

NUNAVUT WATER BOARD

Hamlet of Pangnirtung

Type "A" Water Licence Application No. 3AM-PAN----

PUBLIC HEARING/COMMUNITY SESSION

VOLUME 1

Pangnirtung, Nunavut

March 21, 2018

1	TABLE OF CONTENTS	
2		
3	Description	Page
4		
5	March 21, 2018	
6		
7	Appearances	5
8		
9	Public Hearing	
10	Opening Remarks by the Nunavut Water Board Chair	7
11		
12	Identification and Introduction of the Parties	19
13		
14	BHABESH ROY, Sworn	24
15		
16	RONALD LADD, Sworn	25
17		
18	STEPHEN BLISS, Sworn	26
19		
20	Presentation by the Hamlet of Pangnirtung	26
21		
22	Fisheries and Oceans Canada Questions	42
23	the Hamlet of Pangnirtung	
24		
25	Indigenous and Northern Affairs Canada	44
26	Questions the Hamlet of Pangnirtung	

1	Nunavut Water Board Staff Questions	47
2	the Hamlet of Pangnirtung	
3		
4	RICHARD JANUSZ, Affirmed	55
5		
6	Presentation by Fisheries and Oceans Canada	55
7		
8	GABRIEL BERNARD-LACAILLE, Affirmed	63
9		
10	Presentation by Environment and	64
11	Climate Change Canada	
12		
13	IAN PARSONS, Affirmed	72
14		
15	SARAH FORTE, Affirmed	72
16		
17	LISA BACHELLIER, Affirmed	72
18		
19	Presentation by Indigenous and	73
20	Northern Affairs Canada	
21		
22	Hamlet of Pangnirtung Questions	83
23	Indigenous and Northern Affairs Canada	
24		
25	Nunavut Water Board Staff Questions	92
26	Indigenous and Northern Affairs Canada	

1	Discussion	96
2		
3	Community Session	
4	Opening Remarks by Nunavut Water Board Chair	111
5		
6	Presentation by the Nunavut Water Board	116
7		
8	Presentation by the Hamlet of Pangnirtung	123
9		
10	Presentation by Fisheries and Oceans Canada	134
11		
12	Presentation by Environment and	137
13	Climate Change Canada	
14		
15	Presentation by Indigenous and	142
16	Northern Affairs Canada	
17		
18	Certificate of Transcript	152
19		
20	List of Exhibits	153
21		
22		
23		
24		
25		
26		

1 Proceedings taken at Pangnirtung Community Centre,
 2 Pangnirtung, Nunavut

3

4 March 21, 2018

5

6 NUNAVUT WATER BOARD

7 L. Toomasie Chair of Hearing

8 M. Mrazek Panel Member

9 M. Nortok Panel Member

10

11 NUNAVUT WATER BOARD STAFF

12 T. Meadows Legal Counsel

13 S. Autut Executive Director

14 D. Hohnstein Director of Technical Services

15 B. Kogvik Director of Board

16 Administration and

17 Communications

18 K. Kharatyan Acting Manager of Licensing

19 R. Dwyer Licensing Administrator

20 A. Kubeisinova Technical Advisor

21

22 HAMLET OF PANGNIRTUNG

23 R. Ladd Senior Administrative Officer

24 B. Roy Municipal Planning Engineer

25 S. Bliss Senior Process Engineer

26

1 INTERVENERS

2

3 FISHERIES AND OCEANS CANADA

4 R. Janusz Senior Fisheries Protection
5 Biologist
6 J. Moyer Fisheries Protection Biologist

7

8 ENVIRONMENT AND CLIMATE CHANGE CANADA

9 G. Bernard-Lacaille Acting Senior Environmental
10 Assessment Coordinator
11 A. Wilson Senior Water Quality Expert

12

13 INDIGENOUS AND NORTHERN AFFAIRS CANADA

14 I. Parsons Acting Manager of Water
15 Resources
16 S. Forte Water Management Specialist
17 L. Bachellier Water Resource Technician

18

19 INTERPRETERS/TRANSLATORS

20 B. Kogvik Inuktitut Language Translator
21 W. Kilabuk Inuktitut Language Translator
22 M. Qumuatuq Inuktitut Language Translator

23

24 T. Huynh, PSR(A) Official Court Reporter

25

26 I. Mablick Sound Technician

1 _____
2 (PROCEEDINGS COMMENCED AT 9:04 AM)
3 Opening Remarks by the Nunavut Water Board Chair
4 THE CHAIR: Good morning. Welcome.
5 Welcome to the public hearing. Welcome, everyone, to
6 the public hearing for a Type "A" water licence
7 application submitted by Hamlet of Pangnirtung, seeking
8 authorization for the use of water and deposit of waste
9 associated with a municipal undertaking.

10 I am -- my name is Lootie. I am the Chairperson
11 for Nunavut Water Board, and I'll be hearing Chair for
12 today, public hearing. We're going to proceed -- we
13 are proceeding -- we're starting -- we're going to be
14 beginning with a -- before we proceed with the hearing,
15 let us begin with a prayer. Let's stand and pray.
16 Let's pray.

17 (OPENING PRAYER)

18 THE CHAIR: Thank you. On behalf of the
19 Nunavut Water Board, I welcome you to the Hamlet of
20 Pangnirtung.

21 Now, to provide some background and set the stage
22 for the hearing, the Nunavut Water Board, which I'll
23 call -- refer to as "the Board" or "NWB," is an
24 institution of public government created under Article
25 13 of the Nunavut Land Claims Agreement. The NWB is
26 responsible for the use, management, and regulation of

1 fresh water in the Nunavut Settlement Area.

2 The purpose of this public hearing is to review an
3 application filed by the Hamlet of Pangnirtung -- I may
4 refer to as "Hamlet" or "applicant" -- for a new Type
5 "A" water licence to replace the Hamlet's previously
6 expired Type "B" water licence. The new licence would
7 authorize the use of water and deposits of waste
8 associated with the Hamlet's sewage treatment plant,
9 drinking water supply, and solid waste management
10 facilities under the Nunavut Waters and Nunavut Surface
11 Rights Tribunal Act.

12 Pursuant to Article 13, Section 13.3.6 of the
13 Nunavut Agreement and Section 29 of the Nunavut Waters
14 and Nunavut Surface Rights Tribunal Act, the Board has
15 delegated its power to dispose of all matters related
16 to the processing of the Hamlet's application for the
17 Type "A" Licence Number 3AM-PAN----, including the
18 conduct of this public hearing, to a panel of the
19 Board, which is referred to as "the Pangnirtung panel"
20 or "P18 panel."

21 I'll be the chairperson for this Panel 18, P18
22 panel. For today, I'll be the Chair. For those panel
23 members, these -- I'm sitting with Ross Mrazek on my
24 right; and to my left, Makabe Nartok. And staff
25 members who have contributed to the NWB's
26 administration and technical of the application, along

1 with the -- which are as follows: Stephanie Autut,
2 Executive Director; David Hohnstein, Director of
3 Technical Services; Ben Kogvik, Director of Board
4 Administration and Communication; Karen Kharatyan
5 Acting Manager of Licensing; Richard Dwyer, Licensing
6 Administrator [OTHER LANGUAGE SPOKEN]; Teresa Meadows
7 and Meadows Law [OTHER LANGUAGE SPOKEN]; Assol
8 Kubeisinova -- I'm not pronouncing it properly --
9 Technical Advisor.

10 I'll be -- and two interpreters available. Who
11 are they? I don't know them, but my name is William
12 Kilabuk. And Ben Kogvik, welcome. And Water Board
13 staff, who helps to interpret, translate: William
14 Kilabuk from Pang. And there was another person
15 that'll be arriving, who will help, assist in
16 translating, interpreting for the day.

17 For our helper -- to support, we have Israel
18 Mablick. If there's one available -- and if you need
19 help for headset, for anything, you can approach him.
20 That way, we will identify -- which should be a proper
21 writing, we have a typist; we have a writer. Record of
22 proceeding is -- we have with us from -- I can't really
23 pronounce her name -- Dicta Court Reporting, from that
24 department -- is going to help to interpret. Thank
25 you.

26 Before I move on to an overview of this

1 application and what to expect today during this public
2 hearing, there are some important housekeeping items
3 for everyone here. First, as indicated earlier,
4 there's interpretation available throughout the
5 hearing, in English and Inuktitut. Inuktitut is
6 Channel 1, English is Channel 2, and the floor is
7 Channel 3. When you're speaking into a microphone,
8 please make sure you have turned off your earpiece so
9 as to prevent audio feedback or interference from the
10 speaker [OTHER LANGUAGE SPOKEN].

11 Second, the Board appreciates if everyone,
12 including the applicant, interveners, and members of
13 public sign in on the sheets located at the table at
14 the entrance. This is very important -- of the
15 hearing, and we appreciate your help in making sure it
16 is complete.

17 Thirdly, the agenda for the public hearing and the
18 community session are available at the back, down at
19 the entrance, I guess. Please pick one and follow
20 along with us as we proceed.

21 For newcomers, there'll be -- there's a washroom
22 behind this wall, at the front here, at the end, behind
23 this wall over here. There's one women's washroom and
24 the men's washroom, and nearby there's a small kitchen
25 there too; SAO showed me shortly earlier. And there'll
26 be coffee, so on the side of the wall, and the snacks

1 will be available throughout this hearing, during
2 breaks, and you are welcome to help yourself throughout
3 the day.

4 I would also like to remind everyone, please turn
5 off your cell phones or put them on silent before we
6 begin. If you haven't done already so, please do so.

7 Finally, to assist both our court reporter and our
8 interpreters, please wait to have a microphone before
9 you speak. Then state your name, speak clearly and
10 slowly, and avoid the use of abbreviations. We
11 appreciate your assistance in making sure your comments
12 are recorded and the Board's record of proceeding is
13 accurate and complete.

14 Before I continue on, I need to -- thank you,
15 Teresa.

16 In the past, parties in other proceedings have
17 approached the media prior to the release of the
18 Board's decision, suggesting comments about what the
19 Board is going to do, either procedurally or in terms
20 of final results. Since the Board cannot comment on
21 pending matters, either by confirming or denying
22 accuracy of statements by others to the media, the
23 Board would appreciate if all parties refrain from any
24 such comments that may imply a certain action or
25 decision by the Board.

26 In addition, the Board reminds everyone that the

1 panel members and Board staff will not discuss the
2 substance of the hearing or the matters before the
3 Board with any of the parties or the media. If you
4 have questions regarding the Board and its practice or
5 procedures, please speak with the executive director,
6 and she will assist you.

7 Prior to identifying and introducing all the
8 parties in attendance today, I will provide a brief
9 description of the application that is before the
10 Board. The application we will be discussing today is
11 for a new Type "A" Water Licence Number 3 AM-PAN---, ,
12 requested by the Hamlet of Pangnirtung. Although the
13 Hamlet previously had a Type "B" Water Licence Number
14 3BM-PAN1417 that expired in 2017, based on the amount
15 of water required by the applicant to fill the Hamlet's
16 reservoir, the Hamlet now requires a Type "A" water
17 licence so this -- the scope of the application is
18 generally as follows:

19 A new water licence with a 15-year term for the Hamlet
20 of Pangnirtung to authorize the use of water and
21 deposit of waste associated with a municipal
22 undertaking, consisting of the following: storage and
23 use of up to 120,000 cubic metres of fresh water
24 annually, with the water to be extracted from the Duval
25 River and withdrawal rates exceeding 299 cubic metres
26 per day; continued operation of the wastewater

1 treatment plant that treats sewage and industrial waste
2 from the fish processing plant; and continued
3 management of a solid waste management facility that
4 handles municipal solid waste, waste materials, and
5 hazardous waste generated by the Hamlet.

6 The following is a list of some of the key
7 documents pertaining to the Type "A" Water Licence
8 Application Number 3 AM-PAN----, submitted to the
9 Nunavut Water Board by the applicant to date.

10 On April 4, 2017, the applicant filed the main
11 application package, including the following documents:
12 authorization letter from the Hamlet of Pangnirtung
13 dated March 16, 2017; Nunavut Impact Review Board
14 screening decision report and attachments dated March
15 17, 2017; Nunavut Planning Commission, land use
16 conformity determination, November 22, 2016;
17 application cover letter, March 20, 2017; project
18 summary in English and Inuktitut; completed Type "A"
19 water licence application form and attachments,
20 including the following manuals, plans, and
21 documentation for the review of the Board; mechanical
22 and electrical operation and maintenance manual for the
23 truck-fill station, September 2016 version; spill
24 contingency plan dated October 31, 2016; WWTP bypass
25 contingency plan dated October 31, 2016; fish process
26 plant waste management plan dated April 2017; and solid

1 waste operation and maintenance plan dated June 2014;
2 water treatment plant operation and maintenance manual
3 and attachments.

4 On May 10, 2017, the Hamlet supplemented the
5 application materials by providing the following:
6 operation and maintenance plan for the solid waste
7 facilities dated May 2017; fish waste lagoon
8 decommissioning plan; and correspondence from the
9 Government of Nunavut Community and Government Services
10 responding to the Nunavut Water Board's questions about
11 the application and process.

12 On August 21, 2017, the Hamlet provided additional
13 information in response to questions and comments
14 received from interveners: cover letter and responses
15 to questions from Indigenous and Northern Affairs
16 Canada, Environment and Climate Change Canada, and
17 Fisheries and Oceans Canada and attachments, including
18 parties -- revised solid waste management O&M manual
19 dated August 2017; drainage plan for the waste
20 facilities, wastewater treatment plant, landfill and
21 metal dump sites; plan and cross-section of the
22 landfill site; plan and cross-section of the metal dump
23 site; plan and cross-section of the water supply
24 facilities; flow path of the wastewater effluent from
25 the wastewater treatment plant to the marine
26 environment; revised spill contingency plan dated

1 August 2017; revised wastewater treatment plant bypass
2 contingency plan, August 2017 version; wastewater test
3 results from 2015 to 2017; leachate test results from
4 2012 to 2017; a risk assessment report on the
5 sustainability of Nunavut's primary drinking water
6 sources, dated July 14, 2017; latest zonal plan for the
7 Hamlet of Pangnirtung; weekly log sheet showing the
8 Hamlet's method of recording water extraction.

9 The following information was submitted to the
10 Board as a response to the commitments agreed to by the
11 Hamlet at the NWB technical meeting and prehearing
12 conference on December 5 and 6, 2017: a finalized
13 commitments list; civil drawing for the new truck-fill
14 station; final quality assurance and quality control
15 plan for water sampling; mechanical and electrical
16 operation and maintenance manual for the truck-fill
17 station; updated operations and maintenance manual for
18 water supply facilities, including water reservoir
19 operations and maintenance manual; solid waste
20 facilities operations and maintenance plan, 2017
21 version; a summary document about water reservoir berm
22 repairs undertaken in 2017.

23 Copies of all submissions received from all
24 parties and correspondence from the Board associated
25 with the application are available on the NWB's public
26 registry and FTP site. In addition, our licensing

1 administrator, Richard Dwyer, has available, for public
2 viewing at this hearing, the electronic copy of the
3 public registry for this application and paper copies
4 of some of the key documents for the application
5 received to date. If you are interested in reviewing
6 any of the documents, please ask Richard.

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

11 • March 16 to May 10, 2017: Renewal amendment
12 application documentation was filed by the Government
13 of Nunavut Community and Government Services on behalf
14 of the Hamlet.

15 • May 11 to 16, 2017: NWB conducted an internal
16 preliminary review and completeness check of the
17 application.

18 • May 17, 2017: NWB issued correspondence requesting
19 that parties conduct their preliminary review and
20 completeness check and provide comments by June 6,
21 2017.

22 • June 6, 2017: Preliminary review comments were
23 received from Indigenous and Northern Affairs and
24 Environment and Climate Change Canada.

25 • June 9, 2017: NWB issued correspondence providing
26 formal notice of the application and requesting that

1 parties conduct full technical review of the
2 application.

3 • June 20 to 22, 2017: NWB received the applicant's
4 response, including additional information for the
5 application.

6 • July 19 to 28, 2017: NWB received the technical
7 review comments from Environment and Climate Change
8 Canada, Fisheries and Oceans Canada, and Indigenous and
9 Northern Affairs.

10 • August 4, 2017: NWB issued correspondence requesting
11 that the licensee responded to interveners' comments.

12 • August 20, 2017: The Hamlet provided responses to
13 interveners' comments and recommendations.

14 • October 30, 2017: NWB notified the parties that the
15 application could proceed to a teleconference technical
16 meeting, TM, and prehearing conference, PHC, to be
17 hosted by the Board's staff on December 5th and 6th,
18 and draft agendas for the meetings were distributed.

19 • December 5 and 6, 2017: NWB hosted a technical
20 meeting and prehearing conference for the file via
21 teleconference.

22 • December 7, 2017: NWB received a formal request from
23 the applicant to increase the licence term from the
24 10-year term originally requested in the application to
25 a term of 15 years, which is what is being considered
26 during this public hearing.

1 • December 20, 2017, to January 22, 2018: The
2 applicant provided additional documentation, as
3 outlined in the list of commitments from the technical
4 meeting.

5 • December 22, 2017: NWB issued the prehearing
6 conference decision in respect of the application,
7 providing a list of commitments, timelines for the
8 submission of the additional documentation, a list of
9 issues to be considered at the public hearing, and a
10 tentative timeline for this in-person public hearing
11 and community session.

12 • January 8, 2018: NWB issued a formal notice of this
13 public hearing, as required under the Nunavut Waters
14 and Nunavut Surface Rights Tribunal Act.

15 • March 5, 2018: NWB issued a public hearing update
16 with draft agendas for this public hearing and
17 community session.

18 • March 7 to 9, 2018: NWB received a public hearing
19 presentation from the applicant, Environment and
20 Climate Change Canada, Indigenous and Northern Affairs,
21 and Fisheries and Oceans Canada.

22 • March 7 to 9, 2018: NWB distributed the final
23 agendas for this public hearing and community session.

24 Complete details on all submissions received in
25 relation to the application and key procedural steps
26 are available on the NWB's FTP site. If you need any

1 assistance finding or reviewing any of the
2 documentation filed on the site, please check with our
3 licensing administrator, Richard Dwyer, at the table
4 down at the entrance, and he will help you get access
5 to the documents.

6 I will now move on to a list of issues to be
7 addressed at this public hearing, as identified during
8 the technical meeting and prehearing conference for
9 this file:

- 10 • Scope and terms of the new licence
- 11 • Water management: water balance for the withdrawal
12 from Duval River
- 13 • Wastewater, runoff, and effluent discharge: data
14 acquisition and reporting, determination of discharge
15 criteria
- 16 • Mitigation measures: landfill upgrade, waste
17 segregation, hazardous waste storage, drainage
18 management, minimization of open burning, installation
19 of fish screen
- 20 • Management plans and reports: contents of plans,
21 upgrades to plans, approval of plans

22 Identification and Introduction of the Parties

23 So now that I have given you the background to the
24 application we will be discussing throughout this
25 public hearing and community session, I would like to
26 turn to Item 4 on the agenda, "Identification and

1 Introduction of the Parties," applicant and interveners
2 participating in this public hearing.

3 Now I ask that the representative from the
4 applicant, Hamlet of Pangnirtung, please introduce who
5 you are and your representative. Thank you.

6 MR. LADD: Qujannamiik. Thank you. Good
7 morning. Welcome, everyone, to the meeting. It's a
8 public hearing. It's for 3 AM-PAN/3BM-PAN417 [sic]
9 renewal. It's a Type "A" municipal water licence
10 amendment application, the Hamlet of Pangnirtung,
11 Nunavut. I'm acting on behalf of the Hamlet of
12 Pangnirtung. I'm the licensee, Ron Ladd, Senior
13 Administrative Officer.

14 To my right, I have the licence technical
15 representative, Bhabesh Roy, M.A. Science,
16 Ph. Engineer, municipal engineer for the Government of
17 Nunavut CG&S. We also have technical support from
18 Stephen Bliss, M. Science engineer, Ph. Engineer,
19 senior process engineer, and he's with EXP Services
20 Incorporated. Thank you.

21 THE CHAIR: Thank you. Now I will go -- I
22 will now go to the local associations and
23 representatives and intervening parties to introduce
24 the people who will be representing them here today.

25 Okay, Fisheries and Oceans Canada, please go to
26 the microphone and introduce your representative.

1 MR. JANUSZ: Morning, everyone. I'm
2 Richard Janusz. I'm the Senior Fisheries Protection
3 Biologist, Fisheries and Oceans Canada, Fisheries
4 Protection Program. [INAUDIBLE] I'm joined by my
5 colleague, Jeff Moyer, also with Fisheries and Oceans.

6 THE CHAIR: Thank you.

7 And the Environment and Climate Change Canada,
8 they're on the phone. Please introduce your
9 representative.

10 MR. BERNARD-LACAILLE: Yes. My name is Gabriel
11 Bernard-Lacaille, and I'm the Acting Senior
12 Environmental Assessment Coordinator with Environment
13 and Climate Change Canada. And a little bit later in
14 the day, joining us on the phone will be Anne Wilson,
15 our Senior Water Quality Expert. Thank you.

