:1	142:9,18 154:7
121:9	22:3 52:12	piece (6) 126:1,3	56:15 58:1,8	158:5
pathways (2) 23:3	pH (2) 107:15,17	126:4 128:6	59:14,18 60:19	pleased (1) 44:13
71:17	phase (4) 23:7	130:10 132:6	62:13 63:17	pleases (1) 78:5
pause (1) 153:17	39:21 120:3	pieces (1) 136:7	64:3,9,25 65:6,8	PM (3) 75:9,11
pay (1) 163:26	121:21	Piésold (5) 133:25	65:11,13 69:23	165:16
people (2) 25:10	phone (8) 25:26	134:1 135:4	70:3 74:19 81:8	point (19) 48:16
140:5	26:12 90:5	154:21 158:12	82:1 89:18 90:9	55:12 59:1
per-day (1) 66:8	117:21 153:16	pile (2) 46:22 51:2	94:21 95:9,12	90:26 93:4 95:8
percent (2)	153:18,20	piles (2) 51:16	95:14 96:17	126:25 127:22
106:25 123:22	154:13	99:5	97:8,13 98:23	127:23 129:12
perform (2) 64:20	phone-like (1)	pillar (9) 41:23,23	99:26 100:17	130:8 134:10
163:10	153:23	47:9,9,18,24	102:8,11,14,24	136:11,23
performance (6)	phones (1) 16:2	48:2 51:14	103:18 104:7,18	138:24 148:13
69:21 138:13,15	phonetic (1) 64:7	52:15	104:26 105:9,12	155:5 156:18
138:16 146:20	photo (21) 36:9	pillars (2) 46:8	124:23 125:23	161:14
163:24	36:11,14 40:16	52:21	126:1,22 128:12	pointed (1)
performed (1)	41:5,7 47:17,19	pipeline (2) 48:25	128:13,26 136:5	145:24
83:10	47:22,26 48:1	48:26	140:17 141:2	points (1) 42:10
performing (1)	49:23 50:2,14	Pit (1) 40:21	149:17 153:5	Poitras (3) 11:3
163:7	50:15,19,21	pits (2) 38:15,26	158:21,23	14:16 25:13
period (7) 20:7	51:13,15 55:10	pitting (2) 54:13	160:11	policy (5) 130:11
21:20 73:11	56:26	63:11	planned (13)	131:9 135:13,14
84:7 92:24 94:4	photo's (1) 53:16	place (36) 22:17	35:17 56:16,19	135:15
123:4	photograph (11)	37:25 38:8	59:2 74:4 94:8	Pollution (1)
periodic (1) 23:13	38:24,25 40:15	39:12,16,19	103:10 122:8	119:16
periods (1) 36:23	40:18 41:11,11	41:5,10 43:25	137:21 148:16	pond (31) 40:7,7
permafrost (1)	41:19 42:6 57:2	44:6 45:21 46:3	163:14 164:2,17	40:8,9,15 41:2
121:18	57:4,11	48:25 51:11	planning (10)	45:9,9,20,20
permanent (4)	photographs (4)	54:10,12,16,19	23:1,11 64:21	46:3,4,10 48:13
16:22 22:14	38:23 40:11	54:22 55:2,6,8	91:16 119:2,14	49:19 50:5,20
46:17 69:19	45:4 162:2	57:16 58:13,21	125:5 126:11	50:21 57:16,16
permission (1)	photos (5) 36:11	74:25 84:22	136:10 140:2	93:11 96:12
78:1	41:4 50:8 52:22	85:2 89:18,21	plans (15) 22:21	101:19,19
permitted (1)	55:7	121:26 124:12	22:21,22,23	106:13,15,18
98:16	phrase (1) 135:10	124:20 134:22	36:3 37:5 58:20	107:4,11,12,14
permitting (1)	physical (6) 39:11	136:16 153:9	61:3,7 64:13,15	ponds (4) 38:14
	1	I	ı	ı

	 I	1	l	l
49:13 66:16	60:13,18 72:4	presentation (83)	prevent (3) 15:9	58:13 67:19
84:5	73:14 84:17	2:10,14 3:11	40:25 41:9	68:16,23 105:13
Port (1) 58:18	91:17 95:9	4:11 6:22 18:12	Prevention (1)	118:20 139:26
portal (3) 47:8,19	100:9 121:1,2,9	27:19 29:3,13	119:16	161:19
57:5	123:24 125:11	30:14 31:15	previous (8)	processes (2) 35:5
portion (3) 50:1	125:15 143:18	34:14,14,19	37:21 47:22	119:21
100:18,20	potentially (2)	35:7,10,19,26	51:17 99:18	processing (2)
position (14)	97:11 139:2	36:12 37:19,21	101:3,4 133:8	13:12 53:3
129:12,14,17	power (2) 13:11	37:22 41:20	134:8	produce (1)
131:1 137:11	105:11	56:1,2,7,9,13	previously (7)	134:13
142:17,18,18,21	powerhouse (1)	59:2 73:5 75:5	30:9 36:17 37:5	produced (1)
143:4,14 144:20	53:6	75:16,24 76:24	37:20 89:6	133:9
146:6 156:23	PowerPoint (5)	77:6,17 80:12	106:9 133:10	professional (2)
positions (1)	4:11 6:22 29:13	80:18 81:1,11	price (1) 60:3	25:1 51:25
131:8	31:14 116:12	81:20 82:4 83:2	primary (1)	program (7)
positive (1)	practice (2) 130:5	83:4 84:13,15	123:14	51:23 58:4,12
147:13	131:12	85:17,21 87:2,8	principal (2) 9:10	70:15,17 102:6
positively (1)	pray (1) 12:12	95:24 112:9	24:21	103:6
161:1	prayer (2) 12:12	113:24 114:16	prior (19) 16:11	programs (2)
possibility (2)	12:13	114:26 115:2,25	38:2,4,11 41:26	22:23 54:22
94:3,16	pre-closure (1)	116:13 117:2,3	44:15 57:4 58:2	progress (1)
possible (9) 50:26	105:19	117:12,15,26	60:9 61:25	152:11
58:21 101:20	pre-hearing (14)	118:5,7,11,15	62:26 63:6	progressive (23)
109:13 134:11	17:25 20:14,17	118:24,26	68:18 72:13,16	22:16 23:12,14
134:13 141:3	20:19 21:18	120:25 124:5	94:23,23 95:13	37:4 38:7 44:20
152:14 162:21	37:24 42:13	129:6 132:9,24	103:1	45:11 46:19
post-closure (47)	44:10 59:3 67:7	139:21 140:13	privy (1) 161:20	63:3 69:1 72:14
12:6 13:6 16:22	71:6,20,21	141:19 145:9	probably (4) 53:1	109:17 110:6,14
21:22 22:18,25	120:6	149:11 153:1	90:9 93:24	110:16 113:18
42:18 43:9 47:3	precipitation (4)	165:1,7,10	140:5	129:25 130:6
54:26 59:17	87:21 88:2,6	presentations (2)	procedural (8)	131:5 147:24
61:5 62:12	89:5	33:7 120:5	19:1,3 21:10	148:26 155:12
63:17 64:2,24	preferable (1)	presented (5)	28:26 34:10	156:9
65:5,10,13	43:3	29:13 68:15	79:15 115:6	project (17) 6:26
67:17 69:23	preliminary (8)	83:14 99:25	116:10	9:4,11 11:24
70:3 102:1,2,5,7	60:21 72:8 82:9	118:3	proceed (5) 12:11	13:7 19:6,9,11
102:11,12,13,22	82:14,21 85:8	presenting (1)	15:19 27:18	24:8 25:1 35:5
102:26 103:9,17	122:6 127:16	115:4	75:23 115:6	80:4 108:10,23
103:18,19,21,23	prepare (1)	presently (1)	proceeding (3)	111:6 116:16
104:7,26 105:15	134:11	121:24	14:20 26:21	119:14
105:16 122:2	present (10)	president (1)	28:4	projected (1)
125:23 131:4	13:23 28:14	24:24	proceedings (7)	109:14
137:18 144:26	34:24 73:1	press (2) 25:13	8:1 11:5 16:9	projects (4) 9:17
145:11	78:16 100:19	114:18	75:9,11 165:16	10:6 24:25
potential (20)	115:26 118:7	pretty (4) 116:4	166:5	117:19
22:8,8,9,10 23:5	120:24 126:3	146:25 162:4,12	process (9) 42:22	promised (2)
	1	I	I	1

	I	I	I	I
90:11 128:24	provided (80)	20:23,24 21:1,4	quantity (1) 43:10	141:12,18,22,26
pronounced (1)	17:15,18,21,26	21:6,8 23:18,21	quarrels (1) 155:6	142:3,5 149:7
14:17	18:7,11 20:2	24:3 25:5,18	quarter (2) 58:9	152:15 153:21
pronouncing (1)	29:2,6,17,23	27:1,3 29:11,23	61:4	157:15 162:14
14:2	30:19,21 35:6	35:8 38:2,11	Queen (1) 12:21	164:25
proper (1) 122:26	37:14,26 38:3	44:12,16,18,26	question (45) 2:21	questions/com
properly (1)	60:1,16,25,26	68:23 69:15	2:23 88:9,14	75:4
14:17	61:1,17,25 62:7	71:14,14 72:5	89:14 90:26	quick (5) 28:4
property (1) 37:6	62:22,26 63:24	72:13,17,26	93:3 94:16 95:9	44:4 71:4 73:13
proportionate (1)	65:19,25 67:21	76:5 95:19,22	95:15 96:10,11	100:5
162:7	68:9,12 69:3,3,5	106:1 107:26	98:6,7,18 99:7	quickly (1)
proposal (4) 47:9	69:16 70:13	114:15 116:9	100:7,26 101:26	101:20
69:5 122:13	71:6 75:24 76:4	117:15 141:25	102:3 104:13,19	quite (8) 41:13
123:16	81:14 82:6,8,10	150:18	105:8,10 106:2	57:2 94:15
propose (4) 30:12	82:11,24 83:15	pull (1) 78:23	108:19 109:24	134:17 136:17
73:19 76:15,26	83:15 84:3,8,23	pulled (1) 147:12	111:12,19 112:1	139:24 149:26
proposed (15)	84:26 85:13	pumped (1) 50:4	112:4,10,19	152:3
22:12 46:9 51:6	94:1 97:22	pumphouse (1)	128:9,11,14	quizzes (1) 107:2
53:10,20 64:22	101:2 113:13	54:3	134:15 138:6	quo (1) 143:16
65:12,20 69:23	114:1,3,4	pumping (3) 40:7	140:12 143:21	quote (1) 88:17
70:3,22 72:18	121:12 123:6,6	40:15,20	144:13,26	
104:4 111:15	123:9,10,23	purpose (3) 12:25	152:26 157:20	R
163:4	124:17 125:8	118:26 132:16	158:5	R (1) 8:18
proposing (1)	128:18,23 138:3	purposes (3)	questioning (4)	R-U-P-T-A-S-H
140:17	138:4 140:15	66:16 126:19	141:10 155:26	34:2
protected (2)	142:10 146:26	140:15	156:1 165:3	Radium (1) 58:19
85:11 139:12	147:3 149:16,26	push (1) 114:18	questions (69)	raise (2) 95:20
proud (1) 108:24	152:10	put (12) 16:2	2:15,17,19 3:1,3	106:3
provide (47)	provides (1)	35:25 85:22	3:5,7,13,16,19	raised (1) 139:26
12:16 14:19	80:24	89:18 99:16	3:23 4:2 27:6	range (1) 64:6
16:12 18:26	providing (13)	120:17,20	73:2,11 74:22	ranges (1) 47:10
19:18 20:11	17:12 20:20	129:23 138:21	75:15,23 76:16	rap (1) 126:20
27:6 60:12,21	30:22 62:12	146:18 162:3,23	77:2 79:18,24	rate (3) 43:1,3
61:3,9,10,13	105:17 118:16	putting (2) 90:8	86:7,25,25 87:1	101:17
62:4 63:6,10	119:22 123:11	129:21	87:7,13 89:10	rates (2) 60:5
65:16 69:6,6	127:15 128:7,25		89:14 90:24	99:20
71:12,16 77:8	131:23 136:23	Q (20) 10 16	91:5 95:2,19,21	rationale (1) 85:7
79:3 82:9,16,21	Province (1)	quality (20) 10:16	95:24,26 96:4	reached (5) 91:18
83:7,18 84:1,5	166:8	26:12 38:17	100:5 105:4	92:1,7 118:3,4
85:5,6 111:15	provision (2)	39:18 54:21	106:5 107:25	read (7) 36:8 39:5
113:2 122:7	124:14 125:23	55:5 69:21,24	108:1 109:9	76:26 78:6
123:7 124:7,21	public (52) 11:10	69:26 70:10	112:5 128:9	79:22 113:14
125:1 128:24	11:20 12:19,25	96:14,18,19,20	132:10,25 133:1	151:22
129:5 131:25	13:14 14:24	97:4,9,26,26	133:5 136:1,4	ready (5) 75:15
134:11 141:13	15:12,16 18:12	107:16 138:10	138:17 139:18	79:17 86:24
150:14,20 163:3	18:18,20,22	quantities (1)	140:1,21,23	95:18 165:14
		150:5		reagents (1) 52:8
	·	·	-	*

	1	1	1	ı
really (5) 124:21	99:25 106:25	108:15	134:23 135:1	3:20,24 4:3 6:23
126:13 131:16	109:17 114:2	recording (1)	regard (5) 122:1	7:2,6,10 10:3
134:18 155:6	119:2,3,4,5	14:20	123:25 125:26	19:20 25:11,20
reason (5) 50:8	125:5 126:1	records (2) 60:12	126:5,11	31:11 76:1,22
78:22 96:10	128:15,21	154:18	regarding (23)	77:18 78:17
137:22 164:19	129:25 131:9,10	Recreation (1)	61:26 63:24	79:23 86:26
reasonable (1)	133:24 134:11	8:1	65:10 66:23	87:5 104:20
146:25	134:22 143:4	rectified (1)	67:6,9,10 68:6	111:14 112:25
reasons (1)	149:14 153:5	153:11	68:17,20 69:7	113:5,20,23
162:13	reclamation's (1)	reduce (5) 48:14	69:18 71:9,10	115:25 116:13
reassure (1) 140:8	133:9	69:22 123:21	71:23 81:1,11	116:19,22,25
recap (1) 44:4	recognition (1)	156:17 164:15	81:20 84:12	117:3,10 118:12
received (15)	134:25	reduced (4) 130:8	85:16 101:26	119:10 124:3
17:17 18:16,24	recognize (1)	146:12,14	102:22 117:15	128:1 133:2,6
19:4,8,12 20:4,8	78:13	155:19	regardless (1)	141:26 142:6,20
21:9 59:25	recognized (4)	reducing (3)	129:8	143:20 145:6
60:15 67:6,8	65:23 94:1,17	114:1 128:18	regards (8) 40:19	149:8 152:16
79:1 128:10	97:3	135:22	44:13 47:7 62:2	153:19 154:15
receiving (3)	recommendatio	reduction (8)	68:25 69:7 72:1	154:17 156:14
90:23 93:10	158:13	21:25 23:13	72:17	157:16
105:18	recommendatio	77:24 131:14	regional (1) 117:9	relatively (1)
reclaim (6) 47:16	17:20 52:2	144:11 146:1	registered (2)	50:10
59:24 60:6	recommended (5)	161:13,17	130:5 147:25	release (48) 18:9
130:12 136:14	63:26 65:20,22	refer (4) 12:18	registry (7) 18:19	23:12 38:7
159:9	65:25 70:9	13:1 117:11	18:22 25:5	44:20 54:23
reclaimed (3)	recommending	118:12	29:11,23 134:9	63:3 69:1 72:14
41:25 47:2 51:9	65:4 137:23	reference (7) 5:8	150:19	110:6 113:18
reclaiming (2)	recommends (2)	5:15,21 30:5	regular (2) 50:3	119:5 129:15,19
53:11 135:3	63:16 66:15	32:7,13,19	55:3	129:20 130:6,9
reclamation (73)	reconfirm (1)	referenced (2)	regulation (3)	131:5,9 135:16
4:17,21,25 5:2	67:13	29:10 77:16	12:23 96:21	135:17,17
11:17,23 12:4,9	reconstructed (1)	referred (2) 69:9	97:25	137:24 142:23
13:6 16:21 17:9	58:20	121:21	regulations (6)	143:5,8,15,15
21:21,25 22:15	reconvene (5)	referring (6) 51:2	37:17 39:23	143:24,25 144:9