16 THE CHAIR: Thank you. And then
17 Indigenous and Northern Affairs Canada.

18 MR. PARSONS: Thank you, Mr. Chair. My name
19 is Ian Parsons. I'm the Acting Manager of Water
20 Resources for Indigenous and Northern Affairs in the
21 Nunavut regional office, in Iqaluit. And I'm joined
22 today by Sarah Forte and Lisa Bachellier, and they're
23 the leads on the file. Thank you.

24 THE CHAIR: Thank you. [OTHER LANGUAGE
25 SPOKEN] Who are you representing? Please -- you have
26 the opportunity now to go on the floor. Okay, there's

1 none.

2 Now that we have Water Board, we have -- we want
3 to treat and respect the Elders. Due to that, today,
4 while we're having this hearing, as we are proceeding,
5 please, if they want to speak out as an Elder, you
6 can -- to make a statement to this application. And if
7 you want to speak directly, please raise your hand any
8 time. The microphone can be given to you or close --
9 the one closest to you. Please -- the microphone --
10 that you will be recorded if you speak in the
11 microphone. And please speak closely to the
12 microphone. Any time -- any time, any topic, you can
13 raise your hand if you want to speak out.

14 Are there any members of the general public who
15 would like to identify themselves and request to speak
16 to the Board during this public hearing?

17 I also want to mention that any community member
18 who wish to ask questions or provide comments to the
19 Board about this application will also have an
20 opportunity to do so tonight during the community
21 session starting at 7 PM tonight.

22 Are there any representatives from agencies,
23 associations, et cetera, who have not submitted
24 interventions but would like to speak?

25 I will now turn to the identification of any
26 motions or any objections to the application that is

1 before the Board.

2 At this public hearing -- we will now have a short
3 break before we proceed again, health breaks. And
4 there's coffee and tea. 15 minutes break time.

5 (ADJOURNMENT)

6 THE CHAIR: We shall reconvene from the
7 break. Okay, thank you for coming back from the break.
8 We will start with Item 8 in our agenda, "Presentation
9 By the Applicant." So we request that -- make a brief
10 presentation on the application before the Board.

11 Mr. Ladd, how much time will you and your
12 representatives require?

13 MR. LADD: Thank you. About a half an
14 hour, 30 minutes.

15 THE CHAIR: Thank you.

16 Teresa, please swear or affirm the witnesses.

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

19 If I can have the witnesses who wish to swear -- I
20 left the Bible over there, so please put your left hand
21 on the Bible, raise your right hand. And if I can have
22 the witnesses state and spell their name for the
23 record, please.

24 MR. ROY: Bhabesh Roy.

25 MS. MEADOWS: State and spell your name for
26 the record, please.

1 MR. ROY: B-H-A-B-E-S-H; last name,
2 R-O-Y.

3 MS. MEADOWS: Thank you. Please place your
4 left hand on the Bible and raise your right hand.
5 BHABESH ROY, Sworn

6 MR. ROY: As I swear, the document, the
7 hard copy on the front desk, that is the document we
8 are going to present.

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

11 So, Mr. Roy, we have a copy of the presentation
12 materials and as well the executive summary that you've
13 put together in a package here.

14 And, Mr. Chair, I will now mark that as the first
15 exhibit in this hearing. And those are my procedural
16 matters, Mr. Chair.

17 EXHIBIT 1 - Hard Copy of Information Package
18 Provided by Government of Nunavut Community
19 and Government Services on behalf of Hamlet
20 of Pangnirtung, Consisting of
21 Public Hearing Summary (English/Inuktitut)
22 and PowerPoint Presentation (English)

23 THE CHAIR: Thank you, Teresa.

24 Mr. Ladd, please go ahead with your presentation.

25 MR. LADD: Qujannamiik. Thank you. So
26 the public hearing today is for a 3AM-PAN/3B417 [sic]

1 renewal.

2 THE CHAIR: Just one moment, please.

3 MS. MEADOWS: Thank you, Mr. Chair. My
4 apologies.

5 Mr. Ladd, anybody who is going to be giving
6 evidence needs to be sworn or affirmed. So if you can
7 please put your left hand on the Bible, raise your
8 right hand. Please state and spell your name for the
9 record.

10 MR. LADD: Ronald Ladd, R-O-N-A-D -- L-D
11 L-A-D-D.

12 MS. MEADOWS: Thank you, Mr. Ladd.

13 RONALD LADD, Sworn

14 MS. MEADOWS: Thank you, Mr. Chair. Those
15 are my matters.

16 THE CHAIR: Thank you.

17 So are you ready to go? Are you are ready to go
18 ahead with your presentation? Is the third man also
19 going to speak?

20 MR. LADD: Yeah, we should swear him in,
21 too. Thank you.

22 MS. MEADOWS: Thank you, Mr. Chair, for
23 catching that. Teresa Meadows, legal counsel for the
24 Nunavut Water Board. And I would just like to remind
25 all of the speakers, because we have people in
26 attendance, on the phone, if you can, before you speak,

1 state your name so that they know who you are and who
2 is speaking. That would be much appreciated. It would
3 make it much easier for them.

4 So if I can get you to put your -- do you wish to
5 be sworn or affirmed?

6 MR. BLISS: [INAUDIBLE].

7 MS. MEADOWS: If I can get you to place your
8 left hand on the Bible, raise your right hand. State
9 and spell your name for the record, please.

10 MR. BLISS: Stephen Bliss, S-T-E-P-H-E-N
11 B-L-I-S-S.

12 STEPHEN BLISS, Sworn

13 MS. MEADOWS: Thank you, Mr. Bliss.

14 Thank you, Mr. Chair. I believe I am done.

15 THE CHAIR: Thank you, Teresa.

16 Now you may go ahead with your presentation.

17 Presentation by the Hamlet of Pangnirtung

18 MR. LADD: Thank you. So for the public
19 hearing today, 3AM-PAN-3BPAN417 [sic] renewal, it's for
20 a Type "A" municipal water licence amendment
21 application, Hamlet of Pangnirtung, Nunavut. The
22 existing licence covers three environmental facilities.
23 It covers the water supply system, the wastewater
24 treatment, and the solid waste management. I'm now
25 going to put you over to Bhabesh Roy for the
26 presentation.

1 MR. ROY: Good morning, audience. The
2 water licence has three component. The first component
3 I am explaining is the water supply. Water supply
4 contains three different component as well, the water
5 supply system: the water truck-fill station, water
6 storage reservoir, and Duval River as a potable water
7 source.

8 The water supply system -- you'll see the
9 cross-section. The water coming from Duval River, we
10 are using a diesel pump. During the summertime, we
11 extract water from Duval River and fill the reservoir.
12 Reservoir capacity is 120,000 cubic metre. Our annual
13 consumption, of the community, is roughly 55,000 metre
14 cube. So every year, we don't need to extract 120,000
15 cubic metre. More or less, we're extracting, like, 50
16 percent.

17 But every four-to-five-years interval, we have to
18 clean the reservoir. This is a lined reservoir. It's
19 a containment in nature. So we have to clean the
20 sediment from the top of the liner every
21 four-to-five-years interval. That very time, we made
22 the reservoir empty and clean the sediment, and that
23 very time, we'll fill the reservoir, 120,000 cubic
24 metre.

25 The second one is the wastewater treatment plant.
26 Wastewater treatment, this is a mechanical treatment

1 plant. I must say, this is a very successful
2 mechanical treatment plant in Nunavut. The -- we have
3 also existing sewage lagoon. This lagoon are normally
4 used to use for fish waste. Right now it is not being
5 used. And we have a fish plant, and from the fish
6 plant, the fish effluent is coming to the treatment
7 plant.

8 So this is the fish plant. And you'll see the --
9 from the fish plant, the water is -- effluent is
10 running towards the sea, over a gravel bed, and gravel
11 bed is kind of a channel. So this is the picture of
12 the wastewater treatment plant. And next to the
13 wastewater treatment plant, there is another building
14 that is abandoned, this old incinerator building.

15 We have solid waste management. Solid waste
16 management, we have domestic waste management, which is
17 normally called "landfill"; metal waste site; hazardous
18 waste material storage site; and also fish plant solid
19 waste. Now, all the waste are coming to -- more or
20 less, in the same location. Metallic is going to the
21 metal sites, and the fish heads, bone, et cetera, and
22 domestic waste, hazardous waste, is coming to the --
23 site.

24 So this is -- this is their topo map of the entire
25 town. It's not that visible. But the -- you will see
26 the pattern of -- we have the metal dump site, landfill

1 site, and the wastewater treatment plant. At the
2 bottom, we have the water reservoir.

3 This is a picture -- as you'll see, at the --
4 there is a long road from town going to the gravel
5 site. You'll see, it's written "dyke," "collector
6 drain," "metal dump." So this dyke is -- it is a dyke.
7 It is a small berm. And after the dyke, there is a
8 collector drain. So water from the hillside is running
9 towards the road and towards the sea. So collector
10 drain collect this runoff so the runoff cannot go
11 inside the metal dump.

12 And along the road, there are a few culverts.
13 Culverts are taking water from left side to the right
14 side, towards the sea. And also, you'll see our
15 landfill site. Landfill site, we have -- also, at
16 the lower end, there is a small berm. Inside the berm,
17 there is a collector drain. Collector drain is
18 connected with the two culverts, which collect the
19 leachate towards the wetland. And at the end, our
20 wastewater treatment plant. So all the waste site,
21 more or less, look at it in this boundary.

22 So this is, more or less, a clear picture. You'll
23 see the metal dump site and the Monitoring Station
24 Number 6. At the left side, we have the landfill site.
25 Inside the landfill now is the domestic waste, as well
26 as we have sludge waste. We dump sludge -- they almost

1 30 percent of the landfill site. And we have
2 Monitoring Station Number 4, Number 5.

3 And also, in wastewater treatment plant, we have
4 inflow. The raw sewage is coming to the plant; it's
5 PAN-2. And once the wastewater is treated and
6 effluent -- we are throwing out to the sea. And this
7 is Number 3, which is the compliance point of the
8 wastewater of the plant.

9 "Compliance point" means the Water Board regulated
10 some parameters, BOD and TSS. We have to satisfy the
11 water quality at PAN-3 and also PAN-4, PAN-5, PAN-6.

12 So following our last prehearing and technical
13 meeting, following our submission, there are some
14 question raised by Environment and Climate Change
15 Canada and the DFO and INAC. So I'm going to, step by
16 step -- first, the ECCC's comments. They have some
17 comments on the quality assurance and quality control
18 of the document we submitted. We responded that this
19 document has very minor correction. We will be willing
20 to submit the correction after this meeting.

21 Second comment, they are talking about the
22 toxicity testing of the wastewater effluent. Normally,
23 it is a new -- normally, it is not in the licence
24 before. But it is -- if it is shown in the licence,
25 definitely, we'll start doing this toxicity test along
26 with other test.

1 In solid waste, they are talking about the open
2 burning. I think the last technical meeting, the SAO,
3 Ron Ladd, is clearly stated that the burning is not --
4 is very common practice, but we try to reduce the
5 burning. Also, the good news is we were moving to a
6 capital project of the waste site for this community.
7 So this is a kind of a transition period, going to the
8 new facility then from the existing facility. During
9 this time, as much as possible, Hamlet will try to
10 reduce the burning.

11 The spill contingency plan, that is also -- there
12 was emergency telephone number, so they feel that that
13 number should be removed. So when we resubmit the
14 spill contingency plan, we will remove that number.

15 So the DFO has one major concern, the -- that
16 concern is when we extract water from the Duval River
17 to the water reservoir, at the intake end, there is a
18 buildup screen, what we are using right now. And they
19 feel that the screen size should be minimum so that no
20 fish can enter inside the intake part. And SAO is
21 already working with the EXP to find out the more final
22 mesh so that we can add the mesh on the top during the
23 summer, when we extract water from Duval River. So
24 that -- the concern is being addressed, and we are
25 taking care.

26 And SAO just remind me that the -- we are using

1 the diesel pump, using the water from the Duval River
2 to fill the reservoir. And the -- there was a metering
3 issue. They mentioned that we need to use a meter to
4 measure the volume of water coming from the river. The
5 EXP and -- working with the Hamlet to find out a
6 mechanical device. As soon as we can get a mechanical
7 device, we can use it when we pump water from river to
8 the storage reservoir.

9 Also, we are looking forward -- a capital project
10 Hamlet is proposing, that if we can't [sic] install one
11 power pole and then we can connect the power from the
12 water treatment plant to the pole, then we can use the
13 electrical pump, and we can totally knock out the
14 diesel pump from the system. And diesel pump might be
15 kept in the community as a contingency. And using the
16 electrical -- electricity, we can use the electrical
17 pump. That will be faster, easier, and safer. So that
18 is the direction the Hamlet is working forward.

19 Some comments coming from INAC: Again, they're
20 talking about the same thing, the flow-measuring
21 equipment. I already explained that we have taken
22 step, doing the remediation and connection and
23 improvement of this system.

24 Their second comment is surface water management
25 -- sorry, surface water management around the water
26 reservoir. What happened, this water reservoir was

1 built before Nunavut was born, during the NWT time.
2 And that very time, there was a collector drain at the
3 two -- of the upper end of the reservoir. So after
4 many years, that collector drain actually fill up. So
5 water, straight away, ran to the reservoir. And as a
6 result, there was a cut on the berm.

7 So to have all the structural integrity, we need
8 to rehabilitate the collector drain, and that was done
9 during our recent capital project of the water
10 treatment plant. And you'll see the picture; it's all
11 done and all protected. So we have to maintain for
12 future years so that the surface runoff coming from the
13 hill collected with the collector drain so that no
14 water can go to the water reservoir.

15 Water reservoir only can get water when we pump
16 water from Duval River to the water reservoir and also
17 the surface area of the snow, which is melted inside,
18 but not from the runoff coming from this hill.

19 Now, 1.5, they are talking about the -- we have a
20 [sic] old water truck-fill station. And you'll be glad
21 to know that we are moving forward to optimize our
22 water treatment plant in Nunavut. Pangnirtung is a
23 lucky community. We built the new one here.

24 Now, the question is -- new one, we commission and
25 we tested. It is still on testing stage. We are doing
26 some further improvement. By this time, we are using

1 the old truck-fill station. We want to keep the old
2 truck-fill station almost a year and so, until and
3 unless we make sure that new water treatment plant is
4 successfully operating to the satisfaction. So, yes,
5 it will be decommissioned. But we can't commit today
6 that it will be decommissioned tomorrow or two months
7 after. It depends on the best performance of the new
8 water treatment plant.

9 Operation and maintenance plan for the manual of
10 water supply, as I say, the plant is second stage
11 up-gradation, up-gradation, and the rectification of
12 deficiencies to function to the satisfaction. So
13 initial O&M manual the consultant submitted, which I
14 submitted to the Board, it has to be revised. So once
15 the optimization is complete, the O&M manual will be
16 revised and submitted to the Board accordingly.

17 Wastewater treatment plant bypass contingency,
18 this is our -- you'll be happy that this is the first
19 time in Nunavut. Also, I must say, in this Nunavut and
20 NWT, these two territories, Pang has the only
21 mechanical treatment plant is successfully operating
22 today. This is my declaration to the audience. And it
23 happened because we have a very, you know, experienced
24 consultant, experienced engineer who are working with
25 us in this plant, also design and aftercare. I must
26 make -- ask Stephen to make a comment on 2.1, on the

1 bypass contingency.

2 MR. BLISS: Well, in this particular case,
3 the -- INAC was concerned about -- where they had a
4 vested interest in this, that they should be included
5 as a point of contact. So that will be made when the
6 next -- when the plan is updated for the 2018 annual
7 report and 2019.

8 THE CHAIR: Can you state your name for
9 the record, please?

10 MR. BLISS: Sorry, Stephen Bliss.

11 MR. ROY: Okay, let me continue. 2.2 --

12 THE CHAIR: Before you speak, can you
13 state your name so -- recordkeeping have to know the
14 name.

15 MR. ROY: Bhabesh Roy. 2.2, again, INAC
16 concerned about the decommissioning of the sewage
17 lagoon. I already -- this is a sewage lagoon -- a long
18 time ago, before the wastewater treatment plant was
19 built, the Hamlet probably used to use it. And after
20 that, the Hamlet use it to -- use for fish effluent,
21 when they threw it out to this lagoon. But the
22 wastewater treatment plant is optimized in a way so
23 that we can accommodate --

24 MR. HOHNSTEIN: Excuse me. David Hohnstein
25 here, Mr. Chair.

26 I think, Bhabesh, we need to advance the slide for

1 the audience. You were on 2.2, I think you mentioned.

2 MR. ROY: Yeah. Sorry.

3 MR. HOHNSTEIN: Okay, thanks. Yes.

4 MR. ROY: Thank you, thank you. Yeah,
5 so this is 2.2, the sewage lagoon. As I said, this
6 lagoon was used before the mechanical treatment plant
7 was built. And after that, also it is used for fish
8 effluent management. Today it is not being used; it is
9 abandoned. The reason behind is, the domestic
10 wastewater is being treated by the mechanical treatment
11 plant, and the fish effluent also going to the
12 mechanical treatment plant.

13 The plant is optimized in the higher degree so
14 that the domestic and industrial waste, commonly, we
15 can treat. So we don't need any sewage lagoon anymore.
16 So this lagoon is -- it is going to be decommissioned
17 any time. Hamlet is looking for the procurement of the
18 granular, and as soon as those granular will be
19 available, we plan to decommission this sewage lagoon.
20 This sewage lagoon, just next to the landfill site.

21 3.2, INAC also concerned about the surface water
22 management at the metal dump area. As I have shown in
23 the long road and the both side -- the structures, the
24 metal dump area -- as I have shown before, the water
25 coming from the hillside and then running over the
26 road, through the culvert and then wetland, going to

1 the sea.

2 Now, the INAC suggested if we have the -- you
3 know, the drainage plan in place so that we make sure
4 no runoff can go to the metal dump site as well as to
5 the landfill site. So runoff only pass through the
6 culvert, going to the wetland, going to the sea. So
7 the idea is, we don't like to mix up the leachate water
8 with the runoff water.

9 So we projected that we'll do this project, 2020.
10 But I am very fortunate. We have been searching the
11 document all over. And in last meeting, David
12 Hohnstein suggested NRCAN might have. I also checked
13 the Ottawa office, their library, and I don't find any
14 kind of -- you know, the control in their office as
15 well. But we found something in our Land office.

16 And I am hoping that this drainage plan would not
17 wait for until 2020. Probably, we might complete this
18 plan beforehand.

19 3.3, we are talking about the runoff or the
20 leachate is coming from the landfill site. I have
21 shown in the previous picture, the PAN-4 and PAN-5;
22 these are the two leachate monitoring station. And
23 according to the licence, in the licence, clearly
24 indicated at the particular monitoring station, what
25 are the parameters we need to test.

26 So I was talking with the Board technical team,

1 and we all agreed that the -- these two monitoring
2 station correspond to some parameters which is already
3 retained in the water licence. If something change
4 from the old water licence, we follow the change.

5 And this kind of testing, we don't have any
6 accredited lab in Nunavut. We normally send our sample
7 to Ottawa laboratory, Ottawa accredited laboratory;
8 they do the testing. And once we have the test result,
9 every year, we send the test result to Water Board,
10 along with the annual report.

11 3.4, hazardous waste storage area, here, there are
12 different types of hazardous waste in the dump site.
13 It's not in the landfill site, as it is on the metal
14 dump site area, in that very compound. Our batteries,
15 we kept in the Sea-Can; it's well-kept. The idea is we
16 can ship out the Sea-Can sometime in future, from the
17 community. So all the batteries are kept in the
18 Sea-Can.

19 Now -- and other waste -- other hazardous -- the
20 Hamlet kept in area. But the idea is, the -- Ron is
21 going to fence this summer so that that area will be
22 isolated from the waste of the metal dump area.

23 Now, INAC also concerned on raw water supply
24 intake. I think I already explained that the -- we are
25 in improvement process of the improvement of the water
26 intake. INAC concerned later of the spill contingency

1 plan. The spill contingency plan, they're asking for a
2 topo map. This topo map will be -- will be completed
3 at the same time when the drainage plan is completed,
4 because drainage plan --

5 THE CHAIR: We need to take a break
6 because the line is not super. So it's just so much
7 static there on the line. So we need -- they need to
8 fix that up. We take a break.

9 You will continue on once the static -- fixed it.
10 Thank you.

11 (ADJOURNMENT)

12 THE CHAIR: We can start again. I think
13 technical stuff -- technical issue we have, I think
14 it's fixed it. We'll start proceeding again.

15 So you may go ahead again. But before, I want to
16 remind you not to -- please speak slowly because the
17 interpreters and the court reporter have some issue
18 with your speech. Thank you.

19 MR. ROY: Thank you, Mr. Chair.

20 We are in 4.5, "Spill contingency plan." INAC
21 suggests that this spill contingency plan should tie up
22 with the topo map. As I explained before, the topo map
23 is necessary to develop -- to repair the drainage plan.
24 So that very topo map, also we'll be using for spill
25 contingency plan. So if the topo map is completed
26 before 2020, so this spill contingency plan will be

1 revised accordingly, using those information.

2 The last item is QA/QC plan, quality assurance and
3 quality control plan. The quality assurance and
4 quality control plan is -- we have to work together
5 with the accredited lab and the Water Board.