22:16,24 23:1,6	73:20 74:13,15	88:25 93:8	54:10 93:26	145:25 146:2
23:8,9,11,14	75:13 114:25	102:23,24 110:1	119:13,15	147:23 148:26
31:19,22,25	record (17) 15:14	refers (4) 13:15	regulatory (4)	151:7,9 155:11
32:2 34:26	16:9 26:26	67:23 68:4,22	24:17 35:5	155:12,12,20
35:24 37:1,4,8	33:11 77:1	reflect (6) 22:13	108:16 119:18	156:10 159:11
37:12 45:2,11	78:14 87:17,18	22:15,17 23:10	related (5) 13:11	160:8 161:10,11
46:15,17,19	87:19 90:4	23:14 111:8	57:26 75:4 87:2	162:3,25 164:12
47:5 55:8 57:26	91:14 113:14	reflected (2) 29:7	88:9	released (1)
58:1,8,11,13	115:10 122:20	60:19	relation (2) 21:10	162:11
64:9 68:26 77:6	126:9 148:5	reflects (1) 77:16	75:25	releases (7) 94:16
77:22 96:17	149:22	refund (1) 156:21	Relations (54)	110:14,17
98:23 99:10,24	recorded (2) 16:9	refunded (2)	2:24 3:11,14,17	135:24 159:21
	•	•	<u> </u>	

159:22,23	58:8 59:21	43:22,26 63:15	requires (1) 68:9	117:9 119:7,20
releasing (3)	67:11,19 118:18	67:16 71:7 72:7	requires (1) 08.9	respect (17) 20:20
144:17 145:22	125:22	81:15 82:7	125:16 129:25	26:20 37:16
163:7	renewal/amend	101:16 109:13	reserve (1) 73:10	60:13 66:4
relieves (1)	6:24 34:25	120:1	resident (1)	70:25 71:17
147:11	116:15 132:2	requested (16)	148:10	76:3 78:24 81:5
Relocation (1)	renewed (2) 21:19	11:14 16:17	residual (1) 74:25	81:24 98:22
85:2	67:10	20:11 27:20	resloped (1) 83:26	116:2 118:18
remain (1) 89:7	repair (1) 41:5	63:9 66:7 67:13	resloping (7)	133:21 136:5
remained (1)	repairs (2) 40:23	67:15,22 71:19	61:18,19 83:11	153:21 130:3
102:6	54:19	71:19,22,26	83:13,21,22	respecting (3)
remaining (4)	repeat (1) 87:24	83:13 84:20	127:8	81:6,25 83:1
12:10 49:1 72:3	replacing (1)	124:7	resolution (9)	respective (1)
85:24	104:3		6:11 68:11 71:5	38:4
remains (3) 49:11	reply (3) 140:3	requesting (4) 19:17 61:12	76:18 78:6 79:6	responded (5)
49:25 71:9	141:14 157:17	69:4 142:13	80:15 114:5	19:22,25 59:17
remarks (3) 2:6	report (13) 17:13	requests (10) 12:3	118:4	62:20 124:14
11:6 75:1	18:2 19:14 39:6	12:7 17:17		
remedial (2)	39:24,26 42:13	19:19,23,26	resolve (3) 76:23 132:5,5	response (36) 2:21,23 17:16
\ /	·	21:19 43:21	1	-
70:12,18	44:10,13 59:9 59:10 88:18	68:12 118:22	resolved (42) 38:6 38:11 44:22	17:19,23 20:11 39:13 60:16
remediation (4)				
6:15 23:15 79:9 125:17	106:17	require (6) 64:21	59:7,22 60:9	61:16,21 62:9
	reported (3)	70:11 83:11	61:8 62:15	62:11,21 65:9
remember (1) 139:1	106:19 107:12 109:3	126:14 148:7,18	63:15,19 64:4	65:10,24 67:23
		required (20)	64:23 65:14	68:10 69:8 70:2
remind (2) 16:1	reporter (4) 11:1	19:11 21:1	66:1 67:5,20	70:13 82:6 83:6
115:1	14:21 16:4	30:14 42:19	71:3,8,8,22 72:2	91:1 98:20
reminded (1) 131:15	166:15	43:13 45:22	80:26 81:6,10	104:13,19
	reporting (2)	48:24 52:10	81:19,25 82:3	121:17 125:19
removal (7) 46:24	14:22 22:19	56:23 61:20	83:3 84:14	137:3 145:7
48:25 51:21,26 52:3,4 93:4	reports (4) 22:21	63:24 65:7	85:18 113:16,20	150:13 152:17
/	68:21 106:19	67:17,19 68:17	113:22 122:3	154:14 156:4
removed (15)	107:3	69:2 70:19	125:3 131:19,21	161:7
41:2 46:7 48:26	represent (1) 43:24	97:10 127:12	131:22,26 132:3	responses (2)
49:1,3 50:12	··· ·= ·	149:18	132:4 137:8	118:1 138:9
51:4,18 52:7,8	representative (1)	requirement (8)	resolves (4) 83:1	responsibility (1)
52:10,13,13,20	161:9	21:24 22:25	84:12 85:16	118:17
106:26	representatives	60:20 67:22	125:2	responsible (2)
renew (2) 11:13	3:4 23:23 24:7	95:14 97:23	resource (3) 10:8	12:23 106:20
12:2	25:9 26:18	98:1 103:12	26:1 117:22	responsive (1)
renewal (20) 1:9	27:11 106:6	requirements (resources (16)	81:14
4:12 13:2,12	representing (2)	42:23 56:2 65:4	4:13 9:6,12 10:4	rest (1) 35:18
16:16 17:1,8	25:10,25	66:6 67:26 94:2	24:1,11 25:19	restate (1) 131:8
19:5 23:17	request (19) 27:3	98:9 102:14,25	31:17 36:26	restated (1) 122:2
31:16 35:21	42:11,15,25	103:1,24 105:20	37:7 57:24	restored (2)
37:10 42:20,22	43:6,10,11,14	150:17 152:1	72:21 108:5	153:23 154:14

	Ì	Ì	İ	I
restricted (1)	12:22 13:19	23:2 30:1 32:20	satisfied (5) 62:9	134:1 164:2
74:17	34:17 38:26	46:11,11,22	122:12,12	section (11) 13:8
resubmitted (1)	40:17 47:10,17	48:5 51:2,7,11	123:24 148:9	13:9 27:25
125:21	47:19,26 49:11	51:16 60:22	satisfy (2) 72:7	97:19,23 98:11
result (1) 137:15	50:3,19 51:15	61:5 62:6 70:8,9	110:14	102:5,23 103:4
resulted (1) 68:11	57:19,20 104:26	72:6,9 82:10	saying (12) 90:3	103:7 140:3
results (6) 65:7	110:4 114:20	99:4 119:2	130:11 135:16	sections (3) 62:1
70:7 92:3,9	117:5 124:9	121:1,3,5,7,9,13	142:26 143:2	85:9 122:6
93:19 161:19	130:23 154:4,22	121:15,18,23,25	144:2,5 146:6	secured (1)
resume (1) 30:21	156:18 160:13	122:4,5,7,24	148:10 151:6	137:16
Resumé (8) 5:25	160:20 163:23	124:6	155:7 159:18	security (72) 6:18
6:1,4,7 32:22,24	164:1,5,14,16	rock/acid (1)	says (1) 80:20	17:10 18:9 23:9
32:26 33:2	right-hand (7)	121:9	scenario (8) 64:12	23:12,13 38:6,8
retain (5) 131:3	36:16 40:16	role (1) 108:12	64:19 88:15,16	44:19,19,20
137:23 142:21	41:7,14 49:19	room (1) 15:5	88:19,20,21	58:3 59:23 60:7
143:5 145:10	53:20 110:12	rotational (1)	89:4	63:3 68:26 69:2
return (6) 58:3	Rights (4) 13:4,10	58:22	scenarios (8) 64:6	69:11 71:10,12
71:24 73:23	21:2 119:13	roughly (2) 51:12	64:11,14,22	71:24,24,25
135:9,12 137:14	rip (1) 126:20	158:11	87:20 88:1,4,11	72:15 77:16,24
returned (1)	risk (19) 18:1,8	round (1) 164:2	schedule (15)	79:11 80:24
137:16	23:4 38:22	rundown (1)	6:15 65:21	85:25 92:14
review (24) 12:25	59:10,20 64:22	120:23	72:18 73:15	98:22 99:14