6 THE CHAIR: Just hold on. The earpiece --
7 some of the earpiece is not working properly. And
8 Israel can fix the --

9 (ADJOURNMENT)

10 THE CHAIR: Okay, thank you. You may go
11 ahead. I think the technical issue is resolved again.
12 Thank you.

13 MR. ROY: Thank you, Mr. Chair.

14 The next item is quality assurance and quality
15 control plan. As I was explaining, this is a plan we
16 need develop in conjunction with the accredited lab,
17 along with the guidelines of Nunavut Water Board. We
18 -- there are some issue raised by INAC, and we're
19 willing to revise the document and some of the document
20 in 2018 annual report. 2018 annual report will be
21 submitted on or before March 31st, 2019. That is the
22 Water Board guidelines. So, yes, the QA/QC plan is
23 going to revise.

24 Now, before we go to the question period, I just
25 inform and confirm the audience that, under the
26 licence, we have three major facilities: water supply,

1 wastewater treatment, and the waste management. Hamlet
2 of Pang already have two brand-new, latest facilities:
3 wastewater treatment mechanical plant and the modern
4 water treatment plant. And this community is going to
5 get another new facility for waste management because
6 waste management, we have a land issue. We cannot go
7 for, again, another landfill site as an opened waste
8 management in this community.

9 So the capital project is on, and we are going to
10 start working on this project this year, and Hamlet
11 will be getting new waste management facility very
12 soon. So, finally, within few years, Hamlet will see
13 three brand-new facility under the licence.

14 Thank you, Mr. Chair.

15 THE CHAIR: Thank you. Is there any more
16 presentation from your group? Go ahead. And state
17 your name before you speak.

18 MR. LADD: Hi, it's Ron, SAO of the
19 Hamlet of Pangnirtung. So we've committed to doing a
20 hydrology study for four years, hydraulic study within
21 the next four years. So I just wanted to state that
22 for the record.

23 THE CHAIR: Thank you. So you're done
24 with your presentation, right?

25 MR. ROY: Yeah. I just include one word
26 with Ron. Hydraulic study means -- in the last

1 technical hearing, the question was raised about the
2 hydraulic characteristics of Duval River. So Hamlet
3 committed that the hydraulic study will be conducted
4 four years from the date of issuing the new licence.

5 Thank you, Mr. Chair.

6 THE CHAIR: Thank you. I think we are
7 ready to open up for questions.

8 MR. ROY: Yes, Mr. Chair. Thank you.

9 THE CHAIR: Okay. Yes, thank you. I'd
10 like to start with -- open up for questions and
11 comments to the presentation by the applicant. I'll
12 start with Fisheries and Oceans.

13 Go to the table at -- mic on the table. State
14 your name before you speak.

15 Fisheries and Oceans Canada Questions the Hamlet of
16 Pangnirtung

17 MR. JANUSZ: Richard Janusz, R-I-C-H-A-R-D
18 J-A-N-U-S-Z, Fisheries and Oceans Canada. I just have
19 one or two questions for the Hamlet.

20 In our letter of February the 9th, 2018, we
21 referred to a requirement for river-discharge
22 monitoring to determine that the Hamlet would be in
23 compliance with the advice on how much water could be
24 taken from the river in a way that was safe for the
25 aquatic environment, and we didn't hear that in your
26 presentation. We also didn't hear one of the other

1 conditions, which was that water-taking would be
2 limited, certainly wherever required, to July and
3 August. We did hear that you promised a fish screen,
4 which was a positive thing for us.

5 I think, if it pleases the Board, we will be
6 discussing the conditions of our determination later on
7 in our presentation, and these items will be mentioned
8 as well. However, I would appreciate hearing the
9 Hamlet respond to our questions.

10 THE CHAIR: Thank you.

11 Applicant, there's questions on the floor. Please
12 state your name before you speak.

13 MR. LADD: Hi. Ron from the Hamlet of
14 Pangnirtung. So we've engaged EXP for the discharging;
15 we're coming up with a solution for that. And then
16 we'll have an answer back to you by August, for sure,
17 on the water-taking device and that, so we'll have
18 that. So we are fully engaged now with EXP with those
19 two comments, and we'll definitely be addressing them.

20 MR. JANUSZ: Thank you very much.

21 THE CHAIR: Thank you.

22 Next, I'd like to call upon Environment and
23 Climate Change Canada. You have a question to the
24 applicant's presentation?

25 MR. BERNARD-LACAILLE: This is Gabriel with
26 Environment and Climate Change Canada. We don't have

1 any questions for the applicant at this time.

2 THE CHAIR: Thank you.

3 And then Indigenous and Northern Affairs Canada,
4 you may go ahead with your questions. Before you
5 speak, state your name.

6 Indigenous and Northern Affairs Canada Questions the
7 Hamlet of Pangirtung

8 MR. PARSONS: Thank you, Mr. Chairman.

9 Ian Parsons, I-A-N P-A-R-S-O-N-S, with Indigenous
10 and Northern Affairs Canada. I just have probably two
11 or three questions for the applicant.

12 Going into this public hearing, all through the
13 process, we've made comments with regards to the
14 landfill. So we just want to get a better
15 understanding, because right now our understanding is
16 contaminants can basically -- they're free to move into
17 the environment. So basically -- our question is,
18 basically, what's going to be done to control that --
19 the contaminants from entering into the environment
20 from the landfill area, and, I guess, when will that be
21 done. So how will you limit the contaminants from
22 entering into the environment from the landfill area,
23 and when can we expect that to be done, first question?

24 THE CHAIR: Thank you.

25 Applicant? State your name before you speak.

26 MR. LADD: Hi. Ron, from the Hamlet of

1 Pangnirtung. In 2017, there's a berm around that area,
2 and we had remediated it last year. So there is no
3 contamination going through whatsoever, as far as I
4 know.

5 THE CHAIR: Thank you.

6 Any further questions, INAC?

7 MR. PARSONS: Thanks for your response. We
8 have further details that will be contained in our
9 presentation, so we can discuss further, I guess, at
10 that time.

11 A second question revolves around the metal dump
12 and the hazardous waste storage area. So, basically,
13 in our last submission, you responded, saying that
14 further measures are expected to be completed in 2020,
15 with regards to a drainage plan. We just heard Mr. Roy
16 say that it may be done sooner, which is great. I'm
17 wondering when sooner is. And I guess Part B to that:
18 What's going to be done in the interim because, along
19 with the landfill area, we've seen throughout the
20 application process that contaminants are also free to
21 move into the environment from the metal dump area as
22 well?

23 THE CHAIR: Thank you.

24 Applicant? State your name before you speak.

25 MR. LADD: Ron from the Hamlet.

26 So the interim solution is, we were going to

1 fence-in the area. Then we're going to do a
2 topographic, and then we're going to do the solution to
3 it. And we've engaged EXP in that -- on those
4 discussions. They're currently underway.

5 THE CHAIR: Thank you.

6 INAC, any further questions?

7 MR. PARSONS: Thanks for your response.

8 Yeah, one more further question, I think, at this time.

9 In your 4.5 point in your presentation, you talk
10 about, like, doing a topographical map, like, in the
11 future. But we've seen one -- I can't recall on which
12 plan that we've reviewed. It's like a zoning map, a
13 topography map of a zoning of Pangnirtung. So I'm just
14 wondering why that topographical map can't be used in
15 this situation. Why do we have to wait?

16 MR. ROY: Bhabesh Roy. Zoning plan,
17 which is over there -- we already posted -- is not --
18 we cannot use exactly how the zoning plan is because
19 the zoning plan has the demolition of the existing
20 waste sites and building the new facilities over there.

21 As I indicated in my presentation, I indicated
22 that the -- we found, from our Land division, some
23 other drawings which we can use it and expedite to
24 complete our topo map and the drainage plan before
25 2020.

26 MR. PARSONS: Thank you for that response.

1 One final question, and it's about the QA/QC plan.
2 INAC is okay with the plan being revised and submitted,
3 along with the annual report. But we're just wondering
4 if the QA/QC procedures will be implemented in the 2018
5 field season.

6 THE CHAIR: State your name before you
7 speak.

8 MR. ROY: Bhabesh Roy. Yes, QA/QC is
9 already -- definitely, it will be implemented this
10 year. But QA/QC also revised according to the renewal
11 of the licence because the -- in the new licence might
12 be -- the monitoring station might be different.
13 Monitoring might -- station might be added into the
14 system. But what existing QA/QC plan will be
15 implemented right away.

16 MR. PARSONS: Okay, thank you.

17 THE CHAIR: Go head, INAC.

18 MR. PARSONS: No further questions at this
19 time.

20 THE CHAIR: Thank you. Is there any
21 members from the public have any questions for the
22 applicant about the application? Okay, there's none.

23 Does the Board staff have any questions to the
24 applicant? Go ahead, staff. State your name before
25 you speak.

26 Nunavut Water Board Staff Questions the Hamlet of

1 Pangnirtung

2 MS. KUBEISINOVA: Hello, my name is Assol
3 Kubeisinova. So, yes, Mr. Chairman, I do have a couple
4 of questions to the applicant.

5 So concerning the fish screen installation, so in
6 your presentation, you mentioned that it will be
7 installed for the duration of the withdrawal, of the
8 water withdrawal. So I was just wondering if that is
9 mentioned in the operation and maintenance plan and
10 whether there is a person mentioned that's responsible
11 to do that, for doing that, and if there is a checklist
12 for that person to follow. That would include the
13 installation of the fish screen prior to withdrawal.

14 THE CHAIR: Thank you.

15 State your name and speak slowly for the purpose
16 of interpreters and the court reporter, please. Thank
17 you.

18 MR. ROY: Bhabesh Roy. Yes, the
19 extraction of the water, this is a part of the Hamlet
20 operation. So Hamlet is responsible to use the intake
21 and -- intake by diesel pump, fill the reservoir. Now,
22 we have -- in the intake, we have an intake mesh, but
23 this is -- we are putting one extra mesh on top so that
24 no little fish also go inside. That's why Ron already
25 indicated -- I also indicated in my presentation that
26 the EXP is working with the Hamlet and come up with the

1 mesh, following these guidelines. And that will be
2 done before our extraction start.

3 And we normally do the monitoring. Like, I, as a
4 municipal engineer, my job is, whatever in the licence,
5 in the O&M, make sure the Hamlet is doing accordingly.

6 THE CHAIR: Thank you.

7 Staff?

8 MS. KUBEISINOVA: Thank you. My next question
9 is regarding the installation of the flow-meter on the
10 water intake. Do you have a timeline for that?

11 THE CHAIR: Go ahead, applicant.

12 MR. ROY: Bhabesh Roy. In my
13 presentation, I am offering two types of the flow
14 meter: One is the electrical, another is the
15 mechanical device.

16 Now, electrical meter cannot go right away because
17 there is electrical line connection we need to -- there
18 is some electrical work. There is a capital project
19 involved, capital funding involved.

20 But mechanical one, the -- as I say, EXP is
21 involved in this exercise. And you are -- we are
22 trying to get it during this extraction season. But
23 they -- this is not only our community. Many
24 community, we don't have this meter. So we have been
25 searching for mechanical device for a long time. So we
26 are trying to get it before the extraction season.

1 Extraction normally in August, middle of August,
2 beginning of September. So I cannot promise that we
3 can -- we must do it, but we are trying to get it done
4 before August, because this work can be done in the --
5 but we can use in -- during the extraction period. But
6 you can say we are -- the Hamlet is trying to get it
7 done by August.

8 MS. KUBEISINOVA: Thank you. So my last
9 question would be regarding the minimization of waste,
10 the open-waste burning. Do you have an action plan for
11 that?

12 MR. LADD: Ron from the Hamlet of
13 Pangnirtung. So what we're doing presently is, we do
14 small burns. We do it at nighttime, at 11:00 in the
15 morning, and we actually cover it up with gravel. So
16 we're not actually doing large burns. We only do small
17 burns. The reason for that is our landfill is expected
18 to be replaced; it's a capital project by 2021. So
19 we're just trying to minimize the burns.

20 We could go ahead and burn the whole dump, but
21 unfortunately, that's not wise. And so we're just
22 doing enough to get us by for the next couple years
23 until it's replaced, and then we cover it with gravel.
24 Thank you.

25 MS. KUBEISINOVA: Thank you.

26 Thank you, Mr. Chairman.

1 THE CHAIR: Thank you.

2 Any further questions from the staff? Dave.

3 MR. HOHNSTEIN: Thanks, Mr. Chair. David

4 Hohnstein, Nunavut Water Board.

5 I just wanted to follow up on a question regarding
6 the landfill. I think throughout the process, we've
7 heard a number of dates in there, and I just heard, I
8 think, 2021 for potential commissioning of a new
9 landfill. Previous dates I thought I'd noted was 2024.
10 So maybe the Hamlet or Bhabesh could confirm for the
11 Water Board what the plan is, based on the GN's plans,
12 moving forward.

13 THE CHAIR: Thank you. Applicant? State
14 your name before you speak.

15 MR. ROY: Bhabesh Roy. Yes, you are
16 right -- our promise in the last teleconference. That
17 is the projection of the capital project. Right now we
18 are going ahead to do the waste audit. That's
19 different steps of the project. Once waste audit is
20 finished, then we can go forward -- so you are right,
21 '23/'24, that is the time frame.

22 THE CHAIR: Go ahead, Dave.

23 MR. HOHNSTEIN: Thanks, Mr. Chair. David

24 Hohnstein, Nunavut Water Board.

25 I just wanted to follow up on a couple other items
26 there. I think they were probably items that you

1 answered in your presentation, regarding some questions
2 or comments brought forward by INAC. And I just wanted
3 to -- I'm looking at the water management at the metal
4 dump. There are some questions or comments raised
5 regarding characterization of the water. I think INAC
6 had brought up a question regarding contamination still
7 moving from the metals dump to the marine environment.
8 So I just -- and then there's a water management plan
9 that was submitted with the application.

10 So I was just concerned and wanting clarification
11 on when that plan would be put in place and what
12 actually was part of that plan, other than monitoring
13 and characterization or testing of the effluent.

14 MR. ROY: Bhabesh Roy. Yes, we are
15 heading -- and we are also experiencing difficulties of
16 the three different monitoring station, PAN-4, PAN-5,
17 and PAN-6. PAN-6 is the monitoring station of the
18 metal dump.

19 As soon as our drainage plan is finalized --
20 because this is related to the drainage plan. This
21 water is coming from inside and also from the outside.
22 So we committed the 2020; this is our projection. I
23 also confirm the audience that the -- fortunately, we
24 found some document which I could not found from Ottawa
25 NRCAN office, but we found from our Lands office.

26 Now, EXP -- told me that we do not wait for 2020.

1 Hopefully, we can do it before. So 2020 is our -- you
2 know, the last deadline. But we are trying to get it
3 before.

4 THE CHAIR: Thank you.

5 Further questions?

6 MR. HOHNSTEIN: Thanks, Mr. Chair. David
7 Hohnstein, Nunavut Water Board.

8 One last question or clarification. I think it
9 was Item 3.3 on your presentation, response to
10 comments. Just regarding the criteria for the leachate
11 runoff from the landfill and metal dump, it was
12 indicated that, you know, criteria would be developed.
13 And I was wondering where that would be provided, at
14 what point would it become part of an O&M plan, and to
15 what extent would the Hamlet be committed to following
16 that criteria if it's determined that potential
17 treatment might be required.

18 THE CHAIR: State your name. State your
19 name for the record.

20 MR. ROY: Bhabesh Roy. I think in your
21 licence, the parameters is already defined, that each
22 monitoring station -- what are the parameters we have
23 to test for the effluent quality.

24 Now, PAN-4, PAN-5, PAN-6, those are waste site
25 monitoring station. And I think the waste site
26 monitoring station parameter is already in the water

1 licence. But in the new licence, whatever parameter
2 you established -- if you go ahead with the existing
3 parameters, it's fine. If you can add more parameter,
4 it's also fine. We'll follow the table which will be
5 given in the licence for us to monitor. Thank you.

6 MR. HOHNSTEIN: Thanks, Mr. Chair. No further
7 questions.

8 THE CHAIR: Thank you.

9 Okay, thank you, staff.

10 Is there questions from the Board panel?

11 There's no -- thank you for your presentation,
12 applicant.

13 And now we'd like -- we turn to a presentation by
14 the interveners. I remind the interveners that before
15 they begin their presentation, our legal counsel needs
16 you to swear or affirm and verify the materials you
17 will be presenting and making as exhibit.

18 Teresa, please proceed with the procedural
19 matters.

20 MS. MEADOWS: Thank you, Mr. Chair. Teresa
21 Meadows, legal counsel for the Nunavut Water Board.
22 So, Mr. Chair, it's my understanding that Fisheries and
23 Oceans Canada is the next intervener on the list. So
24 if I can have the intervener step up to the table,
25 please.

26 Thank you, Mr. Chair. Teresa Meadows, legal

1 counsel for the Nunavut Water Board.

2 If I can have the witness state and spell his name
3 for the record, please.

4 MR. JANUSZ: Richard Janusz, R-I-C-H-A-R-D
5 J-A-N-U-S-Z.

6 MS. MEADOWS: Thank you, Mr. Janusz.

7 RICHARD JANUSZ, Affirmed

8 MS. MEADOWS: And it is my understanding,
9 Mr. Chair, that a hard copy of the presentation
10 materials that will be presented now is available, and
11 we will be marking that as the next exhibit in this
12 public hearing. Thank you, Mr. Chair.

13 EXHIBIT 2 - Hard Copy of PowerPoint
14 Presentation from Fisheries and Oceans
15 Canada: Type "A" Water License for the Hamlet
16 of Pangnirtung (English/Inuktitut)

17 EXHIBIT 3 - Hard Copy of Executive Summary
18 DFO Comments (Inuktitut)

19 EXHIBIT 4 - Hard Copy of Executive Summary
20 DFO Comments (English)

21 THE CHAIR: Thank you. So you're the
22 representative for DFO. You may go ahead with your
23 presentation. Yes, please speak slowly, if you may.
24 The interpreters require catchup.

25 Presentation by Fisheries and Oceans Canada

26 MR. JANUSZ: Yes, Mr. Chairman. Thank you,

1 Mr. Chairman and Nunavut Water Board, for inviting us
2 here today. As I said, my name is Richard Janusz. I'm
3 a Senior Fisheries Protection Biologist with the
4 Fisheries Protection Program at Fisheries and Oceans
5 Canada.

6 In our presentation today, we'd like to talk very
7 briefly about DFO's mandate in this Type "A" water
8 licence and our responsibility and then also go over
9 our technical review comments. The Fisheries
10 Protection Program has the objective to protect
11 Canada's commercial, recreational and Aboriginal
12 fisheries and the species that support them by avoiding
13 serious harm.

14 "Serious harm" is a prohibition under Section 35
15 of the Fisheries Act. It's the Fisheries protection --
16 fish habitat protection provision of the Fisheries Act,
17 the main one. And "serious harm" is defined as death
18 of fish and/or permanent alteration of habitat in a
19 negative way or destruction of fish habitat.

20 We acknowledge that there's been a hydrological
21 assessment, the basic stage for the Duval River
22 discharge data that was available, and that the
23 proponent, in that sense, meets our framework for
24 considering water withdrawals. And that is a document
25 that was provided by -- to us by scientists from across
26 Canada who were asked the question of "What sort of

1 advice should be given for looking at water
2 withdrawals," and that was titled "A Framework for
3 Assessing Ecological Flow Requirements to Support
4 Fisheries in Canada." It was published in 2013, so
5 that gives my program something to use when we're
6 considering something like this Type "A" water licence.

7 In looking at the information that was given to
8 us, we find that, based on a pumping rate of 32 litres
9 a second as a cumulative withdrawal, which means all
10 the water that would be withdrawn from the natural flow
11 of the river will not exceed 10 percent -- I'm using
12 the language that's in our science advice. So this is
13 our scientists to us, as to what constitutes low risk.
14 So the water withdrawal will not exceed 10 percent of
15 the instantaneous flow at any time. And no water will
16 be withdrawn when the instantaneous flow is below 30
17 percent of the mean annual discharge, or "the average
18 annual discharge" would be another way of saying that.

19 Should the Duval River be subject to levels of
20 cumulative water withdrawal greater than 10 percent of
21 the instantaneous flow or when the flow is below 30
22 percent of the mean average discharge, a more rigorous
23 level of assessment is required or would be required to
24 evaluate the potential impacts.

25 We find that the water should be withdrawn during
26 the higher flow periods in July and August to minimize

1 the requirements to withdraw water during low-flow
2 periods. So from that point of view, we recommend that
3 DFO -- pardon me, that the Hamlet monitors the
4 instantaneous flow of the river, using a gauged
5 reference system, and they should do that daily, in a
6 way to ensure that the water withdrawal does not exceed
7 10 percent of the instantaneous flow, and that they
8 don't withdraw water when flow is at or lower than 30
9 percent of the average annual discharge.

10 We also support the inclusion of a licence
11 condition to conduct a hydrology study of the Duval
12 River -- so this would be in more detail -- to help
13 understand the current conditions and to help the
14 Hamlet determine the long-term sustainability of the
15 water supply for the Hamlet of Pangnirtung.