13:22 17:19	88:5 89:2,2	running (1)	77:4,5,9 79:9	109:14 110:1,3
19:11,18,22	107:20,22 125:6	153:26	91:9 101:17	110:7 113:17,19
20:3,7,8 37:12	125:7,10,11,17	runoff (2) 41:9	103:7,8 109:24	113:26 114:6,13
37:13 42:21	125:19 146:19	46:14	111:8 160:13	119:3 128:16
43:22 60:11	risks (6) 64:19,19	runoffs (1) 123:13	scheduled (1)	129:15,18,19
83:10 102:2	85:4 125:15	Ruptash (6) 2:9	74:3	130:9 131:9,21
105:9,12 119:24	139:10,11	9:17 24:24 34:1	schedules (1)	131:25 134:24
120:3,7 124:15	road (11) 36:16	34:1,7	104:4	135:16,17,18
127:20 147:1	36:20 45:6		scheduling (1)	137:12,23,24
reviewed (5) 40:1	53:17 55:18,20	S	23:7	142:13,24
60:17 103:19	56:17 58:11,15	S (3) 8:13 9:11	scientific (2)	143:15,17,24
110:24 121:5	66:19 146:18	10:8	84:22,26	144:9 147:24
reviewers (1) 66:2	roads (7) 43:15	S-A-R-A (1)	scope (1) 16:18	149:1 153:3,5
reviewing (4)	43:16 53:12,12	33:21	screen (3) 36:10	155:10,11,20
18:21,24 21:12	55:18 57:9	safety (1) 85:4	67:3 80:14	156:8 160:7
122:22	66:17	samples (2) 62:10	seal (1) 47:21	see (18) 31:3
revised (3) 62:23	roadside (1)	122:13	season (5) 36:13	36:13 47:25
98:24 124:17	66:15	sampling (4) 70:9	49:14 58:2,6	49:24 50:15
revision (1)	roadways (1)	92:23 107:17	67:1	55:12,22 57:8
157:23	60:13	121:19	second (12) 15:11	73:17 78:22
Richard (4) 14:5	robust (1) 85:8	Sara (9) 2:8 6:7	59:1 67:21 77:4	79:3 92:3,8
18:20,25 21:14	rock (45) 5:22	24:26 30:22	88:18 93:14	93:24 109:1,25
riding (1) 89:18	17:22 18:2 22:2	33:2,21 34:6	98:24 122:5	120:15 150:2
right (32) 11:8	22:6,7,7,9,10	87:22 88:13	125:4 126:1	seeing (2) 27:17
		satellite (1) 41:17		
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

78:18	106:9,11	side (12) 36:16	122:24 123:9,13	small (7) 45:15,17
seeking (2) 11:13	seven-year (2)	40:17 41:14	124:25,25	45:26 49:10
37:17	42:12 67:12	42:3 48:13	124.23,23	50:4 55:14
II - · · ·		49:19 53:18,20	129:13 130:2,13	147:23
seen (4) 106:13,17 160:12 163:16	sewage (12) 36:15	· · · · · · · · · · · · · · · · · · ·		
	39:17 40:14,14	53:21 110:3,4 110:12	130:13,18 131:4	snacks (1) 15:24
Seep (1) 93:11	46:10 53:19,22 54:24 57:8		134:23 135:3	soil (2) 22:4 51:10
seepage (11) 22:9		sight (1) 28:23	136:12,14,19,25	soils (4) 46:23
22:10 60:24	100:8,9,17	sign (3) 15:13	137:19 138:10	51:20 52:11,12
62:5,7,9 70:16	shaft (1) 52:24	163:2,15	139:9 153:2	solid (1) 48:22
70:19 122:6,13	shallow (1)	sign-off (1) 148:8	162:25	solvents (1) 52:6
123:1	121:23	signed (3) 51:25	site-specific (2)	somebody (1)
seepages (2)	shape (1) 123:3	60:2 99:19	125:14,16	34:16
122:11 123:18	shaping (1)	significant (6)	sits (2) 11:24	someone's (1)
seeps (2) 61:5	122:25	134:22 135:2,11	147:14	90:5
70:10	sheet (1) 15:13	146:17,17 160:2	situated (2) 19:9	soon (2) 91:7
sees (1) 130:19	shop (1) 52:6	significantly (1)	28:23	152:14
selected (3) 18:8	shops (2) 52:26	121:14	situation (2)	sorry (30) 13:25
38:18 63:21	56:23	silent (1) 16:2	50:11 108:13	13:25,26 14:3
send (1) 90:13	short (8) 19:22	similar (1) 48:7	six (4) 71:7 90:20	14:11,12 15:1
senior (6) 9:13,15	20:11 28:5	simplify (1)	95:11,13	18:6 20:4 28:16
10:14 24:26	36:23 56:1	118:24	six-month (1)	28:20 71:11
25:2 26:9	132:16 136:4	simultaneous (1)	90:9	73:8 82:8 85:19
sense (1) 136:15	157:20	14:10	skill (1) 166:7	86:18 87:25
sentence (1) 87:24	short-term (2)	site (95) 12:8	skip (1) 120:23	88:10,17 98:3
separately (2)	46:26 54:1	16:24 18:19	sleepy (1) 120:13	109:19 115:3
59:19 103:23	shorthand (2)	21:11,13 22:13	slide (5) 45:3	122:19 126:8,10
series (1) 127:2	166:5,6	22:18 23:15	72:20 80:19	128:4 150:16
seriously (1)	shortly (2) 29:14	35:1,23 36:1,9	120:17 131:8	151:14 154:7
108:12	77:14	36:15,17,24	slide's (1) 39:5	157:14
services (5) 8:14	show (5) 45:25	38:23 40:22	slides (2) 36:5	sort (4) 55:15
10:18 14:2	50:9 55:7	41:17,21,26	37:20	126:25 134:12
26:13 74:11	120:17 164:18	42:3,23 45:6,25	slightly (3) 48:14	161:9
session (13) 2:5	showed (1) 47:23	46:6,23,26 47:2	50:25 126:22	sound (3) 11:3
2:12 8:4 20:25	showing (8) 39:10	47:4,5 48:6,7	slope (7) 41:6,10	74:9,17
21:6,8 23:18	40:12 48:1	51:3,5,8 52:5,7	48:14 50:25	source (3) 53:14
27:9 74:3	49:25 50:16,19	52:9,19,22 53:6	61:18 63:25	62:5,8
120:20 151:23	51:13,16	53:8,12,17,18	126:21	sources (5) 43:12
165:5,8	shown (2) 91:2	53:21 55:4	slopes (4) 48:12	43:14,20 66:14
sessions (1) 15:17	163:15	56:16,19,21,23	48:15 82:18	66:18
set (6) 12:16 28:9	shows (5) 38:24	57:2,3,4,10,12	127:6	south (1) 11:25
44:16 74:16	38:26 50:14	57:22 58:15	sloughed (1)	southeast (1)
85:4 92:22	96:25,26	62:13 66:20	164:19	36:18
Settlement (2)	shrub (1) 55:14	82:5 94:11 97:9	slower (1) 133:20	southwest (1)
12:21,24	sic (5) 63:18	101:21 108:15	slowly (1) 16:7	49:10
seven (5) 11:14	97:11 120:12	109:2 120:19,22	sludge (2) 100:9	spaces (1) 37:22
21:20 103:14	142:18 163:9	121:22 122:24	100:19	speak (21) 15:7
	I	I	I	I

16:6,6 26:17,22	50:26 61:11,18	102:26	110:5 153:10	126:3 159:2
26:23 27:3,13	63:26 64:1	standing (3)	155:3	structured (1)
76:8 90:4	69:26 70:5	55:22 135:13,15	statements (1)	159:10
104:24 106:4	80:21 83:9,10	standpipe (1)	140:19	structures (5)
118:5 119:4	91:5,6,17,18	38:16	status (19) 17:13	18:8 48:21
124:1 129:7	92:1,7 122:10	standpipes (1)	19:14 22:13	71:16 83:8,26
130:10 133:20	122:10 123:14	63:13	36:1 37:17	struggles (1)
140:2,12 160:3	126:6,12,15	stands (1) 153:5	41:16 43:24	158:23
speakers (1)	127:4,9,21	Stantec (29) 5:6	45:5 63:12 68:6	studies (2) 48:11
15:10	131:18 163:23	5:13 6:2,5,8	81:9,19 82:2,26	55:2
speaking (4)	163:23 164:16	9:12,14,15	84:11 85:15	studies/analysis
28:11 34:21	stabilization (2)	24:25 29:18	97:3,22 143:16	23:2
76:25 80:5	61:14 163:13	30:5 32:5,11,25	step (1) 97:3	study (3) 39:22,26
specific (6) 61:13	stabilize (2)	33:1,3 38:20	Stephanie (7)	54:9
136:13,16	126:18,20	39:6 72:8 87:23	13:25,25,26	stuff (1) 110:12
145:15 151:24	stabilized (1)	88:13 91:15	73:7,25 96:3,8	subject (8) 29:19
161:24	131:4	92:2 93:17 94:6	steps (5) 19:3	29:26 74:6
specifically (3)	stabilizes (1)	94:20 97:7	21:10 84:21,25	105:19 111:22
65:2 83:20	164:3	100:16 101:15	85:5	150:11 156:9
151:20	stable (8) 85:10	start (11) 25:11	stewardship (1)	157:23
specifications (1)	123:3,4 126:18	37:18 58:10	108:12	submission (30)
61:3	137:19 138:10	79:23 86:26	stick (3) 78:2,25	17:8 20:21
specifics (1) 151:3	163:21,22	89:15 92:8	81:19	42:19 43:26
spell (2) 33:10	staff (27) 2:15,19	103:10 118:16	stood (1) 113:16	62:22 63:2,14
115:9	3:1,5,16 8:11	132:11 156:22	stop (2) 160:23	63:23 64:16
Spencer (2) 25:26	13:21 26:24	started (4) 30:25	163:20	65:2,18,26
117:21	58:22 72:24	57:6 106:12	Stope (1) 40:21	66:13 67:15,24
spilled (1) 160:17	81:4,23 86:7	120:1	stopes (2) 47:16	68:2,10 69:4,8
spillway (3) 93:5	95:23,26 96:4	starting (5) 27:9	51:6	69:14,18 70:13
93:7 96:25	97:11 100:23	73:18 74:10	storage (6) 22:7	70:21 71:23
spillways (4) 49:4	102:21 105:4,26	96:9 158:9	54:18 60:23	84:16 113:1,18
93:18 94:9	102.21 103.4,20	starts (1) 79:24	72:9 82:10	120:9 121:11
96:15	142:3,5 148:21		122:5	152:12
	· /	state (15) 16:6 33:10 106:4		
spite (1) 147:15	stage (3) 12:17 129:4 155:11		storm-return (1)	submissions (15)
spread (1) 92:23		115:9 117:25	84:6	2:13 3:22 4:1
spreadsheet (7)	stages (1) 11:17	122:18 124:1	storm-water (1)	18:16 21:9 38:9
142:25 143:7,23	stakeholder (1)	126:7 128:2	60:24	59:4 76:12 91:2
143:23 145:23	89:21	129:24 133:18	straightforwar	118:1 119:25
147:6 162:9	stakeholders (2)	148:4 149:21	162:4,12,21	120:2,7 151:16
spring (2) 54:18	64:25 125:24	152:20 156:24	stressing (1)	157:1
54:25	stamp (2) 130:4	stated (8) 99:2,5	120:12	submit (4) 90:11
square (2) 51:11	131:11	113:15 132:3	stringent (1)	95:11,14 110:26
51:12	stamped (1)	135:19 138:11	148:7	submitted (26)
stability (34) 5:16	148:18	143:17 144:24	structure (6)	11:11 17:2
23:6 29:20	stand (1) 12:12	statement (5)	43:23 57:19	27:12 37:1,9
32:14 48:14	standard (1)	36:6 105:25	61:23 84:2	38:2 39:24 40:2
<u> </u>				

	<u> </u>	<u> </u>	1	1
44:15 45:2	55:7 58:22	Sweden (1) 108:9	107:4,11,12,14	TCA (8) 22:10
59:11,13,20	101:18,21	sworn (6) 3:9	107:21 119:1	40:19 59:19
60:14 68:5,14	136:17	28:18 33:8	120:26 122:4	63:16 64:20
72:5,16 81:8	summer's (2)	115:18,19,20	124:8,9,10,22	66:26 69:24
82:1 98:24	38:23 40:12	syphon (2) 49:2	125:8,20 131:19	83:8
102:25 104:7	supplement (1)	93:4	139:3 159:5,5,6	tea (1) 15:23
110:24 112:13	84:2	syphoned (2)	159:7 160:17	team (3) 24:5,14
118:20	supplemented (1)	49:16 50:4	163:12,12	113:6
submitting (1)	17:11	syphoning (2)	take (41) 26:19	technical (48) 5:5
91:20	supplies (1) 56:20	40:6,16	27:17,23 28:5	5:12,18 8:14,19
subsequently (1)	supply (2) 54:3,3	syphons (3) 40:13	28:12 34:22	13:22 14:1,7
21:23	support (9) 10:17	50:14,16	46:3 48:25 55:2	17:19,22,24
subsidiary (1)	14:16 29:3	system (3) 138:20	55:6 56:3 57:16	18:14 20:3,7,8
36:26	30:14 34:26	163:22 164:6	58:13,25 72:23	20:14,16 21:18
substantive (1)	82:7 85:7 132:1	systems (1) 51:22	73:8 74:9 75:2,6	24:16 29:18,22
160:26	137:4		75:18 78:23	30:3 32:4,10,16
sufficient (3)	supporting (12)	<u>T</u>	91:12 93:13	37:12,21,24
69:25 97:9	5:8,15,21 17:8	T (1) 8:12	95:22 97:5	38:9,13 42:12
164:8	24:14 29:20,26	T-O-N-G (1)	100:13 101:12	43:1 44:4,5,8
suggest (3) 73:10	30:5 32:7,13,19	33:24	101:13 102:16	61:1 118:8,10
111:11 125:9	117:23	table (11) 2:1	108:11 130:23	118:23,25
suggested (2)	supposed (1)	15:4,13 21:14	130:24 132:21	119:22,26 120:3
65:16 121:17	132:25	70:22,23 91:9	137:3 142:2	120:5 123:5
suggesting (2)	sure (14) 15:8,15	103:20 104:4	153:17,22,25	152:4 154:5
137:22 164:10	16:8 34:15	105:18 111:2	165:7,8,13	162:14
sulfur (1) 121:23	54:17 74:8 86:1	tailing (4) 22:6	taken (7) 8:1	Technician (1)
sulphate (1)	90:2,3 91:13	54:15 99:5	22:17 52:20	11:3
121:24	98:5 148:14	124:6	55:8 120:18	Teleconference
summaries (2)	158:18 162:14	tailings (80) 17:23	134:22 166:5	10:9,11,19
17:14 19:12	surface (12) 13:4	18:4 36:16 39:8	takes (1) 45:21	telephones (1)
summarized (1)	13:10 21:2 22:4	39:9 40:5,9,22	talk (4) 89:20	154:3
72:4	41:22 47:11,14	43:18,20 45:6,7	108:19 111:13	temporary (1)
summary (26)	61:22 70:15	45:12,25 46:2	111:16	22:14
4:16,20,24 5:1	106:12 119:12	46:21 48:10,17	talked (3) 123:17	ten (4) 43:7 53:7,7
6:10 7:1,5,9	123:13	48:21,22,24	136:15 146:24	92:23
17:6 29:15	surprises (1)	49:2,7,13,16,18	talking (4) 109:24	ten-minute (1)
31:18,21,24	145:12	49:21,25 50:12	139:6 159:16	114:22
32:1 69:16 71:4	surprising (1)	53:17 54:5,13 54:15 57:13,14	163:22	tentative (2)
72:20 76:17	55:16	57:22 59:15	talks (1) 68:16	20:23 74:19
79:5 80:14,24	survey (3) 18:4	60:13 62:17,19	tank (5) 36:15	Teresa (31) 14:7
99:8 116:5,18	38:18 63:21	66:21,23 69:21	42:3 51:24,24	27:21 28:15
116:21,24	surveys (2) 38:14	80:22 83:7 85:1	52:26	33:4 34:3,8 73:8
summer (11)	54:12	85:10,22 88:12	tanks (1) 51:23	73:12,13,19,22
36:12 48:11	swale (2) 40:24	88:22,25 89:1	target (2) 125:14	73:24,26 75:17
49:15 50:24	41:8	96:12 101:8	125:16	75:19,20 76:10