16 Given that there is no fish information available
17 for the Duval River that we're aware of, we recommend
18 that the proponent should ensure that, if required,
19 they have a fish screen that meets the fish protection
20 guidelines provided by DFO in 1995; that's the
21 "Freshwater End-of-Pipe Fish Screen Guideline."

22 Our determination was that, provided the proposed
23 mitigation measures are fully developed and effectively
24 carried out, that there's a low probability of
25 detectable impacts to the Duval River in terms of its
26 ability to support commercial, recreational, and

1 Aboriginal fisheries. So in the language that we use,
2 serious harm is not likely, and, therefore, a Fisheries
3 Act authorization is not required.

4 If there was going to be serious harm, our
5 Minister would require an authorization. And part of
6 that authorization would be offsetting, assuming that
7 the project was acceptable. In this case, that is not
8 the case. The Hamlet should be able to avoid serious
9 harm.

10 If there are questions or comments, we can take
11 those now. Thank you very much.

12 THE CHAIR: Thank you, DFO, for your
13 presentation. Before going to the questions -- it's
14 11:30 now, so I think we take a break for now for the
15 lunch break. You can keep your notes for your -- if
16 you have a question with regard to the presentation
17 from DFO. So we come back at 1:00. We reconvene at
18 1:00 this afternoon.

19 Thank you, DFO, for your presentation.

20 MR. JANUSZ: Thank you.

21 (LUNCHEON ADJOURNMENT AT 11:30 AM)

22 (PROCEEDINGS RECOMMENCED AT 1:09 PM)

23 THE CHAIR: Okay, before we break for
24 lunch, we had -- DFO had a presentation. And ready for
25 questions and answers, so we want to start with the
26 applicant to -- if you have a question to DFO

1 presentation. State your name and speak slowly,
2 please. Thank you.

3 MR. ROY: Bhabesh Roy. It's not a
4 question, like, just a clarification and the
5 information to the audience. In my presentation, I
6 explained that we used to extract, like, about 55 to
7 60,000 cubic metres annually. But every five years,
8 when we do the cleaning of the reservoir or made it
9 empty, we need 120,000 cubic metre.

10 So two way we normally operate. When we need
11 120,000 cubic metre, we have to start filling a little
12 early, like, sometime from July to August. And if we
13 need 60,000, 65,000 cubic metre, the Hamlet start a
14 little later. But we want to make sure that, in a
15 reasonable time, the reservoir is filled. By no means,
16 we cannot fail to fill the reservoir, otherwise, we
17 don't have any water.

18 So 30 percent water or mean flow or minimum flow,
19 we -- since we don't have any mechanical way to
20 measure, we experience, seeing the river flow for many,
21 many years, that this time of the year, the river has
22 the amount of water, amount of the flow rate is good
23 enough to fill the reservoir. That way, the Hamlet
24 operators have been working for many years.

25 Having said so, I found only a hydraulic study
26 before 1980, where a university student, Ph.D. student,

1 from Saskatchewan did a study. Following that, I was
2 told -- I think Jeff or somebody indicating sometime
3 before, there was a DFO monitoring station somewhere; I
4 don't know where it is.

5 But anyway, this is a time to do a hydraulic study
6 to install the gauge, measure the flow rate, find out
7 the flow there, how the flow pattern is. And this is
8 not only for filling the reservoir. This is important
9 for us to monitor the river, the water quality,
10 quantity, and the sedimentation and aeration rate,
11 because you all know that 2008, there is a bridge
12 collapse here. So this is not only drinking water
13 supply; this is also having important restructure about
14 the river, which connect the two community together.

15 So as Ron already committed, that within four
16 years' period, we are going to address the issue, do
17 the study, and install all the station so that from --
18 once we install it, from now on, we all will be
19 benefited. Hamlet will be benefited -- will be
20 benefited, you will be benefited, taking the data and
21 to know how the river pattern is. Yes, we are on the
22 same boat, and we're going to do it. Thank you.

23 THE CHAIR: Thank you.

24 DFO?

25 MR. JANUSZ: Yes, I appreciate that comment
26 very much.

1 THE CHAIR: State your name.

2 MR. JANUSZ: Oh, sorry. Richard Janusz,
3 J-A-N-U-S-Z.

4 We appreciate that commitment to doing that.

5 THE CHAIR: Any further questions from
6 applicant? State your name and ...

7 MR. ROY: No. I think the -- he's
8 satisfied with my response, so I am also satisfied.
9 Thank you, Chair.

10 THE CHAIR: Thank you. And then
11 Environment and Climate Change, do you have a question
12 to DFO presentation from this morning?

13 MR. BERNARD-LACAILLE: It's Gabriel with Environment
14 and Climate Change Canada. I don't have any questions
15 for DFO.

16 THE CHAIR: Thank you.

17 Indigenous and Northern Affairs Canada? Yes.
18 Yes, it's on.

19 MR. PARSONS: Ian Parsons, Indigenous and
20 Northern Affairs Canada. We have no questions for DFO.
21 Thank you.

22 THE CHAIR: Thank you.

23 Is there questions from public for DFO? Okay,
24 there's none.

25 Water Board staff, you have questions?

26 MR. HOHNSTEIN: Thanks, Mr. Chair. David

1 Hohnstein, Nunavut Water Board. No, we have no
2 questions for DFO.

3 THE CHAIR: Thank you.

4 Panel members? Okay, there's no questions.

5 Thank you for your presentation, DFO. Thank you.

6 MR. JANUSZ: Thank you.

7 THE CHAIR: Next, intervener, it's the
8 Environment and Climate Change Canada. Right now,
9 computer -- next screen is trying to open it up right
10 now.

11 Okay, Environment and Climate Change, you may
12 sworn in and/or confirm. Teresa will take care of that
13 for you.

14 So, Teresa, take over.

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

17 So seeing as I can't see the Bible, I'm going to
18 assume that you're going to be affirmed. So if I can
19 get the witness to state and spell their name for the
20 record, please.

21 MR. BERNARD-LACAILLE: Yeah. My name is Gabriel
22 Bernard-Lacaille, G-A-B-R-I-E-L B-E-R-N-A-R-D, dash,
23 L-A-C-A-I-L-L-E.

24 MS. MEADOWS: Thank you. Teresa Meadows,
25 legal counsel for the Nunavut Water Board.

26 GABRIEL BERNARD-LACAILLE, Affirmed

1 MS. MEADOWS: Teresa Meadows, legal counsel
2 for the Nunavut Water Board. Mr. Chair, we do have a
3 hard copy of the presentation materials that will be
4 presented now, and we will be marking that as the next
5 exhibit in this public hearing.

6 EXHIBIT 5 - Hard Copy of PowerPoint
7 Presentation from Environment and Climate
8 Change Canada: Type "A" Water License for the
9 Hamlet of Pangnirtung Type "A" Municipal
10 Water Licence Application Government of
11 Nunavut - Community Government Services
12 (English/Inuktitut)

13 MS. MEADOWS: Thank you, Mr. Chair. Those
14 are my procedural matters.

15 THE CHAIR: Thank you, Teresa.

16 So Environment and Climate Change, you may start
17 your intervention. State your name for the record,
18 please. Thank you.

19 Presentation by Environment and Climate Change Canada

20 MR. BERNARD-LACAILLE: Yeah, this is Gabriel from
21 Environment and Climate Change Canada. So I'll be
22 giving my presentation, and I'll just let you know when
23 I -- when you need to switch the slides for me, so
24 thank you for that.

25 So good morning, Mr. Chair, Board members, and all
26 of the -- all of those joining us today. My name is

1 Gabriel Bernard-Lacaille, and I am an Acting Senior
2 Environmental Assessment Coordinator with Environment
3 and Climate Change Canada. With me, on the phone
4 today, I have Anne Wilson, our water quality expert.

5 Today I will present the department's mandate,
6 briefly touch upon the relevant acts and legislations
7 for the department, and outline the technical comments
8 and recommendations provided in Environment and Climate
9 Change Canada's final written submissions to the
10 Nunavut Water Board. For each recommendation, we will
11 indicate whether the issue has been resolved or remains
12 outstanding, along any commitments made by the Hamlet.
13 Next slide, please.

14 Environment and Climate Change Canada's mandate is
15 to preserve and enhance the quality of the natural
16 environment, including water, air, soil, flora and
17 fauna; conserve Canada's renewable resources; conserve
18 and protect Canada's water resources; forecast daily
19 weather conditions and warnings and provide detailed
20 meteorological information to all of Canada; enforce
21 rules relating to boundary waters; and coordinate
22 environmental policies and programs for the federal
23 government. Next slide, please.

24 In order to do so, Environment and Climate Change
25 Canada administers over a dozen acts of Parliament,
26 either in whole or in part, and is responsible for

1 meeting numerous obligations spelled out in
2 legislation. This slide presents relevant acts and
3 regulations that the department administers, either in
4 whole or in part. This includes the Department of
5 Environment Act, the Canadian Environmental Protection
6 Act, and the pollution prevention provisions of the
7 Fisheries Act.

8 Environment and Climate Change Canada participates
9 in this water licence process by providing scientific
10 expertise within our mandate to the Nunavut Water Board
11 for their consideration. For this project, the
12 department has provided scientific expertise to the
13 Board in regards to water quality, specifically in
14 regards to quality assurance and quality control,
15 toxicity testing, and the management of solid waste.
16 Next slide, please.

17 Environment and Climate Change Canada's first
18 technical comment is in regards to quality assurance
19 and quality control. The quality assurance and quality
20 control plan proposes to use only trip blanks to
21 achieve quality assurance and quality control.
22 Environment and Climate Change Canada believes that
23 using only trip blanks is insufficient and made the
24 following recommendations to the Hamlet. The
25 department recommends that the Hamlet includes fields
26 blanks rather than trip blanks, uses replicate or split

1 samples, append lab sheets that document the lab's
2 internal quality assurance and quality control program,
3 and include a data reporting protocol. These
4 recommendations are made to ensure the validity of
5 water sampling.

6 In their response to the department's final
7 submissions, the Hamlet agreed to include Environment
8 and Climate Change Canada's recommendations in their
9 quality assurance and quality control program. Hence,
10 this issue is resolved to the department's
11 satisfaction. Next slide, please.

12 The department's second technical comment is in
13 regards to toxicity testing. In the previous,
14 now-expired 3BM-PAN0810 water licence, the condition
15 was included to conduct effluent toxicity testing. The
16 condition stated that all effluent discharged from the
17 wastewater treatment plant at Monitoring Program PAN-3
18 shall be demonstrated to be not acutely toxic under the
19 following tests to be conducted once annually, with a
20 minimum of six months between samples: (a) acute
21 lethality to rainbow trout and (b) acute lethality to
22 the crustacean *Daphnia magna*.

23 The department noted that these tests have not
24 been conducted to date. Environment and Climate Change
25 Canada acknowledges that performing these types of
26 toxicity tests may be challenging because of holding

1 times. Therefore, the department recommends to the
2 Hamlet that the rainbow trout bioassay be used as an
3 indicator for acute lethality of the effluent, as
4 Daphnia is less sensitive to municipal effluent than
5 rainbow trout.

6 Furthermore, due to the possibility of technical
7 difficulties related to holding times, the department
8 would like to recommend to the Nunavut Water Board that
9 this requirement be included in Part H, "Conditions
10 Applying to the Monitoring Program," rather than in the
11 main body of the water licence.

12 In their responses to the department's final
13 submissions, the Hamlet agreed to limit the bioassay
14 testing to rainbow trout. Environment and Climate
15 Change Canada hopes that the Government of Nunavut
16 Community Government Services will be able to overcome
17 the technical difficulties related to bioassay testing,
18 moving forward, and considers this issue resolved.
19 Next slide, please.

20 Environment and Climate Change Canada's third
21 technical comment is in regards to open burning. The
22 solid waste plan states that garbage is burned daily
23 and that waste is properly segregated. However, during
24 the technical meeting and prehearing conference held in
25 December 2017, the Hamlet provided clarification to
26 Environment and Climate Change Canada and stated that

1 household garbage was not segregated into burnable and
2 non-burnable waste.

3 The department is aware that the Hamlet will be
4 commissioning a new landfill site that should be
5 operational by 2024. But while this work continues,
6 Environment and Climate Change Canada strongly
7 encourages the Hamlet to minimize open burning of
8 non-segregated waste.

9 In their response to the department's final
10 submissions, the Hamlet agreed to minimize the burning
11 of non-segregated waste. In light of this response and
12 the future commissioning of the new landfill site, this
13 issue is resolved to the department's satisfaction.
14 Next slide, please.

15 In summary, Environment and Climate Change Canada
16 is generally satisfied with the information provided by
17 the Hamlet and looks forward to its continued
18 participation in the water licensing process. This
19 concludes our presentation. We would like to thank the
20 Nunavut Water Board for giving us the opportunity to
21 present, for providing hard copies of our presentation
22 at the hearing. And we welcome any questions. Thank
23 you.

24 THE CHAIR: Thank you, Environment and
25 Climate Change Canada.

26 Now open for questions. I'll start with

1 applicants. State your name before you speak.

2 MR. ROY: Bhabesh Roy. I have no
3 question. But I have a -- I am highly satisfied that
4 Environment and Climate Change Canada -- and we are in
5 the same agreement, and we satisfy each other to the
6 higher satisfaction. Thank you very much.

7 THE CHAIR: Is that it? Okay, thank you.

8 Now, going to Fisheries and Oceans. If you have a
9 question to the intervention. State your name before
10 you speak.

11 MR. JANUSZ: Richard Janusz. DFO has no
12 questions for the Hamlet -- or, sorry, for
13 Environment Canada.

14 THE CHAIR: Thank you.

15 Next, Indigenous and Northern Affairs Canada.
16 State your name before you speak, please.

17 MR. PARSONS: Thank you, Mr. Chair. Ian
18 Parsons, Indigenous and Northern Affairs Canada. We
19 have no questions for Environment and Climate Change
20 Canada. Thank you.

21 THE CHAIR: Thank you.

22 Is there questions from the public [OTHER LANGUAGE
23 SPOKEN]? Thank you. I think that there's none.

24 Water Board staff?

25 MR. HOHNSTEIN: Thank you, Mr. Chair. David
26 Hohnstein, Nunavut Water Board. No, the staff has no

1 questions for Environment Canada. Thank you.

2 THE CHAIR: Thank you.

3 Panel members?

4 Okay, thank you -- thank you for your intervention
5 presentation, Environment and Climate Change Canada.

6 Thank you very much.

7 MR. BERNARD-LACAILLE: Thank you.

8 THE CHAIR: The next intervention will be
9 done by Indigenous and Northern Affairs Canada. Okay,
10 before you have your presentation, Teresa needs you to
11 swear in.

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

14 Are you going to have your colleagues also present
15 evidence?

16 MR. PARSONS: Depending on if there's any
17 questions, they may.

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

20 I learned my lesson from this morning. Perhaps
21 I'll get everyone to come to the table so that we can
22 have the witnesses on the record, just in case.

23 Thank you, Mr. Chair. Teresa Meadows, legal
24 counsel for the Nunavut Water Board.

25 If I can have the witnesses state and spell their
26 name for the record, please.

1 MR. PARSONS: Ian Parsons, I-A-N

2 P-A-R-S-O-N-S.

3 MS. FORTE: Sarah Forte, S-A-R-A-H

4 F-O-R-T-E.

5 MS. BACHELLIER: Lisa Bachellier, L-I-S-A

6 B-A-C-H-E-L-L-I-E-R.

7 MS. MEADOWS: Thank you. Do the witnesses
8 wish to be affirmed or sworn?

9 THE CHAIR: When you speak, don't go too
10 close to the mic, for the -- better for the
11 interpreters there. Don't speak really close to it.

12 MR. PARSONS: Okay, thank you. We're all
13 going to affirm.

14 IAN PARSONS, Affirmed

15 SARAH FORTE, Affirmed

16 LISA BACHELLIER, Affirmed

17 MS. MEADOWS: Thank you, Mr. Chair. Teresa
18 Meadows, legal counsel for the Nunavut Water Board.
19 Mr. Chair, I have two submissions, being the
20 presentation materials, a hard copy of the presentation
21 materials, and also an executive summary, in Inuktitut,
22 that I will now be filing as the next two exhibits in
23 this public hearing.

24 EXHIBIT 6 - Hard Copy of PowerPoint

25 Presentation by Indigenous and Northern

26 Affairs Canada: Hamlet of Pangnirtung

1 Renewal Application for Water Licence
2 #3AM-PAN----(3BM-PAN1217)
3 EXHIBIT 7 - Hard Copy of Executive Summary of
4 INAC Comments (Inuktitut)

5 MS. MEADOWS: Thank you, Mr. Chair. Those
6 are my procedural matters.

7 THE CHAIR: Thank you, Teresa.

8 Yes, Indigenous and Northern Affairs Canada, you
9 may go ahead with your presentation.

10 MR. PARSONS: Just one comment before we
11 start our presentation: We do have an English
12 executive summary as well.

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

15 So I will get that from you at the break.

16 Thank you, Mr. Chair.

17 EXHIBIT 8 - Hard Copy of Executive Summary of
18 INAC Comments (English)

19 Presentation by Indigenous and Northern Affairs Canada

20 MR. PARSONS: Good afternoon, everyone,
21 Board members, Water Board staff, applicant,
22 interveners, and the public. My name is Ian Parsons.
23 I am the Acting Manager of Water Resources for
24 Indigenous and Northern Affairs Canada in the Nunavut
25 regional office in Iqaluit.

26 Indigenous and Northern Affairs Canada appreciates

1 the opportunity to make a presentation and intervention
2 regarding the Hamlet of Pangnirtung's application to
3 renew its water licence. I am joined here today by
4 Lisa Bachellier, Water Resource Technician, and Sarah
5 Forte, Water Management Specialist, with the
6 department's Nunavut regional office as well. On
7 behalf of the department, I would like to thank the
8 Nunavut Water Board for facilitating this application
9 process, and the Government of Nunavut and Community
10 and Government Services and the Hamlet of Pangnirtung
11 for responding to our questions and concerns.

12 Throughout the presentation, I will refer to
13 Indigenous and Northern Affairs as "the department."
14 However, the acronym "INAC," I-N-A-C, is used on the
15 slides. I will provide a brief overview of the
16 department's responsibilities with respect to the
17 licence renewal application. I will also list
18 contributions that have been made by the department
19 with respect to this application process so far.

20 Many technical comments were raised by the
21 department in the course of this water licence process.
22 Most of these comments and concerns have been resolved,
23 and only those that need to be discussed further will
24 be presented here. Resolution of these comments and
25 recommendations with the Government of Nunavut
26 Community and Government Services has not been

1 confirmed yet. However, the department is confident
2 that they can be resolved.

3 Our comments are divided into three principal
4 themes: water supply, wastewater treatment, and waste
5 management. Comments that didn't clearly fall into one
6 of the above categories are grouped under the heading
7 of "General." I will conclude the presentation with a
8 general recommendation.

9 The department has a broad mandate for the
10 co-management of freshwater resources and the
11 management of Crown land in Nunavut under the following
12 applicable laws and agreements. And they're listed
13 there, so I'll just quickly go through. It's the DIAND
14 Act, the Nunavut Agreement, the Nunavut Land Claims
15 Agreement, the Nunavut Waters and Surface Rights
16 Tribunal Act and regulations, the Nunavut Planning and
17 Project Assessment Act, the Territorial Lands Act, as
18 well as the Arctic Waters Pollution Prevention Act.

19 The department also administers and enforces
20 regulatory authorizations that pertain to Nunavut's
21 Crown land and freshwater resources. The department
22 participates in water licence processes administered by
23 the Water Board, along with other interested parties,
24 providing technical advice and expertise for the
25 Board's consideration.

26 To date, the department has made three submissions

1 to the Nunavut Water Board in the course of the Hamlet
2 of Pangnirtung's water licence renewal application.
3 The first is a June 7, 2017, completeness review
4 submission, where two recommendations were made and
5 five requests for further information was also made.
6 The written memorandum was provided on June 7th, 2017.

7 Subsequent to additional information being
8 provided by the Hamlet of Pangnirtung, the department
9 conducted a technical review of the renewal
10 application. Comments and recommendations were
11 provided for the Board's consideration in a written
12 memorandum on July 28, 2017.

13 In December 2017, the department also participated
14 in a technical meeting and prehearing conference, where
15 discussions with the applicant allowed us to clarify
16 many questions, and plans were made for resolving
17 outstanding requests.

18 These are just some pictures and a little
19 background.

20 The water supply for the municipality of
21 Pangnirtung is the Duval River. During open-water
22 season, water from the river is pumped to a
23 120,000-cubic-metre reservoir to ensure water
24 availability year round. A new water treatment
25 plant/truck-fill station was completed in 2016 and is
26 currently undergoing collaboration -- or, sorry,

1 calibration. Trucks are used to deliver water to homes
2 and institutions. In the applicant's final submission
3 to the Nunavut Water Board, the applicant has confirmed
4 that proper equipment for measuring extraction volumes
5 will be installed in 2019.

6 Sourcing water from the Duval River was discussed
7 in detail in submissions and during the technical
8 meeting. At the time, no information was available as
9 to whether the river was fish-bearing. We were
10 concerned that the extraction rate should not exceed 10
11 percent of instantaneous flow. Yesterday we saw -- we
12 went for a walk yesterday, by the way. So yesterday we
13 saw there's a road built across the river with two hung
14 culverts, which will prevent fish passage. Ecological
15 flow requirements therefore may be no longer an issue.
16 However, on this matter, we will refer to -- or defer
17 to Fisheries and Oceans Canada for their
18 recommendation.

19 As well, without any recent hydrology information,
20 the department still recommends that a hydrology study
21 be undertaken and that extraction should be limited to
22 the high-water-flow months of July and August unless
23 measurements are taken. We have heard through this
24 process that the applicant will be undertaking a
25 hydrology study within four years, and INCA is
26 satisfied that this meets our requirements.

1 In our final submission, we included a question
2 about work on the secondary cutoff ditch behind the
3 water reservoir. The memo on the berm repairs
4 submitted by the applicant indicates that some further
5 work will be necessary. In their February 23rd
6 response, the applicant confirmed the work has been
7 completed and provided a photo. So this is no longer
8 an issue.

9 This is just a picture of the wastewater treatment
10 plant. And just a little background here, wastewater
11 is collected from homes and institutions by truck and
12 is treated at a wastewater treatment plant commissioned
13 in 2015. The plant uses filters and a membrane
14 bioreactor technology to treat wastewater before
15 discharging to an outfall covered with rip-rap
16 that is approximately 140 metres from the ocean. There
17 is a sewage lagoon that was used for fish plant
18 wastewater and occasionally municipal water. This
19 lagoon is no longer in use, and the Hamlet has agreed
20 to decommission it.

21 The department does not have concerns regarding
22 the performance of the wastewater treatment plant; it
23 is working well. Water quality data presented in the
24 2016 and 2017 annual report shows that the plant
25 effluent meets effluent discharge criteria set in the
26 licence.

1 The next couple of slides are going to focus on
2 waste management. So in the beginning, we're going to
3 show some photos, and then we're going to go into more
4 of our concern.

5 So the first two pictures, Pictures 1 and 2, the
6 two, I guess, above, are pictures of the metal dump,
7 where water from outside the facility infiltrates to
8 the metal dump. This needs to be addressed, as water
9 inside the metal dump eventually ends up in the
10 environment. This has also been captured in our water
11 inspector's inspection reports.

12 Picture 3, the lower one, the bottom one, shows a
13 culvert from the landfill that is allowing discharge
14 from the facility. This also needs to be addressed, as
15 contaminants should not be allowed to enter into the
16 environment from the facility without treatment.

17 It's now into the more technical aspect.
18 Throughout the licence renewal application process, the
19 department has continued to outline the water
20 infiltration/drainage issues at the metal dump. The
21 department had recommended that a plan for managing the
22 water infiltration be implemented. The applicant
23 presented a drainage plan on August 21st, 2017, and
24 expected it to be complete by October 2017.

25 The department's inspectors found, on October 2nd,
26 2017, during an inspection that there was still water

1 infiltrating through the berm. On February 23rd, 2018,
2 the applicant stated that this drainage plan will be
3 completed in 2020. The department finds this to be
4 quite a long time to implement such a plan. This
5 timeline puts us through three more freeze-thaw cycles,
6 allowing contaminants into the environment. INAC --
7 the department, sorry, recommends stopping this
8 infiltration in the interim while the applicant works
9 on implementing its permanent drainage plan.

10 The second point, the applicant has also stated in
11 its February 23rd final submission to the Nunavut Water
12 Board that a collection site be identified, samples
13 collected for characterization, and effluent criteria
14 determined. The department understands this to mean
15 the collecting of effluent and not allowing it to enter
16 the environment.

17 We think this is a good start, however, we would
18 like to add to this response. The department wants to
19 make sure that this collection site also collects the
20 runoff from the metal dump. The collection site also
21 has to now become part of the waste management system.
22 However, the department will defer to Environment and
23 Climate Change Canada on working with the applicant to
24 develop proper effluent criteria.

25 The department looks forward to reviewing any
26 subsequent plan to address the effluent. If this is

1 not what the applicant is planning, the department
2 recommends that the effluent from the metal dump and
3 landfill be stopped from entering the environment
4 immediately.

5 Point 3, the department continues to state the
6 importance of secondary containment of the hazardous
7 materials. As well, the department has stated earlier
8 in its presentation the control of drainage or seepage
9 is of the same importance. The department recommends
10 that the applicant start this work as soon as possible
11 and try and complete this work before 2019, as
12 indicated in their February 23rd submission to the
13 Nunavut Water Board. The department's inspectors will
14 be noting any improvement and/or deficiencies in this
15 area.

16 The department has made several comments on the
17 management plans -- sorry. The department made
18 comments on several of the management plans, and the
19 applicant provided corrected versions of many of these.
20 Further corrections are required for the four plans on
21 this slide. The applicant has committed to providing
22 corrected versions with the 2018 annual report in March
23 2019. This response is adequate, although we would
24 like to see implementation sooner. In particular,
25 duplicate samples should be taken, though they are not
26 yet in the quality assurance/quality control plan.

1 With regards to the closure, reclamation, and
2 decommissioning, infrastructure associated with the old
3 water licence, that is no longer in use, includes the
4 old truck-fill station and the sewage lagoon. We have
5 agreed that these should be kept in a renewed licence
6 until they have been decommissioned. We look forward
7 to reviewing any decommissioning plans for these two
8 infrastructures.

9 The Hamlet's water licence requires them to
10 measure the quantity of water extracted from the Duval
11 River. Presently, they are not in compliance because
12 appropriate flow-measurement equipment is not in use.
13 We strongly encourage them to obtain it and use it.

14 The screen on the water intake does not meet DFO
15 criteria, as required by the licence. However, we have
16 heard that the -- there's going to be the proper
17 screens in place. We find this issue to be resolved.

18 The applicant has requested a 15-licence [sic]
19 term. We support this request, with the understanding
20 that amendments will be necessary before the end of the
21 licence term. In particular, we are expecting an
22 amendment request in 2022 for a new waste management
23 facility to be constructed in 2023, according to
24 information shared during the technical meeting in
25 December.

26 In conclusion, the department supports the

1 applicant's renewal application and recommends it be
2 accepted with due consideration given to our comments.
3 Nakurmiik. Thank you.

4 THE CHAIR: Thank you, Indigenous and
5 Northern Affairs Canada, for your presentation.

6 So -- open up for questions, start with the
7 applicants.

8 MR. ROY: Thank you, Chair. Yes, I'm
9 trying to --

10 THE CHAIR: State your name for the
11 record.

12 Hamlet of Pangnirtung Questions Indigenous and Northern
13 Affairs Canada

14 MR. ROY: Bhabesh Roy. Okay, first of
15 all, start with the water supply. I think some of the
16 clarification already given to previous presenters,
17 like the intake screen, meter, et cetera. Now, two
18 things are addition to this presentation. One is the
19 -- if the Duval River is fish-bearing; this is one
20 question. Another, we are talking about the culverts.

21 First, I reply to the culverts. This municipality
22 has two water licence, one water licence for the
23 municipality itself -- it's called "municipal licence,"
24 the licence we are going to -- we renewed for 15 years
25 last -- Type "A." Another licence is called "Duval
26 River water licence." That water licence include those

1 structures, the culverts, water quality monitoring, et
2 cetera. So we have a separate licence, deal those
3 structures.

4 Now, regarding fish-bearing, as I indicated, that
5 the -- historically, we don't have any kind of record
6 that somebody did it before or we have done before.
7 This is why, in the current hydraulic -- hydrology
8 studies, whatever we are missing in the -- we are
9 hoping to include. The fish-bearing is an issue.
10 Probably we can include this important issue in the
11 study. So from same study, we can get all the
12 information of the river, like, fish contents, water
13 quality, water quantity, sediment transportation,
14 aeration, et cetera.

15 Yes, Ron?

16 So Ron already announce that this study will be
17 expected to complete in four years' period, from the
18 year licence is issued. This is for water.

19 I'm glad that there is not much comments for the
20 wastewater treatment plant, so thank you for that.

21 Yes, the metal waste, I have some question. I
22 have -- I also need some clarification. Ron already --
23 in his presentation, he already said that the hazardous
24 waste area will be fenced, will be isolated from the
25 metal dump site, number one. Number two, the -- some
26 of the hazardous waste, like batteries, already kept in

1 the Sea-Can for the future disposal to the south.

2 Pang, along with other communities, we are in a
3 segregation process of the waste, one from another, and
4 stockpile separately. Some community move ahead. Pang
5 also planning to go ahead accordingly -- the other
6 community is doing. So segregation of waste is in the
7 process. I cannot comment it will be done this year or
8 next year, but this is in the process.

9 On the top, as you also agreed, that the -- we are
10 going to build a new waste management facility. So
11 this is our transition period from the new facility
12 moving to the -- moving from the old facility towards
13 the new facility.

14 Now, one important quotient which we were debating
15 -- let me deal this one first. In the previous
16 licence, the monitoring station for wastewater effluent
17 and the leachate, we are given the same types of
18 parameters in the previous licence: condition applying
19 to the monitoring program, Item 4, page number 24. We
20 have monitoring station PAN-3, which is the wastewater
21 effluent monitoring station; and PAN-4, PAN-5, PAN-6,
22 these are the leachate monitoring stations. So all
23 four station, we are asked to monitor the following
24 parameters; I think it's, altogether, 22 or 24 listed
25 here. We are -- we have been asked to monitor these
26 parameters.

1 But PAN-3, we have a compliance point. And in
2 this -- in this compliance point, strictly given the
3 parameter below: BOD/TSS, total coliform, 180/120. So
4 we are doing two different things. Wastewater effluent
5 monitoring station PAN-3, we are in compliance of the
6 plant. We have to satisfy BOD/TSS below. But the
7 leachate monitoring station, we are doing only
8 monitoring.

9 So in your presentation, I just need a
10 clarification what exactly you mean. We go ahead to do
11 monitoring as we are doing right now, or you want to
12 bring us with a kind of a compliance that -- like
13 chloride, sodium, magnesium, hardness, phenols, et
14 cetera, et cetera, we have to satisfy certain limit.
15 If we cannot satisfy above that, then we go for a
16 treatment. So if you ask to go for a treatment, then
17 this look like we are going for another phase of, you
18 know, treatment process.

19 So this is a clarification I'm requesting to INAC,
20 what exactly you mean in your presentation. I have
21 some more question, but let's clarify this question.
22 Thank you, Chair.

23 THE CHAIR: Thank you.

24 INAC?

25 MR. PARSONS: Ian Parsons, Indigenous and
26 Northern Affairs Canada. I'm going to start, and if my

1 colleagues want to jump in, I'm going to let them jump
2 in as well.

3 Our issue here is basically the containment of the
4 contaminants itself within the landfill and the metal
5 dump facility. We've heard throughout this review
6 process -- and I'm going to bring up the technical
7 meeting, and I don't have the transcripts in front of
8 me, but it was confirmed then that contaminants do
9 leave these sites, these facilities.

10 So, basically, our concern is containment, because
11 with these -- with the contaminants leaving these
12 facilities at your collection sites, you may not be
13 collecting where the drainage from the sites is
14 actually occurring. So our main concern is that the
15 contaminants do not leave the facilities.

16 MS. FORTE: Sarah Forte with INAC. So,
17 yes, we are suggesting that those points become
18 compliance points to ensure that what's leaving the
19 landfill isn't having an ill effect on the environment.

20 THE CHAIR: Okay, thank you.

21 You're done with your questions, applicant? Go
22 ahead.

23 MR. ROY: Audience, I just inform you
24 that I have been 14 years in Nunavut, and today I'm
25 running 15 licences from Grise Fiord to Sanikiluaq.
26 Not a single licence in Baffin region -- I hope in

1 Nunavut -- this criteria was established. So if you
2 want to establish this criteria, it should be a new in
3 Nunavut and a new in this community.

4 I don't know that the criteria was satisfied with
5 the natural flow. But I only say that the leachate is
6 coming from the metal dump site and the landfill site.
7 It happens when there is a snow melt and especially
8 summertime, because summertime, normally, we do the
9 sampling. And most of the time, this snow-melt water
10 -- all the rainwater, when they mix up and then flow --
11 and it does not go to the sea directly. It has a long
12 way to go. It go to the wetland and diluted to certain
13 extent, then go to the -- go to the sea.

14 But I don't know the -- how it should be the
15 limit. Like, our drinking water, there is a limit. So
16 if you -- leachate parameter, if you put a limit, what
17 will happen if we cannot satisfy? If we're not in
18 compliance, what happen next? How we can treat that
19 contaminated water? If within the limit, then I think
20 no question.

21 So acceptance of this recommendation or this
22 action of the recommendation is -- for me, it's very
23 tough to say "yes" or "no." What I can say? But if it
24 comes as a condition, then, you know, you are the
25 regulators. Then we have to see how we can -- how we
26 can manage.

1 Another comments is -- we are talking about
2 drainage plan, the topo plan, 2020. I think INAC is
3 suggesting that it is too long. For -- just for your
4 information, that the -- after long search, we found
5 some information yesterday. And Hamlet engaged EXP to
6 do the topo survey and master plan, which correspond
7 also to the QA/QC plan. It should be done before 2020.
8 So I cannot say it will done -- it'll be six month, but
9 I am -- assure you it will be done before 2020.

10 And third question is the QA/QC plan, you are
11 asking to implement. Yes, QA/QC plan is already
12 implemented; it is going on. We will be following the
13 QA/QC formula. And when the drainage study and topo
14 plan is finalized, the QA/QC will be finally revised
15 and submitted. Thank you, Chair.

16 THE CHAIR: Thank you.

17 Next, Environment Canada -- sorry, Environment and
18 Climate Change Canada. Do you have questions to INAC?

19 MR. BERNARD-LACAILLE: This is Gabriel with
20 Environment and Climate Change Canada. We do not have
21 any questions for INAC. Thank you.

22 THE CHAIR: Thank you.

23 Is there -- oh, DFO. Sorry, I skipped the DFO.
24 Yes, I'm sorry. Yes, go ahead DFO.

25 MR. JANUSZ: Richard Janusz. I'm not sure
26 that I have a question particularly for INAC. But if

1 the Board would permit, I would like to comment on the
2 culverts question.

3 THE CHAIR: Yes, you may go ahead.

4 MR. JANUSZ: We thank INAC for pointing
5 that out to us, and we will be following up with the
6 Hamlet of Pangnirtung on the condition of that
7 road-crossing and those culverts.

8 We would like to remind Pangnirtung, as we remind
9 any proponents people who are doing work in or near
10 water, that, under the Fisheries Act, it is their
11 responsibility -- it is their duty to report if they
12 have caused serious harm or are about to do so. And I
13 suppose what follows from that, is that if they may
14 have, then that's something that they should bring to
15 the department's attention, and we can work with them
16 to get that problem fixed.

17 One of the things that could be done with respect
18 to these culverts is -- could try to consider local,
19 traditional knowledge on, is fish passage required or
20 not.

21 The other thing is just commenting on the amount
22 of flow or the flow requirements. In our opinion, the
23 flow protection is still required, so that's according
24 to our ecological flows framework, because where the
25 water meets the ocean, that can be an important
26 environment for fish, perhaps for young-of-the-year

1 fish. So in our mind, the protection is still
2 required, so -- it may not be required immediately
3 upstream. But, certainly, we're trying to protect the
4 flow. Thank you.

5 THE CHAIR: Thank you, DFO.

6 Applicant, response? Go ahead, applicant. State
7 your name.

8 MR. LADD: Hi. Ron from the Hamlet. A
9 couple points of interest: The culvert and the lower
10 road that we're referring to, that is actually a
11 DFO-built structure. We were fortunate to actually
12 have it after they built that road. So we inherited
13 that, and we thank you for it, actually, 'cause we
14 needed it.

15 The second point of interest is that you're only
16 seeing, currently, the two culverts on the top, but
17 there's three more culverts down below, so there's
18 five. And so what we do every spring is we have, like,
19 a drill bit, and it's got a long, 15-foot drill in it.
20 And we actually bore a hole in the middle of it, so
21 there's a little, wee pinhole. And then the water
22 rotates around it and goes bigger so that those
23 culverts in that road won't be washed out again. So
24 they're just -- those are just two points of interest.

25 THE CHAIR: Thank you. Thank you for
26 clarification.

1 Now I ask the public whether there's a question to
2 INAC. There's none.

3 And then the Water Board staff, you have
4 questions? Stephanie.

5 MS. AUTUT: Thank you, Mr. Chair.
6 Stephanie Autut with the Board. If you want to give us
7 a few minutes, Mr. Chair, the staff are talking amongst
8 themselves and may be prepared to ask a couple of
9 questions.

10 THE CHAIR: Okay. Okay, yes, we'll take,
11 at this time, the break.

12 (ADJOURNMENT)

13 THE CHAIR: So the staff of the Water
14 Board was about to -- was going to ask questions. So
15 you may go ahead, Dave.

16 Nunavut Water Board Staff Questions Indigenous and
17 Northern Affairs Canada

18 MR. HOHNSTEIN: Thanks, Mr. Chair. David
19 Hohnstein, Nunavut Water Board. We do have a few
20 questions, some clarification requirements from INAC
21 and also for the licensee for the Hamlet, as well as
22 probably looking to Environment Canada for some
23 clarification and maybe some assistance here as well.
24 So I'll turn the mic over to Assol. She's going to
25 start with a few questions, and we'll proceed from
26 there.

1 MS. KUBEISINOVA: Thank you.

2 So I guess my question, my first question, to INAC
3 would be if there was any discussion that took place
4 between INAC and the ECCC regarding the -- regarding
5 developing the criteria.

6 THE CHAIR: Go ahead, INAC. State your
7 name before you speak.

8 MR. PARSONS: Ian Parsons, Indigenous and
9 Northern Affairs Canada. No, there's been no formal
10 discussions between INAC and Environment Canada on
11 developing criteria. Up to this point in time, we've
12 just stated the concern here.

13 MS. KUBEISINOVA: Thank you. And can INAC
14 identify any parameters of concern?

15 MR. PARSONS: Ian Parsons, Indigenous and
16 Northern Affairs Canada. Right now, in the annual
17 reports that we have looked at, there's very little
18 sampling data or leachate data. What we do have,
19 however, indicates that there's elevated concentrations
20 of arsenic and cadmium, copper and iron, mercury and
21 zinc. So though it's very limited and that's one of
22 two samples, like, that's where the concern would be.

23 MS. KUBEISINOVA: Thank you.

24 Thank you, Mr. Chair.

25 MR. PARSONS: Ian Parsons, Indigenous and
26 Northern Affairs. I'd just like to add, that was all

1 stated in our technical review submission on July 28th.

2 THE CHAIR: Thank you.

3 Teresa, do you have any further -- or Dave?

4 MR. HOHNSTEIN: Thanks, Mr. Chair. David
5 Hohnstein, Nunavut Water Board. So for clarification
6 for the Water Board, INAC is -- is INAC looking for the
7 inclusion of regulated effluent criteria within the
8 proposed licence for the Hamlet? And I guess, is there
9 any other information that could be provided or would
10 need to be provided prior to developing those criteria?

11 And I guess I'd follow up with Environment Canada,
12 if they're still on the phone, as to whether or not
13 Environment Canada would be willing to participate in
14 the short-term here, before the hearing closes, to
15 assist the Water Board in some criteria development and
16 references in order to proceed. So, first, over to
17 INAC, I guess.

18 MR. PARSONS: Ian Parsons, Indigenous and
19 Northern Affairs Canada. Yes, we would be looking for
20 criteria, based on very limited data being presented so
21 far. So we would have to take the precautionary
22 approach in this case and look at protecting the
23 environment without more data being provided.

24 Ian Parsons, Indigenous and Northern Affairs. I'd
25 just like to point out that the applicant has indicated
26 that they do have another sample, another result.

1 MR. HOHNSTEIN: Thanks, Mr. Chair.

2 I don't know if we could accept the results as
3 part of our exhibits. So if you've got some hard
4 copies available, Bhabesh, we could definitely accept
5 those as part of the submission.

6 Mr. Chair, David Hohnstein, Nunavut Water Board.
7 Just a quick question to INAC as to whether or not they
8 have seen these most recent results that the GN has
9 provided and if we need copies distributed for
10 reference here.

11 MR. PARSONS: Ian Parsons, Indigenous and
12 Northern Affairs Canada. No, we haven't seen the
13 latest results.

14 MS. MEADOWS: Thank you, Mr. Chair. Teresa
15 Meadows, legal counsel for the Nunavut Water Board. So
16 if I can ask to -- if I can ask the Hamlet to make
17 copies of this submission, and then we'll file it as an
18 exhibit, once all the parties have had a chance to take
19 a look at it and you've distributed copies. Thank you,
20 Mr. Chair.

21 EXHIBIT 9 - Hard Copy of Caduceon
22 Environmental Laboratories Final Report,
23 Report No. B17-22112 (English)

24 THE CHAIR: Thank you.

25 Go ahead, Hamlet.

26 MR. LADD: Ron from the Hamlet. How many

1 copies are you looking for? I can go do it now.