51:23 54:12	swear (1) 115:3	106:13,14,18	task (1) 129:26	78:2,10,11
		100.13,17,10		
<u> </u>				

79:16 80:2	75:20 76:9,10	150:13,24,25	134:12,16	time (52) 12:1
81:18 115:6,16	78:4,8,9,11	151:13 152:8,17	135:10 136:6	14:2 26:21
115:22 116:6,11	79:14,16 80:9	152:25 153:14	137:21,26	30:24 36:24
153:12,14	80:10,11 85:19	153:24,25	138:26 139:1,17	42:19,20 50:19
154:10	86:3,4,10,15,20	154:10 155:22	139:18,20,22	57:2,3 58:19
term (17) 21:26	86:22,23 87:4,9	155:25 156:4,12	145:17,21 146:6	67:17 76:24
42:15,19 43:25	87:10,15 88:3	157:17,25 161:3	146:21,25 147:3	77:10 80:17
58:24 61:26	89:8,12,25	161:6,21 164:24	148:21 149:24	87:7 90:12
62:5,8 67:11,12	90:17,19 91:10	164:25 165:1,14	150:10 151:1	91:24,26 94:4
67:15,16 70:1	91:21,23 92:10	thanks (13) 24:19	152:6,6,7 154:3	96:22 97:2,18
91:25 111:8	92:25 93:1,6,21	35:13 56:4 73:3	154:22,24,25	97:21 102:13,14
145:14 146:21	93:23 94:12,18	73:9 88:14	158:12 160:1,5	111:21 113:7
terminology (1)	94:25 95:1,4,6	91:12 92:19	160:20,23 161:1	117:25 123:4
52:23	95:17 96:2,7,7	95:3 100:14	162:25 165:2,2	124:16 125:8
terms (22) 11:14	97:14,16 98:2	104:1 152:22	thinking (1)	128:11,13
21:19 22:11	98:17,20 99:11	154:12	158:26	129:14,24
23:13 43:22	100:11,22,25	thawed (1) 39:7	third (5) 77:13	131:24 134:19
55:3 111:2	101:9,10,22,25	thermal (2) 64:12	130:12,20	135:15 136:12
122:17,23 123:6	102:16,19	64:14	158:14 161:11	136:23 138:25
123:8 127:3	103:25 104:10	They'd (1) 159:19	third-party (1)	140:1,16 141:13
131:11 135:12	104:22 105:1,2	thin (1) 39:8	147:26	143:13 154:24
137:11 139:7,8	105:7,17,21,22	thing (6) 55:15	Thirdly (1) 15:16	157:26 158:1,4
143:2,3 144:1	105:26 107:6,24	85:20 98:20	thought (7) 27:23	165:11,11
147:15 160:19	108:4 109:4,5	140:11 151:7	28:19 77:7,25	timeline (1) 20:24
territorial (2)	109:12,20	152:9	91:7 151:19	timelines (1)
98:8 119:15	111:10,24,25,26	things (18) 41:18	157:4	20:21
territory (1)	112:20,22 114:8	42:9 74:24 96:9	thousand (5)	times (1) 41:19
92:13	114:9,20,23	113:19 129:6	57:23 85:26	timing (9) 23:7
test (4) 38:15,26	115:8,13,16,22	137:20 143:7	142:12 161:26	69:19 89:14
54:13 63:11	116:6,8,11	147:13 148:18	162:10	93:3 95:9
testing (2) 11:8	117:5,13 123:26	148:19,22	three (11) 39:25	110:20 113:3,24
122:1	124:2 127:24	159:11 160:2,22	76:15 78:5	165:4
text (1) 65:25	132:7,8,17,20	162:4,22 163:17	80:19,20 88:21	timing/approva
thank (218) 23:24	133:4,12,13,17	think (67) 28:15	105:18 119:1	22:22
24:1,19,23 25:3	133:22 134:3	36:10 41:18	131:17 161:9,9	titled (1) 76:17
25:6,7,16,16	135:5,6,25,26	43:4 56:26	thresholds (3)	today (18) 13:17
26:3,4,6,14	136:3,26 137:1	75:12 86:24	69:20 70:2,11	14:24 16:12,15
27:21 28:1,2,13	139:13,16	89:18 90:20	throw (1) 28:24	24:9 25:10
28:22,24 30:26	140:21,23 141:7	95:10,18 97:19	Thursday (1)	26:11 29:4 33:8
31:1,7,9,13 33:4	141:8,11,15,16	98:5 101:4	74:24	35:15 108:11
33:16,20,22,23	141:20,23 142:8	106:1 109:6	tie (1) 150:6	112:11 113:3,6
34:3,8,10,12,18	143:11,19	111:1,12,16	tied (3) 110:19	113:13 117:18
34:20,23 35:2	144:14,14 145:5	112:10,14,24	126:26 145:22	161:20 165:11
35:11,12 56:10	147:19,21 148:5	116:4 125:2	ties (1) 128:26	today's (2) 11:20
72:23 73:4,25	148:24,25 149:3	127:7 130:13,20	tight (1) 165:12	76:18
73:25 75:1,2,6	149:4,4,10,21	131:19,20	till (1) 73:11	toe (1) 50:22
[

	1	1	I	I
told (1) 151:24	58:18	76:19	understood (1)	upper-left (1)
tomorrow (7)	trappers (1)	type (12) 1:9	148:14	38:24
73:17,20,23	106:20	11:11 13:2,13	undertaken (1)	upwards (1) 53:7
74:4,6,10,13	travel (1) 66:19	16:16,26 19:4	70:4	URS (1) 121:19
Tong (15) 2:8 5:6	treat (5) 49:15	34:25 102:12	undertaking (1)	use (22) 11:15
5:13 6:4 9:13	97:12 107:15,15	139:25 147:3	11:17	12:3,5,7,23 13:5
25:2 29:19 30:4	138:12	161:16	unfortunate (1)	16:7,19 43:14
30:10 32:5,11	treating (2) 94:9	types (1) 22:2	113:24	43:16,16 51:24
32:26 33:23,24	107:17	typical (5) 60:23	unfortunately (2)	64:6 66:4,14,15
34:6	treatment (14)	61:2 82:19 84:2	58:2 77:10	66:16 67:23
tonight (4) 27:8	45:20 46:26	85:9	unit (1) 60:5	121:12 125:15
165:5,8,14	54:1,5,23 94:7	typo (3) 67:3	units (2) 43:2	145:13 159:14
tools (1) 56:18	97:20 138:22,24	85:21 86:1	66:11	useful (4) 77:7,26
Toomasie (2) 8:7	146:15 160:15		unknown (1)	90:21 146:8
11:18	160:16 164:3,7	U	164:4	utilize (1) 43:19
top (1) 57:7	tree (1) 62:16	unable (1) 114:2	unknowns (13)	utmost (1) 108:23
topography (1)	Tribunal (4) 13:4	unaware (1)	130:24 137:18	
60:24	13:10 21:2	58:17	138:1,7,24	V
total (8) 23:10	119:13	uncertainties (2)	139:8,25 145:11	valid (2) 89:7
42:25 51:9	trigger (1) 69:22	129:16 159:15	145:14 146:11	121:20
92:23 98:25	trouble (1) 35:16	uncomfortable	147:15,17,18	validated (1)
101:3 142:11	try (2) 143:22	146:22,24	unnecessary (1)	144:10
162:8	158:24	156:19,23	66:19	validation (7)
totally (1) 104:3	trying (7) 110:18	uncovered (1)	unsecured (5)	130:3 131:11
touched (1) 131:6	129:22 132:4	39:9	153:1,6,8 155:4	135:21 147:25
track (1) 108:12	154:17 156:24	undercover (1)	156:6	155:14,15,15
tradition (1)	162:14,20	123:2	upcoming (1)	value (3) 77:21
26:20	turn (7) 16:2	underground (5)	49:14	162:7,8
transcribed (1)	23:19 27:14	46:21 47:7 57:5	update (7) 20:26	values (1) 108:21
166:6	35:9 76:6 89:10	57:6 106:11	21:5 23:9 65:22	various (2) 12:8
transcript (4) 4:5	114:26	underlie (1)	113:2 122:13	118:4
29:8 166:1,4	turned (1) 15:8	108:21	140:17	vegetation (3)
transfer (3) 40:4	twice (1) 99:4	undersecured (8)	updated (19) 6:14	55:13,20,23
40:6 45:19	two (29) 11:21	129:13 130:20	11:15 21:23	verification (2)