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

4 So for the benefit of Environment and Climate
5 Change Canada representatives who are on the phone, we
6 will also work to have that scanned and sent to you
7 electronically as soon as we can.

8 THE CHAIR: Hamlet, you have questions or
9 comments? Raise your hand.

10 Discussion

11 MR. ROY: The result I submitted, this
12 is 2017. So for your information, 2017, Hamlet
13 submitted the annual report along with the test result.
14 So this result is available in the Nunavut FTP site.

15 THE CHAIR: David, go ahead.

16 MR. HOHNSTEIN: Thanks, Mr. Chair. David
17 Hohnstein, Nunavut Water Board.

18 So a question to Environment Canada on the phone.
19 If there's, I guess, interest in hopefully being able
20 to participate in some further discussion on the issue
21 of the inclusion of criteria and regulated parameters
22 in a proposed licence, whether or not Environment
23 Canada would be able to provide something in the
24 short-term to facilitate some discussion between the
25 parties and provide the Water Board with some direction
26 and assistance in developing criteria.

1 MR. BERNARD-LACAILLE: It's Gabriel with Environment
2 and Climate Change Canada. Before I answer this
3 question, I'd just like to seek some clarification from
4 the Board. What type of criteria are we talking about
5 and where would -- is this discharge criteria, and
6 where would it -- where would it be discharged?

7 MR. HOHNSTEIN: Thanks, Mr. Chair. David
8 Hohnstein, Nunavut Water Board.

9 Yes, I believe we're looking for some effluent
10 criteria for discharge from the solid waste facilities,
11 the metals dump, and the drainage that's being released
12 from there during spring and summer freshet and through
13 the -- you know, through the thaw season. So looking
14 for effluent criteria from the solid waste facilities
15 that eventually makes it to the marine environment.

16 MR. BERNARD-LACAILLE: This is Gabriel with
17 Environment and Climate Change Canada. I was wondering
18 if it would be possible to take this question away and
19 come back to the Board as soon as possible, with an
20 answer.

21 MR. HOHNSTEIN: Thanks, Mr. Chair. David
22 Hohnstein, Nunavut Water Board.

23 What time frame would you be looking at, you know,
24 an hour, two hours? Or I guess, you know, the latest
25 we would be looking for discussion is first thing
26 tomorrow morning again.

1 MR. BERNARD-LACAILLE: I'm going to say I'm looking
2 for as fast as possible, so hopefully under an hour.

3 MR. HOHNSTEIN: Thanks, Mr. Chair. David
4 Hohnstein, Nunavut Water Board.

5 That would be, you know, very helpful. You know,
6 we'll get the latest results here provided by the GN
7 and the Hamlet sent over your way. I'm going to defer
8 things to our licensing manager, Karen Kharatyan, to
9 email that information out once we have it in our
10 possession, and look forward to a response a little
11 later on here today.

12 THE CHAIR: Go ahead, applicant.

13 MR. BLISS: Thank you, Mr. Chair. Stephen
14 Bliss with EXP, on behalf of the Hamlet.

15 One of the challenges with this developing
16 criteria is, right now it's based on limited sampling.
17 We don't have any understanding of the flow that was as
18 a result of the sampling, so whether this was a
19 concentrated sample or a dilute sample. And if the
20 criteria is being set based on a concentration, but
21 flows are very low, there would be minimal, if any,
22 impact on the environment. For a given concentration
23 and the flows are much higher, then there could be a
24 major impact on the environment.

25 So I think at this point, it would be best to
26 serve the Hamlet is to try to define the flows and the

1 concentrations that are being seen during these runoff
2 periods, and then look at what the impact would be, you
3 know, in the future, because if there's a substantial
4 flow and substantial concentration and this has to be
5 contained, then the question becomes what do you do
6 with it.

7 You cannot run that through that wastewater
8 treatment plant; you'll kill it. These are heavy
9 metals; they're toxic to -- and this is why we're
10 having this conversation. So if you have to contain
11 it, then you have to look at, again, what do you do
12 with it. Does it mean putting it in barrels and
13 shipping it off site? And it not only impacts this
14 particular community, but all the communities that have
15 landfill sites.

16 So I don't believe putting a particular criteria
17 concentration on the Hamlet to achieve at this point
18 would serve any purpose, other than create a lot of
19 hardship. I feel that the best thing to do would be to
20 define the problem. How bad is the problem? Is there
21 a problem?

22 I know they're -- INAC are looking at doing the
23 right thing. They've got a sample that has some
24 questionable results in terms of quantity -- or, sorry,
25 quality, and in and of themselves, they are
26 problematic. But that's -- there's more to the problem

1 than those results from that one or two samples. Thank
2 you.

3 THE CHAIR: Thank you.

4 Okay, thank you. I think we will take a recess
5 for now and -- because we have a community session
6 tonight at 7:00. What time is it now? Yes, quarter to
7 3.

8 So before we do that, Teresa, can you speak to
9 that for me?

10 MS. MEADOWS: Thank you, Mr. Chair. Teresa
11 Meadows, legal counsel for the Nunavut Water Board.
12 Mr. Chair, in light of the discussion that the parties
13 are having right now, and recognizing that we do have a
14 fair bit of time and that we'll come back this evening
15 for the community session, what I would recommend is
16 that the parties perhaps can all have a conversation
17 while we await Environment and Climate Change Canada
18 coming back to the rest of us with some direction as to
19 their involvement or their potential involvement, but
20 maybe have discussion offline so that when the parties
21 come back on the record, perhaps if they haven't been
22 able to resolve it, they will be able to state their
23 positions and have the opportunity to present to the
24 Board after they've had an opportunity to discuss the
25 issues amongst themselves with the Water Board
26 technical staff as well, available.

1 Perhaps, Mr. Chair -- it's been suggested that
2 perhaps reconvening at 4:00 to sort of circle back on
3 this issue and see if we've made any headway on it
4 before we go into the evening session tonight. Thank
5 you, Mr. Chair.

6 THE CHAIR: Thank you. I think we could
7 do that. We can come back here at 4:00.

8 Dave?

9 MR. HOHNSTEIN: Thanks, Mr. Chair. David
10 Hohnstein, Nunavut Water Board.

11 I just wanted to confirm with Environment Canada
12 on the phone lines, if they heard the discussion that
13 took place just momentarily here, and looking at
14 reconvening back at 4 PM Eastern Time.

15 MR. BERNARD-LACAILLE: It's Gabriel with Environment
16 and Climate Change Canada. I did hear the discussion,
17 and I am available to come back at 4 PM Eastern Time.

18 MR. HOHNSTEIN: Thanks very much.

19 THE CHAIR: Okay, we come back here at
20 4:00.

21 (ADJOURNMENT)

22 THE CHAIR: Thank you come back -- thank
23 you for your coming back here to the room. So we
24 want -- we were -- the Board staff were questioning
25 interveners. So we'll start with you again, Dave.

26 MR. HOHNSTEIN: Thanks very much, Mr. Chair.

1 David Hohnstein, Nunavut Water Board. So we left off
2 at around 3:00 there to break off and have some
3 discussions between the Water Board staff, INAC, and
4 the proponent, GN, Hamlet, and their consultant. And,
5 you know, unfortunately, you know, we omitted having
6 Environment Canada in on the discussions. Hopefully,
7 we didn't do too much damage in our private
8 conversations.

9 But we'll defer right now, briefly, to yourselves,
10 Environment Canada, to let us know what you might have
11 come up with. We've, you know, had some discussions,
12 as far as moving forward with some potential monitoring
13 requirements, you know, parameters, frequencies, that
14 sort of thing, with respect to the discharges from the
15 solid waste facilities, but, you know, look forward
16 here to hearing what Environment Canada might have to
17 offer with respect to any potential effluent-quality
18 limits that we might look at, I guess, as far as
19 discharges from the facilities and, you know, even
20 using as some target effluent quality, moving forward.

21 So I'll turn things over to Environment Canada for
22 a brief update on their progress.

23 MR. BERNARD-LACAILLE: It's Gabriel with Environment
24 and Climate Change Canada. So thank you for allowing
25 me some time to discuss with my department and my
26 colleagues for this issue. So Environment and Climate

1 Change Canada would like to thank the Board and INAC
2 for the opportunity to participate in the discussion
3 for those discharge criteria. But, unfortunately, we
4 won't be able to participate at this time.

5 We would like to -- however, we would like to
6 remind the Board that -- and the Hamlet, that any
7 effluent or drainage that does make its way to
8 fish-bearing waters, be it the freshwater or marine
9 environment, is captured under Section 36(3) of the
10 Fisheries Act, which prohibits the discharge of
11 deleterious substances to waters frequented by fish or
12 to a place where those substances plan to enter such
13 waters.

14 MR. HOHNSTEIN: Thanks, Mr. Chair. David
15 Hohnstein, Nunavut Water Board.

16 Thanks very much, Gabriel, for those comments.
17 Much appreciated. And I think we anticipated that
18 response at this point in time. Again, much
19 appreciated.

20 So we'll move on to, I guess, some further
21 commentary response from INAC with respect to the
22 inclusion of additional monitoring parameters and the
23 inclusion of -- or potential inclusion of any
24 effluent-quality limits from the discharge from the
25 solid waste facilities.

26 THE CHAIR: Thank you, staff.

1 INAC?

2 MR. PARSONS: Ian Parsons, Indigenous and
3 Northern Affairs Canada. So, yes, as Dave said, we had
4 a conversation with the Water Board and with the
5 applicant on the leachate coming from both the metal
6 dump and the landfill.

7 And I guess I'll just take a step back and just,
8 like, remind everyone or, I guess, reiterate that the
9 reason -- the other reason -- not just the environment,
10 but the other reason why we're concerned about this
11 leachate is that INAC's inspectors also have a role to
12 play, under the Arctic Waters Pollution Prevention Act.
13 And since this leachate enters the Arctic -- or the
14 North Atlantic -- so it's the -- under the Arctic
15 Waters Pollution Prevention Act, then this is the other
16 reason why we're bringing up this concern.

17 So to continue, we've discussed basically -- in
18 the beginning, one thing that was discussed was just
19 upgrades to the diverts and ditches to make sure no
20 access runoff from the higher elevation land around the
21 metal dump would enter that facility. So that was the
22 very first thing that was discussed. And I think it
23 was agreed that it was a [sic] easy fix.

24 The second part that was discussed was basically
25 how to contain the leachate and, if that can't be done,
26 what was the next step. And so in the interim, we

1 basically discussed that the applicant is going to put
2 forward a monitoring plant where there's going to be
3 monitoring events during spring freshet, any heavy
4 rainfall event, as well as monthly sampling thereafter.
5 So from that, analysis will be done, basically to see
6 what the monitoring data brings back. And from there,
7 subsequent management plans may be updated and
8 addressed.

9 Right. So just discussing there with my
10 colleagues. The one thing that I don't think we've
11 discussed yet is, after the monitoring is done, timing
12 with regards to any action plan or the drainage plan as
13 well and how they're going to interact with each other.

14 I think I've covered the actions that were
15 discussed. So I'll leave it to the other participants
16 at the meeting, if they want to add things.

17 MR. HOHNSTEIN: Thanks, Mr. Chair. David
18 Hohnstein, Nunavut Water Board. I'll pass things over
19 to the Hamlet and the GN and their consultant to, I
20 guess, to further confirm some of the items that were
21 discussed regarding moving forward with some
22 characterization of the effluent from the solid waste
23 facilities and, you know, the monitoring proposed over
24 the next minimum, probably, couple of seasons, 2018,
25 2019.

26 There was some discussion, you know, regarding the

1 adequacy of having enough monitoring and data available
2 to actually characterize the effluent and, you know,
3 determine the action plan, moving forward from there.

4 So I'll pass things over to the Hamlet and GN for
5 now.

6 MR. ROY: Bhabesh Roy. Thank you, Water
7 Board and INAC, for come to some kind of consensus.

8 Yes, this March, we are going to enforce our
9 monitoring program. The one monitoring will be
10 the heavy rainfall time, and then the other
11 monitoring/sampling should be at the time of the flow
12 seen, and then we go for 15 days interval.

13 So, more or less, we are taking four sample,
14 regular sample, and one heavy rainfall, altogether five
15 samples, one from metal dump site, and one from the
16 sampling point of the leachate, PAN-5. And we'll
17 analyze the result and submit with the action plan,
18 along with the 2018 annual report, in 2019, on or
19 before March 31st.

20 MR. HOHNSTEIN: Thanks, Mr. Chair. David
21 Hohnstein, Nunavut Water Board. So I think, just to
22 sort of wrap up our discussions and some of the further
23 comments brought in here when we reconvened, just
24 looking for, I guess, a confirmation and commitment
25 from the Hamlet and the GN regarding providing a
26 revised landfill management plan with the monitoring

1 requirements. And, you know, that would be developed,
2 I'm thinking, through potential conditions included in
3 the licence, to provide direction with respect to the
4 requirements that were discussed here today. So just a
5 confirmation that we would be, you know, looking to and
6 have a commitment from the GN for a revised plan,
7 moving forward, with respect to the solid waste
8 facilities and water management leachate
9 characterization.

10 THE CHAIR: Go ahead, applicants.

11 MR. LADD: Ron Ladd, SAO from the Hamlet
12 of Pangnirtung. Yeah, we can commit to updating that
13 action plan, that landfill plan before we take the
14 first sample. And we're -- and that's what we can
15 commit to.

16 THE CHAIR: Thank you.

17 MR. HOHNSTEIN: Thanks very much. Anything
18 further from the GN?

19 MR. ROY: This is Bhabesh Roy. Yes, we
20 are working with the Hamlet very closely to implement
21 this monitoring plant, as we promised.

22 Thank you, Mr. Chair.

23 THE CHAIR: INAC?

24 MR. PARSONS: Ian Parsons, Indigenous and
25 Northern Affairs Canada. Two small comments: The
26 first comment, I'm just wondering if the action plan is

1 going to take in the drainage plan as well. This is to
2 the applicant, sorry.

3 THE CHAIR: Applicants, go ahead.

4 MR. ROY: Bhabesh Roy. Yes, action plan
5 is including drainage plan, right. Thank you.

6 Thank you, Mr. Chair.

7 MR. PARSONS: Ian Parsons, Indigenous and
8 Northern Affairs. And the second comment was, just so
9 there's no confusion, I thought, when we broke from our
10 sidebar there, that we weren't really committed to,
11 like, five samples. It was basically going to be three
12 samples in the beginning, at spring freshet, say, Day
13 1, Day 15, two weeks later, and then it was going to be
14 monthly until no flow, plus any high rainfall event.

15 So we're not really stuck at five. It could be
16 six or seven, but, like, it's not stuck at five. I
17 just want to confirm that so there's no confusion.

18 THE CHAIR: Applicant, go ahead.

19 MR. LADD: Ron, Hamlet of Pangnirtung.
20 No, you are correct. It's up 'til freeze-up. I
21 remember last year, it rained one day all summer. So,
22 realistically, I think you'll probably get five,
23 probably not more, but we won't limit it to that.
24 We'll limit it to freeze-up. But five is probably
25 close to the number, I think. Thank you.

26 MR. PARSONS: Thanks. Yeah, I just wanted

1 to make sure that, like, we weren't limited at five and
2 just depending on, like, rainfalls and -- I'm sure
3 you're experienced with rainfalls in Pangnirtung. So,
4 yeah, I just wanted to make sure that it's not just
5 five, bang on; it could be more. Thanks.

6 THE CHAIR: Thank you.

7 Staff, go ahead.

8 MR. HOHNSTEIN: Thanks, Mr. Chair. David
9 Hohnstein, Nunavut Water Board.

10 I just wanted to follow up with the commitment
11 from the Hamlet and GN, as far as providing an updated
12 plan. In discussions here, it was brought to my
13 attention that the current plan is a part of a current
14 O&M plan, O&M manual. And the staff would like to see
15 that plan as a standalone document, so it's not
16 imbedded within another operational management plan.
17 So if that can be agreed upon, that would be -- it
18 would be much appreciated.

19 THE CHAIR: Go ahead, applicant.

20 MR. ROY: Yeah, this is Bhabesh Roy.
21 Yeah, action plan/drainage plan, it should be one plan
22 as a standalone plan. It is different from the O&M
23 document. Thank you.

24 THE CHAIR: Dave, go ahead.

25 MR. HOHNSTEIN: Thanks, Mr. Chair. That's it
26 from the Water Board staff.

1 THE CHAIR: Thank you.

2 INAC, do you still have some more to present?

3 MR. PARSONS: Ian Parsons, Indigenous and
4 Northern Affairs Canada. I don't think we have any
5 further comments at this time.

6 THE CHAIR: Thank you. Just hold on.
7 Okay, thank you. Now we have staff done and then
8 panels. So there's no further questions to the INAC
9 presentation. Thank you. Thank you very much.

10 In our agenda, we -- we'll save -- I think we'll
11 save our agenda for tomorrow, I guess. So tonight
12 we'll have a community session at 7:00 here in the same
13 room. So I'd like to have the -- maybe Teresa or
14 Stephanie speak to that.

15 MS. AUTUT: Thank you, Mr. Chair.
16 Stephanie Autut, Nunavut Water Board. So that is
17 correct. The next point on the agenda will be the
18 community session this evening at 7:00. So we ask the
19 parties to be prepared to give a brief presentation,
20 similar to what you've done today, for the benefit of
21 the community and be prepared to address any questions
22 to that front.

23 So, Mr. Chair, unless you have any other business,
24 our recommendation at this point would be to take a
25 recess until tonight's session. Thank you.

26 THE CHAIR: Yes, thank you. Yes, we will

1 take the recess now and reconvene tomorrow morning,
2 9:00. But tonight we'll have a community session
3 starting at 7. And make sure we have the headsets
4 working properly because I'm expecting more people from
5 the community of Pangnirtung will be here tonight.

6 Yes, I think that's about it for now. Thank you,
7 interveners and applicants and staff and interpreters.

8 (DINNER ADJOURNMENT AT 4:22 PM)

9 (PROCEEDINGS RECOMMENCED AT 7:13 PM)

10 Community Session

11 Opening Remarks by Nunavut Water Board Chair

12 THE CHAIR: Good evening. Please welcome.

13 Hopefully, we'll have more people coming in, join in
14 this evening, as the evening goes on. We'll start.

15 We are here for the Nunavut Water Board regarding
16 an application for a new Type "A" water licence for the
17 Hamlet of Pangnirtung, 3AM-PAN----, requested by Hamlet
18 of Pangnirtung. My name is Lootie Toomasie. I'm the
19 Chair of Nunavut Water Board, and tonight I'll be
20 chairing.

21 Tonight -- yes, tonight we are meeting in regards
22 for the new application. That way, we'll have -- the
23 residents of Pangnirtung are able to have drinking
24 water and have the sewage facilities running. The
25 sewage, the garbage, the sewage plant, they're all
26 related. This is open to anyone this evening. This is

1 the last process in doing this kind of application.

2 And there are Government of Nunavut participants
3 and from the Hamlet. The Hamlet requested this with
4 Nunavut Water Board for consideration. NWB is pleased
5 to come to Pangnirtung and that you came in this
6 evening. Before we proceed, we'll start with a prayer.
7 (PRAYER)

8 THE CHAIR: For those of you who were not
9 here this morning when we start the public hearing, I
10 have a few brief housekeeping and introductory remarks,
11 and then I will turn the microphone over to the staff
12 of the Nunavut Water Board to provide everyone a
13 summary of the Nunavut Water Board process in general
14 and in relation to the Hamlet's application for the
15 Type "A" water licence; to the applicant, the Hamlet of
16 Pangnirtung, to present the application; and to the
17 interveners in this application, Fisheries and Oceans
18 Canada and Environment and Climate Change Canada and
19 Indigenous and Northern Affairs Canada, to present
20 summaries of the technical review comments they have
21 provided with respect to this application.

22 Now on to a few brief housekeeping items. There
23 will be interpretation available tonight and earpieces
24 available on the table, down at the entrance area.
25 English channel is Channel 2; Inuktitut, Channel 1; and
26 floor, Channel 3. When you're speaking into the

1 microphone, please turn off your earpiece to avoid
2 feedback.

3 Secondly, the Board appreciates it if everyone
4 signs in on the form provided, located at the table at
5 the entrance area. This is an important record of the
6 hearing, and we appreciate your help in making sure it
7 is complete. The washrooms, everyone knows where they
8 are, from Pangnirtung, people, so I will not -- I will
9 skip that. And there's coffee available and snacks at
10 tonight's session. Help yourself if you wish to have
11 some coffee and some snacks.

12 There are agendas for this community session and
13 the public hearing available at the table, as you come
14 in. Please pick one and follow along. There's papers
15 at the table there.

16 Now I would like to introduce all the Board
17 members and staff here tonight before we proceed to the
18 presentation in the agenda. I'll be chairing this
19 panel. With me today are members of the panel, are the
20 Board members: Ross Mrazek, on my right; on my left is
21 Makabe Nartok.

22 Several staff members who have contributed to the
23 NWB's administration and the technical review of the
24 application are present, along with the legal counsel
25 to the NWB, and I will introduce the individuals
26 attending today. When I say your name, I ask you to

1 wave so that people will know who you are:

2 • Stephanie Autut, Executive Director.