translated (4)	12:5 14:9 21:21	144:6 155:4	23:10 58:12	110:5 145:26
19:13 37:20,20	36:3,23 38:18	156:5,9,11,16	59:14,23 62:10	verified (1) 146:9
123:8	43:6 45:7 47:10	understand (7)	62:26 71:9,12	verify (3) 115:3
translations (1)	55:18 57:23	110:18 126:14	72:18 73:14	153:18 163:11
37:23	63:21 78:14,15	126:24 127:13	79:8 81:17 99:6	version (3) 92:16
Translator (2)	80:7,20 83:14	151:10 158:24	113:17 121:21	99:18 158:20
10:23,25	83:25 91:5	159:2	134:14	vice (1) 24:24
transport (1)	98:26 108:8	understanding	Updates (1) 22:21	Vice-Chair (1)
147:9	132:3 133:9,15	33:8 75:22	updating (1) 86:5	8:8
transportation	136:6 138:23	79:25 96:11,16	upper (7) 40:12	view (7) 41:17
56:18	140:19 154:19	96:19 110:16	41:5 46:10 50:1	85:7 126:25
transported (1)	two-and-a-half	122:8 139:10	53:19,22 100:8	127:22,23
		153:16 160:17		136:11 148:13
	l	l	I	I

visible (2) 41:13	warehouse (1)	40:7,9,16,20,20	160:15,16	27:10 28:22
70:10	52:25	41:1,3,14 42:23	163:20 164:2,7	77:25 86:24
visual (2) 162:2	warm (1) 11:12	43:10,12,12,14	water's (4) 48:17	98:5 101:12
162:24	washrooms (1)	43:14,15,16,17	50:3,11 55:24	107:3,17 112:12
volume (7) 1:17	15:20	43:19 46:3,26	water-collectio	114:12 118:25
54:17,18 101:1	wasn't (3) 134:13	47:23 48:18,20	45:18	118:26 122:11
101:3,7 121:7	143:8 157:9	49:12 50:3,9,17	water-containi	122:12 123:24
VP (2) 9:17 10:7	waste (53) 5:22	50:18,19,21,22	45:9,15	127:7,10,21
	11:16 13:5	53:24 54:1,3,4,5	water-monitori	129:21,21,24
W	16:23 17:22	54:15,16,20	54:22	130:20 131:6,22
W-I-A-T-Z-K	18:2 22:1,1,2,2	55:5,6,22 60:14	water-quality (1)	131:24 132:4,5
115:15	22:6,6,9,10 30:1	62:18 66:4,4,5	70:6	135:13,14,15,16
W-I-L-K-I-N-S	32:20 46:11	66:14,18,26	water-retaining	135:16 137:22
33:22	48:5 51:14,16	67:4,14,23,25	46:1	139:6 140:2
wait (2) 16:5	52:4,5,21 53:11	68:4,19,20	water-use (5)	142:26 143:2
26:24	53:26 60:22,22	69:10,20,24	21:24 42:26	144:2,4 145:21
waiting (1)	61:5 62:6 66:23	70:10,15 72:1	66:5 67:21,25	146:2,4,24
114:12	68:3 70:8 72:6,9	74:1 75:21	waters (7) 13:3,9	148:21 150:3,11
walk (3) 73:22	82:10 101:1	78:12 79:12	21:2 45:19	151:2 154:22
78:2 161:15	108:25 119:1	80:3,22 81:9	49:15 119:12,16	155:7,9 156:16
Walker (14)	120:26 121:3,5	82:2,18,25	Watson (2) 10:18	156:19,21 158:1
10:14 26:6,9	121:7,9,13,15	83:25 84:10,18	26:13	158:1,15 159:16
87:15,16,26	121:18,23,25	85:14 86:7,9	wave (1) 13:24	159:16 162:20
88:7,7,23,23	122:4,5,7,24	95:14,26 96:3,8	way (18) 43:18	163:5,7,19,22
89:8,9 141:20	124:6	96:14,17,19	53:22 55:14	163:24 164:8,10
141:21	waste-manage	97:4,9,12,17,26	108:25 130:19	165:2,2
want (25) 27:5	12:9	99:22 100:4,23	130:21 143:22	we've (34) 35:25
28:24 79:17	wastes (2) 12:8	100:24 101:18	148:16 154:25	35:25 36:5,9
95:5 106:24	52:6	101:24 103:5	155:1,5 156:15	37:20 41:16
109:1 113:19	water (209) 1:3,9	104:5,9,13,19	158:25 159:10	49:8 72:4
114:6,14 118:6	2:15,19,21,23	105:4,6,18,26	160:25 162:18	110:24 113:21
129:7,24 130:17	3:1,5,7,16,19,23	107:15,16,23	162:18 163:14	120:10 127:2
132:15 133:7,21	4:2 6:19,25 8:6	109:6,9,11,26	ways (1) 155:15	128:10 129:8
136:22 139:19	8:11 9:11 10:4	110:2,15 111:5	we'll (28) 16:15	134:2 135:19
140:13 142:21	10:16 11:11,14	112:5 115:17,23	25:11 27:10	136:15 139:7
144:5,8 153:3	11:16,19,21	116:7,15 117:8	31:10 56:3	140:11 142:23
153:17 164:11	12:2,4,15,17	117:13,16	58:26 75:2,4,6	146:23 147:3,16
wanted (8) 30:19	13:2,5 16:16,20	119:20,21,26	78:1 87:7,11	148:15 149:15
78:13 86:1	16:26 17:2,2	124:10 131:20	101:12 111:26	149:24 150:2
89:20 116:3	18:9 19:4 22:8,9	134:9,20 138:10	114:20 118:4	151:1,4,8,25
124:21 140:8	22:12 25:19	138:19,22,23	119:4 120:24	158:15 159:20
148:13	26:12 27:22	142:3,5,7	132:5,21 136:22	159:21
wanting (3) 26:23	33:5 34:4,9,25	143:12 144:15	140:2 149:5	week (1) 35:18
103:3 126:23	35:20 37:2	146:15 149:7	154:14 163:12	welcome (3)
wants (5) 28:3	38:16,16 39:16	152:15 153:15	163:26 165:4,5	11:10 12:15
130:16 139:11	39:18 40:4,4,6,7	154:11 157:15	we're (69) 26:6	15:25
144:8 155:21				
	•		-	-

			27.2.22.4.12.25	22.10.24.20.15
went (2) 110:13	witnesses (5)	workers (1) 56:22	37:3 39:4,12,25	32:19,24 38:15
118:23	27:26 33:7,10	working (11)	42:15,18 43:6,7	39:2,14 42:18
weren't (2) 77:11	115:9,18	53:22 77:25	48:23 55:3,9	63:10 91:4,7,24
158:18	wonder (1)	106:12 113:4,5	67:16 91:3,9,25	10,500 (2) 85:23
west (2) 40:20	106:18	131:6 136:22	92:15 103:14	85:25
41:22	wondering (8)	152:13 154:3	106:9,11 134:18	104 (2) 2:21,23
whilst (1) 102:14	100:8 109:15,23	159:21 160:25	years' (1) 11:15	105 (1) 3:1
wholly (1) 36:25	110:6,7 111:7	works (3) 93:3	Yellowknife (1)	106 (1) 3:3
Wiatzka (34) 3:9	124:11 161:14	138:14 146:20	14:15	109 (1) 3:5
10:7 25:24	Word (1) 76:17	worry (1) 121:2	yesterday (5)	10th (7) 29:19,25
115:14,14,20	wording (5) 39:5	worst (1) 109:2	35:16 44:24	80:18 82:6,11
117:20 122:16	76:3 81:17	wouldn't (3)	62:25 118:2	83:16 84:3
122:19,21,21	104:18 111:15	98:14 102:7	124:19	11 (6) 2:6 6:4 29:1
126:5,8,10,10	work (68) 38:24	143:1	young (1) 107:2	30:11 32:26
133:19,19,23,23	38:24 40:12,19	wrap (1) 91:8		63:20
138:2,2 145:17	40:22 41:4	wrestling (1)	$\frac{\mathbf{Z}}{\mathbf{Z}}$	112 (1) 3:7
148:2,3,6	43:19 50:24	159:8	zero (1) 160:21	115 (1) 3:9
149:23,23	51:22,23 55:8	wrong (2) 113:15	zone (8) 40:20	116 (4) 6:22 7:1,5
150:26,26	57:26 58:5 60:3	139:4	41:22,23,24	7:9
154:25 158:6,6	60:20 61:14		47:19,25 48:1,8	117 (1) 3:11
161:22,22	63:5 64:17	X	zoomed-in (1)	12 (9) 6:7 11:15