3 • Steve Hohnstein -- David Hohnstein, sorry. I never
4 said "Steve." David Hohnstein, Director of Technical
5 Services.

6 • Ben Kogvik, Director of Board Administration and
7 Communication, at the back.

8 • And Karen Kharatyan -- I never really able to
9 pronounce that properly -- Acting Licensing Manager.

10 • Richard Dwyer, Licence Administrator, at the back,
11 down in the entrance area.

12 • Teresa Meadows, with Meadows Law, legal counsel to
13 the NWB.

14 • And Assol Kubeisinova -- I'm sorry, I didn't
15 pronounce that properly as well -- as Technical
16 Advisor.

17 We have two interpreters helping us this evening.
18 In addition to the Ben Kogvik, Director of Board
19 Administration and Communication, we have William
20 Kilabuk and Madeleine Qumuatuq from Pangnirtung. And
21 for audio support, we have Israel Mablick from Innirvik
22 Support Services. If you experience any difficulties
23 with your headset, he will be able to assist you when
24 you need help.

25 To ensure an accurate record of these proceedings
26 is kept, we have with us a court reporter, Tran Huynh,

1 from Dicta Court Reporting Incorporated, at the back,
2 over there. To assist Tran, I ask that all parties
3 please state their name prior to speaking.

4 Tonight's session will involve a presentation by
5 the Nunavut Water Board's technical staff; a
6 presentation by the applicant, the Hamlet of
7 Pangnirtung; and presentations by the interveners,
8 Fisheries and Oceans Canada and Environment and Climate
9 Change Canada, attending by teleconference, and
10 Indigenous and Northern Affairs Canada.

11 Following each presentation, I will invite
12 everyone who wish to ask questions or provide the panel
13 with their comments to step up to the microphone and
14 speak on the record. I encourage everyone with
15 questions to please step up and ask. But to make sure
16 our public hearing record is accurate and to assist our
17 court reporter and interpreters, before speaking,
18 please wait until you have a microphone to speak. Then
19 state your name and speak directly, clearly, and slowly
20 into the microphone.

21 I'm sorry, sometimes my regional speak -- tongue
22 is a fast speaker, very fast, like Newfoundlander. So
23 I -- sometimes I could not manage, myself [OTHER
24 LANGUAGE SPOKEN].

25 Please be respectful and mindful of the
26 interpreters as you go and avoid the use of acronym and

1 abbreviation if you can [OTHER LANGUAGE SPOKEN].

2 Please note that it is our tradition to give
3 respect to our Elders. Therefore, at any time, the
4 Elders will be permitted to speak about the application
5 before the Board. I just ask that any Elder who want
6 to speak waits for our staff to get you a microphone so
7 that we can ensure we have an accurate record of what
8 you have to say. We appreciate your participation and
9 assistance in making sure we are heard, respected, and
10 understood during this community session and public
11 hearing.

12 That concludes my remarks, and I move on to Item 3
13 in our agenda, in this evening's agenda. I will now
14 turn the microphone to the Board's technical staff to
15 walk you through how this application has been
16 progressed to this point.

17 Staff, technical staff, go ahead.

18 EXHIBIT 10 - Hard Copy of PowerPoint
19 Presentation from Nunavut Water Board,
20 Community Session Presentation
21 (English/Inuktitut)

22 Presentation by the Nunavut Water Board

23 MS. KUBEISINOVA: Thank you, Mr. Chair.

24 Good evening. My name is Assol Kubeisinova, and
25 I'm with the Nunavut Water Board. So this evening we
26 will speak about the application that was made by the

1 Hamlet of Pangnirtung, and it is for a Type "A" water
2 licence. So I will just speak about the background
3 information on the Nunavut Water Board, the
4 authorization that the Board may issue, the licensing
5 process for a Type "A" water licence, the scope of the
6 application, the procedural history of the application,
7 participation of the interveners, public participation,
8 and the remaining steps in the application process.

9 So the Nunavut Water Board, or NWB, is an
10 institution of public government established under
11 Article 13 of the Nunavut Agreement. The Board has
12 responsibilities and powers over the regulation, use,
13 and management of fresh water in the Nunavut Settlement
14 Area.

15 Objects of the Nunavut Water Board are to provide
16 for the conservation and utilization of waters in
17 Nunavut, except the national -- in the national park,
18 in a manner that will provide the optimum benefit from
19 those waters to Nunavut's residents in particular and
20 Canadians in general.

21 Based on this mandate and Nunavut Waters
22 Regulations, or "Regulations" for short, the Board may
23 issue any of the following authorizations for the use
24 of water and/or deposit of waste for undertakings in
25 Nunavut. So the first type is an authorization without
26 a licence, and that include activities that would

1 require water use for less than 50 cubic metres of
2 water per day. The next type is a Type "B" water
3 licence, and that includes water use between 50 and 299
4 cubic metres of water per day. And the last one is a
5 Type "A" water licence, and that includes water use of
6 over 300 cubic metres of water per day.

7 So this week we are conducting a public hearing
8 and considering a Type "A" water licence application,
9 based on the criteria set out in Schedules 2 and 3 of
10 the Regulations.

11 So the Nunavut Water Board Type "A" licensing
12 process, so how it starts out is with receiving of an
13 application. Then the Board confirms that the
14 classification is correct, and the type of licence is
15 confirmed as a Type "A" licence. After that, Nunavut
16 Water Board conducts a concordance review and also may
17 request some additional information from the applicant,
18 which the applicant is supposed to provide. After
19 that, Nunavut Water Board issues notice of application
20 and requests technical review and submission of
21 comments, and that can take a minimum 30 days.

22 Parties submit written representations. Then the
23 Board conducts a technical meeting and a prehearing
24 conference, and then issues a prehearing conference
25 decision. After that, the Board issues a notice of
26 public hearing, a 60-day minimum requirement.

1 So during those steps, if required, the applicant
2 can provide additional information to satisfy any
3 questions or requests from the Board or the
4 interveners. So after that, the parties exchange
5 written interventions and prepare for the public
6 hearing.

7 So our current stage is the public hearing itself.
8 So the result of the public hearing would be the Board
9 issuing a decision to approve the application and
10 provide a draft licence to the Minister of
11 Crown-Indigenous Relations and Northern Affairs. And
12 then the Minister can approve or can -- and would
13 decide to not -- or would decide to not approve the
14 licence.

15 Another option is that the Board would issue a
16 decision to not approve the applications -- the
17 application and provide its reasons to the Minister.
18 Then the Minister would approve this decision or would
19 not approve the decision.

20 So the scope of the current application is that
21 the Hamlet of Pangnirtung has applied to use the water,
22 wastewater treatment/disposal, and waste management
23 facilities and use up to 120 [sic] cubic metres of
24 water per year coming from the Duval River. Also, the
25 application includes the new and the old, or backup,
26 truck-fill stations; wastewater treatment facility and

1 the wetland; and the landfill, which consists of the
2 metal waste area, hazardous waste area, and the sludge
3 disposal area. The application also includes a
4 non-functioning, non-operating sewage lagoon.

5 So the timeline -- the timeline for this
6 application was the following. March 16th through May
7 10th of last year, the application was filed by the
8 Government of Nunavut on behalf of the Hamlet. After
9 that, the Nunavut Water Board conducted an internal
10 preliminary review and did a completeness check for the
11 application package. And after that, the Board
12 requested all parties to conduct their preliminary
13 reviews and completeness checks.

14 So on June 6, 2017, the preliminary review
15 comments were received from Indigenous and Northern
16 Affairs Canada and Environment and Climate Change
17 Canada. After receiving those comments, NWB requested
18 the parties to conduct a full technical review. And
19 the Board then received the response from the
20 Government of Nunavut with additional information for
21 the application. After that, the Board received all
22 the technical review comments from the interveners:
23 ECCC, Environment and Climate Change Canada; Fisheries
24 and Oceans Canada; and Indigenous and Northern Affairs
25 Canada.

26 So the Board requested that the applicant respond

1 to these comments, and the applicant did so. And after
2 that, the Board got back to the interveners, requesting
3 that they review the comments provided by the Hamlet.

4 The next stage was holding of the technical
5 meeting and the prehearing conference. And once all
6 the -- once all the submissions for the prehearing
7 conference were received and the technical meeting and
8 the prehearing conference were held, the Board issued
9 its decision. So that was followed by receiving of the
10 final submissions from the applicant and from the
11 interveners and all the presentations for the public
12 hearing.

13 So as we said before, now we are at the stage of
14 the public hearing. The applicant, Department of
15 Fisheries and Oceans Canada, Environment and Climate
16 Change Canada, and Indigenous and Northern Affairs
17 Canada have all contributed to the review process of
18 the application, participated in both formal and
19 informal discussions to resolve relevant issues, and
20 provided the Board and the proponent with valuable
21 technical information.

22 So the Board encourages everyone to participate in
23 the public hearing and this community session, and
24 whoever is interested can also contact the Water Board
25 staff. All documents received have been posted on
26 Nunavut Water Board's FTP site, and you can see the

1 link at the bottom there.

2 The public hearing this week is chaired by the
3 Board panel and led by the Board's Chair. The Nunavut
4 Water Board panel is here to consider the evidence
5 provided during the hearing, before issuing a decision
6 in about 30 to 45 days. And the Board will inform the
7 public of the decision once it's rendered.

8 So here you can see the contact information for
9 the Nunavut Water Board staff. And if you have any
10 questions or comments, please let us know.

11 THE CHAIR: Thank you. Thank you, Assol.

12 MS. KUBEISINOVA: Thank you, Mr. Chair.

13 THE CHAIR: Any more reports to do? No?

14 Okay, okay.

15 If there are any questions -- also, Abraham -- is
16 one of the Elders. Just informing him that he can
17 speak up any time that he wants to. Elders are very
18 important to us, their knowledge. When we have such
19 hearings, we always invite Elders in particular to
20 participate.

21 Any questions, if there are any questions from the
22 floor? NWB? She just explained what NWB -- what
23 process they take.

24 Since there are no questions, we'll proceed, go to
25 the next item. Hamlet of Pangnirtung will do their
26 presentation. Let's proceed.

1 Presentation by the Hamlet of Pangnirtung

2 MR. LADD: Thank you. I'm Ron Ladd, the
3 SAO for the Hamlet of Pangnirtung, for the licensee.
4 The hearing today is to talk about 3AM-PAN, 3BM-PAN417
5 [sic] renewal, Type "A" municipal water licence
6 amendment application for the Hamlet of Pangnirtung.

7 I have here today, to my right, a licensed
8 technical rep, Bhabesh Roy, and he has a Ph.D., and
9 he's a municipal engineer. And Stephen couldn't join
10 us tonight; he's not feeling well. So hopefully he's
11 resting.

12 And I'd like to welcome the public to tonight's
13 meeting. Thank you. And I'd like to turn over the
14 microphone to my colleague, Bhabesh Roy.

15 MR. ROY: Thank you. This part of the
16 presentation, we are -- I'm going to do a little
17 differently than I did in the morning.

18 Under this licence, we have three main facilities:
19 One is water supply system. Water supply system -- we
20 have water supply system, wastewater treatment, and
21 solid waste management. These are the three basic
22 component of the water licence.

23 Now, under the water supply, we have water
24 truck-fill station, water storage reservoir, and Duval
25 River as a potable water source. And this coming at
26 the same time, the water truck-fill station -- we built

1 a new water truck-fill station in Pang. It is going to
2 be commissioned very soon. Right now it is at the
3 calibration stage.

4 New treatment plant, we are using filters so that
5 we can measure turbidity. We can cut down the
6 turbidity from the draw to treated water. That will
7 improve the public health. Right now we could not
8 decommission the existing treatment plant; we are still
9 using it. So once the new treatment plant is
10 commissioned, the old one, we keep for some time, and
11 then we decommission.

12 Water storage reservoir, I think this is the
13 biggest water storage reservoir built by NWT --
14 capacity, 120,000 cubic metre. It is totally lined, as
15 we call it "confinement." It's a containment
16 structure. We fill it every year, but its capacity --
17 but its consumption volume is 55,000 cubic metres. So
18 we feel like 50 percent water, we recharge every
19 time -- every year, from the Duval River to the
20 reservoir.

21 Every five years we clean the reservoir. We
22 remove the sediment from the top of the liner. And
23 that very year, we have to fill the reservoir 100
24 percent. It means 120,000 cubic metre of water.

25 We have Duval River, who is the -- which is the
26 only potable water source. This is the single source.

1 We don't have any secondary source in the community.
2 And from the Duval River, we extract water only in the
3 summertime, from July/August, during this period, using
4 a diesel pump. So we pump water from Duval River to
5 the storage and fill the storage reservoir within 45
6 days and so.

7 So during the discussion -- we have two intake:
8 One intake is from the Duval River to the storage
9 reservoir; another intake is from the storage reservoir
10 to the treatment plant. And both the intake, we have
11 screen, and we are following the DFO guidelines so that
12 the fish cannot go inside the intake. Also, the -- we
13 are using -- as I said, we are using three types of
14 filters: 20 micron, 5 micron, and 1 micron. So fish,
15 there is no possibility to come to the water truck;
16 that, for sure, guaranteed.

17 This is a structure of the cross-section and the
18 plant: Duval River, and then diesel pump process to
19 the water reservoir, and then water reservoir to the
20 water truck-fill station, and filling the water truck.

21 The new design -- this is first in Nunavut. In --
22 we have two. Pang is happy and, I think, glad to have
23 the new one at the beginning. This treatment process,
24 we cut down the 20-minute waiting time. So once we
25 fill the truck, truck is ready to deliver water to the
26 public.

1 The arrangement is -- at the basement of this
2 building, we are using Serpentine pipe, and that
3 Serpentine pipe will consume the 12 minutes. And we
4 are conserving, like, 8 to 10 minute to filling the
5 truck. So once truck is filled, 20-minute contract
6 time is fulfilled. And we satisfy the Department of
7 Health regulation, and we are using the free
8 chlorine/total chlorine testing. And once the chlorine
9 demand is met, it means water is safe to drink and safe
10 to deliver to the public.

11 So this is a new concept. And we are happy and
12 proud to say Pang, first time they are receiving the
13 new plant in the history, which will give the better
14 quality of water.

15 This is our wastewater treatment plant, wastewater
16 treatment plant by mechanical treatment process. We
17 have the existing sewage lagoon, and also we have fish
18 plant from where we are getting fish plant effluent.
19 The wastewater treatment plant -- again, this is a
20 fortunate community. We have only mechanical treatment
21 plant in Nunavut, and it is in Pangnirtung. And this
22 plant built in 2003. Initially, we have some problem
23 to commission the plant, and we upgraded. We optimized
24 to the highest level. Right now the plant is using,
25 with membrane, an aeration system. The effluent water
26 is coming so good, we can satisfy the CCME guidelines.

1 So it means the BOD and TSS is less than 25/25.

2 The cost of this building is almost a million
3 dollars. And we are using the chemical feed system.
4 The chemical cost is, like, 35, 40,000 per year. So it
5 is a so sophisticated plant. I can say it is so
6 sophisticated not in Nunavut, but it is sophisticated
7 in the country. Plant is working good. I declared in
8 the morning and also audience this afternoon, the plant
9 is working to the satisfaction, and we are in
10 compliance.

11 The sewage lagoon -- this is the so-called sewage
12 lagoon. It is abandoned right now. We are not using
13 anymore. We use a few years after the mechanical plant
14 was built, only for the fish effluent coming from the
15 fish plant. So now the treatment -- mechanical
16 treatment plant is optimized in a way, we can treat
17 domestic wastewater as well as industrial wastewater.
18 So sewage lagoon is no use. So we are planning to
19 decommission the sewage lagoon very soon.

20 Fish plant effluent, as I indicated, the -- Pang
21 is one of the -- you know, the important community,
22 where economic growth is very high. Fish plant, we --
23 they're using mainly two types of fish, Arctic char and
24 turbot.

25 The effluent from the plant, we are taking to the
26 plant for treatment. And the solid part, the head,

1 bone, et cetera -- fish plant, they used to use the
2 international market to export. When they don't have
3 the international market, they throw the bone and head
4 to the -- our landfill site. Having said so, the
5 turbot, they clean up right away, the place where they
6 catch the fish. So the turbot things does not come to
7 the plant. I think only the Arctic char, the head,
8 bone going to the -- very small quantity going to the
9 landfill site. It's not throughout the year. I think
10 in the two months in a year and very small quantity.

11 So this is the wastewater treatment plant. And
12 you see the long road -- you know, the wastewater
13 effluent is running over the gravel track to the sea.
14 And the past part -- the thin line, this is the pipe.
15 So end of the pipe is our compliance point. So we have
16 to take water from there, and we make sure it is in
17 compliance.

18 Now, this water, before coming out from the
19 building, there is a UV system. So after treatment,
20 water is passing through the UV system. So you can
21 imagine, after UV, how good the water should be. It is
22 excellent quality.

23 So this is the location of the wastewater
24 treatment plant, and then next to that, there is a
25 small building, this old incinerator building. This is
26 not part of the licence.

1 Now, solid waste management -- like many other
2 communities, here in Pang, we are doing the domestic
3 waste management by landfill, and then we have metal
4 waste site. We have the hazardous material storage
5 area inside the metal waste site. And also, as I
6 indicated, the fish plant solid waste is coming to the
7 landfill site.

8 This is, more or less, the topography, how the
9 facilities are located. We have reservoir, we have
10 mechanical treatment plant, metal waste, and the solid
11 -- landfill site.

12 MR. HOHNSTEIN: Can you point out -- point to
13 them? It might be hard to read, just the middle part
14 there.

15 MR. ROY: Okay, okay. Okay, this is
16 water reservoir, this is wastewater treatment plant,
17 this is landfill site, and this one is metal dump site.
18 And after the -- before the landfill site, there's a
19 little sewage lagoon. It's very small. It's not
20 actually shown here. Thank you.

21 Here is -- I can show this little detail. Here is
22 the wastewater treatment plant right here, and this is
23 the lagoon we are talking about, so-called lagoon. We
24 are going -- it is going to decommission.

25 Metal -- this is the metal dump. This interior
26 area is the metal dump. If you go there, you will see

1 the -- this is another -- you will see the -- all sorts
2 of metals are dumped over there. The red line is a
3 little dyke, and beside the dyke, there is a collector
4 drain. So this is a hill. When the water going there,
5 this collector drain collect the water and then bring
6 it here. And there is a collector drain along the
7 road, and these are the culverts on the road. These
8 are the culvert. The culvert -- this is another one.
9 Culvert take the water from this side of the road to
10 other side of the road.

11 Now, here is our -- the landfill site. You'll see
12 a blue line. The blue line -- there is a collector
13 drain. So the landfill is sloping this way. It's --
14 from this side going to this side is sloped. So
15 surface runoff, which is leachate, is coming to this
16 collector drain. And there is a pipe here and another
17 pipe here, and then the collector -- from collector
18 drain, leachate going to the land, the wetland.

19 Now, from the wetland, it's running towards the
20 sea. So I'll show how, from the wetland, it would go
21 to the sea in the next slide. So here, this is the
22 wastewater treatment plant, and this is our monitoring
23 station. We call it "PAN-3," and this is PAN-2. Truck
24 is standing here and discharge water inside the plant.
25 And after the treatment, the water is coming this way,
26 going to the sea. So here, the compliance point means

1 the -- before the water -- before the water is meeting
2 to the receiving body, the quality of water should be
3 better or as par to the receiving body.

4 So guideline shows -- we call it "two parameter":
5 biochemical oxygen demand and total suspended solid,
6 180 milligram per litre and 120 milligram per litre.
7 If we satisfy, it means our water quality is acceptable
8 to discharge to the sea. But technically, the way we
9 are getting -- instead of 180/120, we are getting,
10 like, 25/20. So you can -- you can see how drastically
11 we improve the water quality, our effluent water
12 quality. That's why we're saying this treatment plant
13 is number one, it's super. It's functioning excellent.

14 This is the old incinerator building. This is --
15 as I told you, this is not working anymore. And our
16 sewage lagoon is just here. And this is aligned -- the
17 water from this side -- there is a drain, there is a
18 culvert. So water is coming here and going to this
19 direction.

20 Now, I have shown the pipe -- one pipe here and
21 another pipe here. The leachate is coming to this way,
22 and leachate is coming this way. Now, this side of the
23 land is a little higher. So when the water -- leachate
24 coming here, leachate is coming to this direction and
25 meeting with this surface drain and diluted
26 significantly before going to the sea.

1 And this particular pipe, actually, is -- right
2 now is block because, in the new wastewater treatment
3 plant, we're getting the sludge in a bag. It's a big
4 bag. So we are dumping the bag over there. So after
5 dumping in the winter, one winter, the bag will become
6 totally solid and become contained. So if rainfall or
7 anything happen, nothing will come out from there. It
8 become kind of rock. So from this part, we are not
9 getting any kind of surface runoff. Only this domestic
10 site, we are getting the surface runoff.

11 And in the metal site, this is a monitoring
12 station established in the licence; we call it "PAN-6."
13 From here, we have to collect sample. As we have been
14 discussing in the morning, we need to collect sample
15 from here, we have to collect sample from here, several
16 sample. And then we analyze to see if there is any
17 environmental impact of the quality.