wildlife (2)	99:21 106:12	Y	83:20	21:23 33:2
108:13 109:2	110:20 113:7		<u> </u>	42:15 53:11
Wilkins (17) 2:8	122:8 126:15	yeah (23) 28:21	0	63:20 64:17
6:8 9:11 24:26	128:26 129:25	28:21 89:26	1	67:16
30:22 33:3,20	130:1,1,3,13,15	90:2,6 101:23	1 (40) 1:17 4:11	12-year (2) 42:18
33:21,21 34:6	130:23 131:10	106:2 108:2	11:8,8 15:5 19:8	103:14
87:22,22 88:3	134:17,18,22,22	111:9,26 116:4	31:14 38:14	125,000 (2) 66:25
88:13,13 89:1	134:25,26 135:2	128:5,6 131:15	39:1,4 40:7,8,16	101:5
89:23	135:9,12,19,20	131:16 138:3	40:21 41:2 45:9	13 (10) 6:10,16
willing (1) 107:26	135:21 136:7,17	141:20 153:25	45:13,20 46:4	12:20 13:8 21:7
Wilson (22) 10:16	137:14 138:4	154:5 155:2	49:8 50:6 55:10	64:5,18 79:5,10
26:11 89:11,12	139:9 143:24	157:11 165:2,13		80:19
89:12 90:19,19	144:10 145:13	year (28) 12:4,6	55:17,21 57:16 59:8,13 61:4	13.3.6 (1) 13:8
91:23,23 92:10	147:8,10 148:15	14:11 16:20,22	65:11 80:21	133 (1) 3:13
92:10 93:1,1,9,9	148:17,22	37:26 40:1 43:5	81:2 82:4 83:3,4	14 (5) 6:14 59:18
93:23,23 94:14	149:16 152:11	43:8 54:23	· ·	64:24 79:8
94:14 95:1	155:14 158:24	64:26 66:8,10	84:14 101:19	120:12
104:15,15	160:26 162:16	66:12 67:18,18	121:1,22 129:24	142 (1) 3:16
winter (5) 36:20	162:17,19	81:8 82:1 89:17	161:1	149 (1) 3:19
56:17 58:11,15	164:13,14	90:12 91:3,7	1-metre (1)	14th (6) 60:16
146:18	worked (7) 55:13	93:20 94:8	162:26	81:14,16 82:13
wish (3) 31:3	106:9,10 107:10	125:24 138:19	1:00 (1) 73:18	83:17 84:24
115:18 153:2	110:23 142:23	160:11 161:1	1:15 (2) 75:6,9	15 (16) 1:26 2:5
wishes (2) 27:6	142:24	years (28) 11:15	1:17 (1) 75:11 10 (15) 5:14 20	2:12 6:12,18 8:4
66:2	worker (1) 147:9	12:5 21:20,21	10 (15) 5:14,20	17:21,26 18:6
		21:22,23 36:2,3	6:1 18:11 32:13	
	I	I	I	I

27.26.20.2	12621		20 (2) 12 0 20 4	15 10 40 25
37:26 38:3	126:21	56:16 58:9,11	29 (2) 13:9 20:4	45:10 48:25
65:15 69:12	20 (7) 55:9,9	58:14 66:26	2AM-LUP1520	50:2,5 54:20
79:7,11 150:1	123:21 156:20	79:7,9,10 80:16	1:10 4:13 6:25	57:17,19 60:11
151 (1) 3:22	157:5,7 158:17	80:18 81:3,14	13:3,13 16:17	60:20 65:3,21
152 (1) 3:23	2000s (1) 41:24	81:15,16,22	17:1,7 19:6	68:6,7 81:5,21
153 (1) 3:26	2002 (2) 48:1 50:8	82:12,13 83:12	31:16 34:26	81:24 101:19
157 (2) 4:1,2	2004 (1) 125:21	83:16,17 84:20	116:16	4,000 (1) 48:26
15th (7) 59:11	2005 (4) 11:26	84:24 94:8	3	4,500 (1) 49:1
60:15,26 61:12	36:23 42:1	96:12,20,23		40 (1) 154:23
62:20 67:14	121:19	120:14,15	3 (31) 4:20 11:8,8	400,000 (1)
80:16	2011 (2) 37:6	160:15,16 166:9	15:6 31:21 40:6	121:15
16 (2) 6:22 116:12	107:10	2021 (3) 58:14	40:17,25 41:9	45 (1) 158:12
166 (1) 4:5	2014 (4) 59:20	61:4 65:22	45:16 49:8,11	4th (1) 120:2
17 (4) 7:1 17:18	125:21 158:9,10	2022 (6) 58:15	50:2,4 55:17	
52:8 116:18	2015 (2) 52:3	94:1,22 99:16	60:11 61:22	5
18 (5) 7:5 20:19	158:11	103:10,17	65:3,11 66:24	5 (28) 5:1 17:11
52:8 116:21	2016 (6) 52:8	2026 (2) 103:11	68:2,7 71:18	19:12 32:1
120:9	134:23,24 135:4	103:13	72:11 80:23	38:14 40:8,15
19 (4) 7:9 17:15	136:18 158:15	2027 (1) 11:15	81:5,21,24 84:4	45:14,14 49:8,9
19:25 116:24	2017 (1) 121:21	21 (1) 158:16	97:19 134:26	49:20,24 50:1
191 (1) 51:7	2018 (10) 17:4	22 (1) 57:24	30 (2) 20:8 154:24	60:21 61:22
1980 (1) 36:22	19:4 37:3,9 44:1	23 (6) 20:12	30-day (1) 20:6	65:3,11 68:7,19
1982 (1) 36:22	47:17,22 48:26	142:11 144:7,19	300,000 (1) 51:10	71:18 72:7,10
199,000 (1) 85:23	51:23 52:4	144:21 159:20	30th (2) 94:1	82:5,8,15 83:2
1995 (2) 39:3	2019 (43) 17:11	23.3 (3) 157:13	120:3	84:4
55:11	17:15,18,21,25	158:17 159:25	31 (5) 4:11,16,20	5,000 (4) 12:6
1a (2) 49:5 50:14	17:26 18:6 19:8	24 (2) 143:1	4:24 5:1	16:21 43:8
1st (1) 59:24	19:12,16,20,25	158:10	32 (6) 5:5,12,18	66:11
	20:1,4,8,12,15	25 (8) 20:1 39:4	5:25 6:1,4	5:00 (1) 74:10
2	20:16,19,26	39:12 66:9	33 (1) 6:7	500,000 (1)
2 (37) 4:16 11:8,8	22:17 36:10	85:21 91:9	34 (2) 2:7,10	145:21
15:6 31:18	37:15 38:12	92:14 160:4	35 (1) 158:15	
38:14 40:7,21	39:18 44:6	25-year (1) 92:24	36 (3) 97:18,23	6
45:9,13,20 46:4	48:12 54:7,11	250 (1) 43:5	98:11	6 (20) 5:5 17:25
48:13 49:8,19	58:2,5,6 59:11	250,000 (4) 12:3	36(3) (1) 98:1	20:15,16 32:4
50:20,21 57:16	59:25 60:15	16:20 43:5 66:9	3D (1) 38:18	39:21 61:9,21
59:23 65:3 69:1	61:12 88:19	26 (12) 142:16,22	3rd (8) 61:17	62:21 65:3
69:9 70:22 71:9	120:2,4,6,8,9,12	143:4,5 144:8,8	62:11 64:16	68:19 71:10,15
71:12 80:22	2020 (55) 1:26 2:5	144:20 156:8,9	65:18 67:24	72:7,10 83:5,6
81:11,12 84:15	2:12 5:7,14,20	156:15 159:18	69:14 70:14	84:13 156:21
85:17 91:1	6:12,15,16 8:4	159:25	121:11	157:8
93:11 96:12	18:11 21:4,7	26th (1) 166:9		6-inch (1) 54:3
101:19 113:16	29:19,25 30:4	27 (3) 17:4 19:4	4	60 (5) 82:24 84:9
121:22 138:19	32:7,13,19	160:4	4 (28) 4:24 19:20	85:13 124:26
2-to-1 (1) 126:20	40:10 49:14	285 (2) 11:24	23:19 31:24	128:8
2-to-5 (1) 126:21	54:5,18,25	36:18	38:14,19,25	600-something
2.5-to-1 (1)			40:6,17 41:1,15	142:12
	I	I	I	l
Dicta Court Reporting Inc				

	3/	
685 (2) 16:19 43:4 6th (6) 19:16 37:25 59:26 61:1 120:6,8		
7 7 (15) 5:12 17:25 20:15,16 27:9 32:10 37:25 59:9 62:4 68:7,8 70:25 82:5,8		
83:2 7:00 (2) 165:5,16 70,000 (2) 67:2 101:4 73 (1) 2:11		
75 (1) 2:12 76 (1) 2:13 78 (1) 36:21 79 (3) 6:10,14,18 7th (6) 81:3,15,22 83:12 84:20		
120:6 8 8 (16) 2:5 5:18 20:26 21:4 27:18 32:16		
62:16,21 65:19 68:7 69:9 72:12 84:16,17 85:17 134:24 80 (1) 2:14 86 (1) 2:15		
87 (1) 2:17 9 9 (11) 5:7,25 32:7 32:22 63:2 68:25 69:2		
72:15 81:12,12 113:16 9:00 (1) 165:10 9:07 (1) 11:5 95 (1) 2:19		
9th (1) 30:4		