18 Now, our hazardous waste is somewhere here. It is
19 open now. So Hamlet has been advised to fence so that
20 it can be isolated from the rest of the materials. And
21 I announced this morning that the -- like any other
22 community, Pangnirtung is also going for segregation
23 because they mix up all sorts of metals together,
24 construction materials and the other metals. So they
25 are segregating, like -- they put in one site, and the
26 car, they will put another site. This way, they will

1 segregate the materials.

2 Now, this is our existing facilities. But,
3 audience, you will be happy to know that the
4 Pangnirtung -- we are building a new facility which
5 will address all the metals, the domestic, the
6 industrial, and the metals. All the waste will be
7 dealing in one single area, and it might go through
8 another mechanical process. I'm not declaring it is
9 mechanical. But Pangnirtung, we don't have a land to
10 build another landfill site where we can treat this
11 material. So I'm expecting that, very soon, Pang will
12 be getting another mechanical facility to treat all the
13 waste, all different kind of waste.

14 So I think this, more or less, the water supply,
15 wastewater treatment, and the waste management. In
16 conclusion, I must say this is the only community -- I
17 think the fortunate community in Nunavut. They have
18 already two brand-new, latest model treatment plant,
19 water supply -- water treatment and the wastewater
20 treatment. And they're expecting the waste management
21 also, hopefully another mechanical.

22 So we are expecting a licence for 15 years. I can
23 easily testify, because these are all mechanical system
24 -- and 15 years is a good time for us to equip ourself
25 to operate the system, train our people and -- for
26 operation and for maintenance and monitoring these

1 facilities. Thank you, Chair.

2 THE CHAIR: Thank you, applicant.

3 We'll open up for questions. Now we are on to
4 questions. Any questions to Hamlet of Pangnirtung for
5 their request for renewal?

6 Since there are no questions, we'll move on to the
7 agenda. Next presenters are DFO [OTHER LANGUAGE
8 SPOKEN].

9 Presentation by Fisheries and Oceans Canada

10 MR. JANUSZ: Good evening, everyone,
11 especially the Nunavut Water Board and also to the
12 Hamlet of Pangnirtung for hosting this event. Welcome,
13 to the public. Can you hear me all right? Okay.

14 My name is Richard Janusz. I'm with the
15 Fisheries -- I'm with Fisheries -- sorry. I'm with the
16 Fisheries Protection Program of Fisheries and Oceans
17 Canada. I'm a Senior Fisheries Protection Biologist
18 with the department. I'm joined here by my colleague,
19 Jeff Moyer, today, and we're happy to be here.

20 I'd just like to go over, very briefly, our
21 mandate and responsibility and -- as well as our
22 technical review comments on the Type "A" water licence
23 for the Hamlet of Pangnirtung. The Fisheries
24 Protection Program, our objective is to protect
25 Canada's commercial, recreational, and Aboriginal
26 fisheries and those species that support those

1 fisheries by avoiding serious harm, which is defined as
2 death of fish, permanent alteration of habitat, or
3 destruction of fish habitat. And serious harm is
4 prohibited under the -- what are generally known as the
5 fish habitat protection provisions of the Fisheries
6 Act.

7 For the Duval River assessment, we note that the
8 Hamlet of Pangnirtung conducted a hydrological
9 assessment of the available data for the river, the
10 river flow, in accordance with our framework for water
11 withdrawal, which was published in 2013. It was
12 carried out under the auspices of the Canadian Science
13 Advisory Secretariat, and it's called "A Framework for
14 Assessing Ecological Flow Requirements to Support
15 Fisheries in Canada."

16 Based on the pumping rate of 32 litres per second
17 as a cumulative water withdrawal, which means all the
18 water which is taken away from the river, in the
19 language of the guidance which we've been given by our
20 scientists, it will not exceed 10 percent of the flow
21 in the river at any given time, and no water will be
22 taken out of the river when the instantaneous flow is
23 less than 30 percent of the average annual flow in the
24 river.

25 Should the Duval River be subject to levels of
26 water-taking from the river greater than 10 percent or

1 when the instantaneous flow is less than 30 percent of
2 the average flow, then a more rigorous level of
3 assessment would be required to evaluate potential
4 problems.

5 We recommend that water should be withdrawn during
6 the highest flow periods, which, as we understand it,
7 are in July and August. And this would minimize the
8 requirements to withdraw water during low flow times.

9 We recommend that flow in the river be monitored
10 with a gauged reference system of some kind, daily, so
11 that the Hamlet can know whether it is not exceeding 10
12 percent of the water in the river, and they don't take
13 water when it's lower than the low-flow cutoff level,
14 which is the 30 percent of the mean average flow.

15 We support the inclusion of a licence condition to
16 conduct a more detailed hydrology study of the Duval
17 River, to help understand the present conditions and
18 also to help understand the long-term sustainability of
19 the water supply for the Hamlet of Pangnirtung.

20 Given the lack of specific fish information for
21 the Duval River, we recommend that the proponent ensure
22 that, if required, they have a fish screen that meets
23 DFO guidelines for water intakes, which is the
24 "Freshwater End-of-Pipe Fish Screen Guideline,"
25 published in 1995. It provides design guidance on
26 building a screen that will help protect against fish

1 getting into an intake or getting pushed on the screens
2 and dying there.

3 Overall, we find that, provided these mitigation
4 measures, as we call them, are fully developed and
5 effectively carried out, that there is a low chance, a
6 small chance -- or a low probability of detectable
7 impacts to the Duval River, in terms of its ability to
8 support commercial, recreational, or Aboriginal
9 fisheries, and that, therefore, serious harm is not
10 likely and a Fisheries Act authorization is not
11 required in this case.

12 Thank you very much again. And if there are any
13 questions or comments, we can hear those now.

14 THE CHAIR: Thank you, DFO.

15 Any questions to DFO? Any questions, comments?

16 Thank you for your presentation.

17 Next, I'd like to call upon Environment and
18 Climate Change Canada to present your presentation.

19 Presentation by Environment and Climate Change Canada

20 MR. BERNARD-LACAILLE: Thank you, Mr. Chair. Can you
21 hear me correctly?

22 THE CHAIR: Yes. Go ahead.

23 MR. BERNARD-LACAILLE: Thank you. Good evening,
24 Mr. Chair, Board members, and members of the public,
25 and all of those joining us today. My name is Gabriel
26 Bernard-Lacaille, and I'm an Acting Senior

1 Environmental Assessment Coordinator with Environment
2 and Climate Change Canada.

3 Today I will present the department's mandate and
4 outline the technical comments and recommendations
5 provided by the department's final written submissions
6 to the Nunavut Water Board. For each recommendation,
7 we will indicate whether the issue has been resolved or
8 remains outstanding, along with any commitments made by
9 the Hamlet. Next slide, please.

10 Environment and Climate Change Canada's mandate is
11 to preserve and enhance the quality of the natural
12 environment, including water, air, soil, flora and
13 fauna; conserve Canada's renewable resources; conserve
14 and protect Canada's water resources; forecast daily
15 weather conditions and warnings and provide detailed
16 meteorological information to all of Canada; enforce
17 rules relating to boundary waters; and coordinate
18 environmental policies and programs for the federal
19 government. Next slide, please.

20 In order to do so, Environment and Climate Change
21 Canada administers over a dozen acts of Parliament,
22 either in whole or in part, and is responsible for
23 meeting numerous obligations spelled out in
24 legislation. This slide presents relevant acts and
25 regulations that the department administers. This
26 includes the Department of the Environment Act, the

1 Canadian Environmental Protection Act, and the
2 pollution prevention provisions of the Fisheries Act.

3 Environment and Climate Change Canada participates
4 in the water licence review process by providing
5 scientific expertise within our mandate to the Nunavut
6 Water Board for their consideration. For this project,
7 the department has provided scientific expertise to the
8 Board in regards to water quality, specifically in
9 regards to quality assurance and quality control;
10 toxicity testing; and the management of solid waste.

11 Next slide, please.

12 Our first technical comment is in regards to
13 quality assurance and quality control. The quality
14 assurance and quality control plan proposes to use only
15 trip blanks to achieve quality assurance and quality
16 control. Environment and Climate Change Canada
17 believes that using only trip blanks is insufficient
18 and made the following recommendations to the Hamlet.
19 The department recommends that the Hamlet include field
20 blanks rather than trip blanks; uses replicate or split
21 samples; append lab sheets that document the lab's
22 internal quality assurance and quality control program;
23 and includes a data reporting protocol. These
24 recommendations are made to ensure the validity of
25 water sampling.

26 In their response to the department's final

1 submissions, the Hamlet agreed to include Environment
2 and Climate Change Canada's recommendations in their
3 updated quality assurance and quality control program.
4 This issue is thus resolved to the department's
5 satisfaction.

6 Environment and Climate Change Canada's second
7 technical comment is in regards to toxicity testing.
8 In the previous, now-expired 3BM-PAN0810 water licence,
9 the condition was included to conduct effluent toxicity
10 testing. The condition stated that all effluent
11 discharged from the wastewater treatment plant at
12 Monitoring Program PAN-3 shall be demonstrated to be
13 not acutely toxic under the following tests to be
14 conducted once annually, with a minimum of six months
15 between samples: (a) acute lethality to rainbow trout
16 and (b) acute lethality to the crustacean Daphnia
17 magna.

18 The department noted that these tests have not
19 been conducted to date. Environment and Climate Change
20 Canada acknowledges that performing these types of
21 toxicity tests may be challenging because of holding
22 times. Therefore, the department recommended to the
23 Hamlet that the rainbow trout bioassay be used as an
24 indicator for acute lethality of the effluent, as
25 Daphnia is less sensitive to municipal effluent than
26 rainbow trout.

1 Furthermore, due to the possibility of technical
2 difficulties relating to holding times, the department
3 would like to recommend to the Nunavut Water Board that
4 this requirement be included in Part H, "Conditions
5 Applying to the Monitoring Program," rather than in the
6 main body of the licence.

7 In their response, the Hamlet agreed to limit the
8 bioassay testing to rainbow trout. Environment and
9 Climate Change Canada hopes that the Government of
10 Nunavut Community Government Services will be able to
11 overcome technical difficulties related to bioassay
12 testing, moving forward, and considers this issue
13 resolved. Next slide, please.

14 Environment and Climate Change Canada's third
15 technical comment is in regards to open burning. The
16 solid waste plan states that garbage is burned daily
17 and that waste is properly segregated. However, during
18 the technical meeting and prehearing conference held in
19 December 2017, the Hamlet provided clarification to
20 Environment and Climate Change Canada and stated that
21 household garbage was not segregated into burnable and
22 non-burnable waste.

23 The department is aware that the Hamlet will be
24 commissioning a new landfill site that should be
25 operational by 2024. But while this work continues,
26 the department strongly encourages the Hamlet to

1 minimize open burning of non-segregated waste.

2 In their response to the department's final
3 submissions, the Hamlet agreed to minimize the burning
4 of non-segregated waste. And in light of this response
5 and the future commissioning of the new landfill site,
6 this issue is resolved to Environment and Climate
7 Change Canada's satisfaction. Next slide, please.

8 In summary, Environment and Climate Change Canada
9 is generally satisfied with the information provided by
10 the Hamlet and looks forward to its continued
11 participation in the water licensing process. This
12 concludes our presentation. We would like to thank the
13 Nunavut Water Board for giving us the opportunity to
14 present, for providing hard copies of our presentation
15 at the hearing, and welcome any questions. Thank you.

16 THE CHAIR: Thank you, Environment and
17 Climate Change Canada, for your presentation.

18 [OTHER LANGUAGE SPOKEN] Any questions to the
19 presentation? So there's no questions.

20 Next intervener is the Indigenous and Northern
21 Affairs Canada.

22 Presentation by Indigenous and Northern Affairs Canada

23 MR. PARSONS: Thank you, Mr. Chair.

24 Good evening, everyone, Board members, Nunavut
25 Water Board staff, the Hamlet of Pangnirtung, the
26 applicant, fellow interveners, and the public. My name

1 is Ian Parsons. I'm the Acting Manager of Water
2 Resources for Indigenous and Northern Affairs Canada in
3 the Nunavut regional office located in Iqaluit.

4 Indigenous and Northern Affairs Canada appreciates
5 the opportunity to make a presentation at this
6 community session and intervention regarding the Hamlet
7 of Pangnirtung's application to renew its water
8 licence. I am joined here today by Lisa Bachellier,
9 Water Resource Technician, as well as Sarah Forte,
10 Water Management Specialist, with the department's
11 Nunavut regional office in Iqaluit.

12 On behalf of Indigenous and Northern Affairs
13 Canada, I would like to thank the Nunavut Water Board
14 for facilitating this application review process, and
15 the Government of Nunavut Community and Government
16 Services, and the Hamlet of Pangnirtung for responding
17 to our concerns and questions.

18 Throughout this presentation, I will refer to
19 Indigenous and Northern Affairs Canada as "the
20 department." And the acronym "INAC," I-N-A-C, is used
21 on the slides. I will provide a brief overview of the
22 department's responsibilities with respect to the
23 licence review application. I will also list
24 contributions that have been made by the department
25 with respect to this process so far.

26 Many technical comments that were raised by the

1 department in the course of this water licence process
2 have been commented on and addressed by the applicant.
3 And only those that need to be discussed further will
4 be presented here. And we did most of this discussion
5 this morning. So in this evening's presentation, I
6 will update our presentation to deal with those
7 discussions.

8 The comments that we have in our presentation are
9 divided into three principal themes: water supply,
10 wastewater treatment, and waste management. As well,
11 comments that didn't clearly fall into one of these
12 categories are grouped under the heading of "General."
13 I will conclude the presentation with a general
14 recommendation.

15 This slide just shows some of our roles and
16 responsibilities. Indigenous and Northern Affairs
17 Canada has a broad mandate for the co-management of
18 water resources -- or freshwater resources and the
19 management of Crown land in Nunavut under the following
20 applicable laws and agreements: the Department of
21 Indian [sic] and Northern Development Act, the Nunavut
22 Agreement, the Nunavut Land Claims Agreement Act, the
23 Nunavut Waters and Surface Rights Tribunal Act and its
24 associated regulations, the Nunavut Planning and
25 Project Assessment Act, the Territorial Lands Act and
26 regulations, and the Arctic Waters Pollution Prevention

1 Act.

2 The department administers and enforces regulatory
3 authorizations that pertain to Nunavut's Crown land and
4 freshwater resources. The department participates in
5 water licence processes administered by the Nunavut
6 Water Board, along with other interested parties,
7 providing technical advice and expertise for the
8 Board's consideration.

9 This slide is just going to show some of our
10 contributions to the application and review process so
11 far. To date, the department has made three
12 submissions to the Nunavut Water Board in the course of
13 the Hamlet of Pangnirtung's water licence renewal
14 application. At the beginning of the renewal process,
15 the department reviewed the scope of information
16 included in the application package and made two
17 recommendations as well as five information requests.
18 A written memorandum was provided on June 7th, 2017.

19 Subsequent to additional information provided by
20 the Hamlet of Pangnirtung, the department conducted a
21 technical review of the renewal application. Comments
22 and recommendations were provided for the Board's
23 consideration in a written memorandum on July 28th,
24 2017.

25 In December 2017, the department participated in a
26 technical meeting/prehearing conference, where

1 discussions with the applicant allowed us to clarify
2 many questions and plans were made for resolving the
3 outstanding requests.

4 These pictures, as you can see, it's -- the first
5 picture is the diesel pump at the Duval River, and the
6 picture in the foreground is the water reservoir.

7 The water supply for the municipality of
8 Pangnirtung is the Duval River. During the open-water
9 season, water from the river is pumped to a
10 120,000-cubic-metre reservoir to ensure year-round
11 water availability. A new water treatment
12 plant/truck-fill station was completed in 2016 and is
13 currently undergoing calibration. Trucks are used to
14 deliver water to homes and institutions.

15 As you've heard from the other presentations this
16 evening, a hydrology study was recommended by the
17 Department of Fisheries and Oceans, and it's also being
18 recommended by Indigenous and Northern Affairs Canada.
19 The applicant has agreed to undertake this hydrology
20 study within the next four years. This will ensure
21 that the Duval River is an adequate source for the
22 replenishment of the water reservoir yearly.

23 There is also a concern about the water management
24 around the reservoir with regards to repairs to a
25 secondary cutoff ditch, and this has been addressed by
26 the applicant.

1 Here -- and this is just a little background of
2 the wastewater treatment facility. This is an aerial
3 shot. Wastewater is collected from homes and
4 institutions by truck and is treated at a wastewater
5 treatment plant commissioned in 2015. The plant uses
6 filters and a membrane bioreactor technology to treat
7 wastewater before discharging at an outfall covered
8 with rip-rap that is approximately 140 metres from the
9 ocean. There is also a sewage lagoon that was used for
10 fish plant wastewater and occasional municipal
11 wastewater; however, this is no longer in use. And as
12 you've heard from the applicant, it will be
13 decommissioned.

14 The department does not have any concerns
15 regarding the performance of the wastewater treatment
16 plant; it is working well. Water quality data
17 presented in the 2016 and 2017 annual reports show the
18 plant effluent meets all effluent discharge criteria
19 set in the licence.

20 Next, there's three pictures of the waste
21 management facility. The top two pictures show the
22 metal dump. The picture to the right is showing some
23 water from outside entering into the metal dump
24 facility. There was some patch work done. However, an
25 inspection report in October 2000 and -- October 2nd,
26 2017, outlined that water was still passing through.

1 The bottom picture shows the outfall pipe from the
2 landfill facility.

3 The reason we're showing these pictures is that,
4 for the metal dump, the top two pictures, is that we
5 need to ensure that water doesn't enter the facility.
6 Once it enters the facility, water has the potential to
7 pick up contaminants and then bring them into the
8 environment. As well, the landfall [sic] discharge
9 needs to be better understood if contamination is
10 coming out into the environment from the facility.

11 So just to update the public now, through
12 discussions that we had this morning and this
13 afternoon, the Hamlet has agreed to updating its
14 monitoring plan and taking samples from both the metals
15 dump and the landfill facility to better understand if
16 there's any contamination in the water coming from
17 those facilities and also what that contamination looks
18 like. And from there, once that information is
19 collected, we can determine an action plan, which the
20 Hamlet has agreed to develop if it shows -- if the
21 effluent shows contamination.

22 As well, as we've seen from the previous picture,
23 the one to the right, we can see water entering the
24 metals dump. The applicant has agreed to upgrade the
25 diversion so water will not be so easily able to enter
26 the metal dump facility.

1 Management plans -- again, this is to update
2 earlier discussions. The applicant has agreed to
3 update all subsequent management plants in the 2018
4 annual reports. As well, the implementation of these
5 plans will happen in 2018. Closure, reclamation, and
6 decommissioning of the old truck-fill station and
7 sewage lagoon has also been committed to by the
8 applicant during the next licence.

9 Some other general comments: Under "Compliance,"
10 the Hamlet has an obligation to basically measure the
11 daily volumes of water extracted. Up 'til now, there
12 hasn't been a measuring device to do that, and we're
13 expecting them to measure daily water volumes in the
14 upcoming open-water season. We've also heard today
15 that they will have a proper fish screen on the intake
16 as well.

17 Term of licence: a 15-year term. The department
18 is in support of this 15-year term, knowing that
19 amendments will come within this 15-year life cycle.
20 As we've heard the applicant talk about, there is a new
21 solid waste facility coming in 2014.

22 In conclusion, the department supports the GN --
23 the Government of Nunavut, sorry, Community and
24 Government Services renewal application and recommends
25 it be accepted with due consideration given to our
26 comments. These comments were more thoroughly

1 discussed this afternoon, and we have -- as I just
2 updated through this presentation, the commitments that
3 the applicant will make. Nakurmiik. Thank you.

4 THE CHAIR: Thank you, INAC, for your
5 presentation.

6 Questions, comments? Applicant, go ahead.

7 MR. LADD: Hi. It's Ron from the Hamlet
8 of Pangnirtung. The dump itself and the waste
9 management, that's going to be 2024 rather than 2014.

10 MR. PARSONS: Thank you. Sorry if I said
11 "2014." 2024, yes.

12 THE CHAIR: Yes, we read that 2024 instead
13 of 2014.

14 Okay, there's no further questions, comments.
15 Thank you. Thank you for your presentation.

16 Okay, last stage for tonight's setting. Tonight
17 look like -- the public hearing look like towards --
18 coming to the end -- as we are approaching the end of
19 this evening's session, thank you for participating in
20 this public -- from Pangnirtung to tonight. So public
21 session this evening, public hearing -- open to public
22 -- thank you for all your presentations. It looked
23 like there was hardly any more questions, but it looked
24 like presentations were understandable.

25 And tomorrow, for tomorrow, we will proceed around
26 9:00 tomorrow morning. Tomorrow, it will be mainly the

1 -- the public hearing for the application will end
2 tomorrow. Thank you. Come again here, in the same --
3 to the Hamlet of Pangnirtung for -- Hamlet of --
4 application for water, for sewage and waste management.
5 Now that we have a process, that process will make the
6 application more complete.

7 (PROCEEDINGS ADJOURNED TO 9:00 AM, MARCH 22, 2018)

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1 CERTIFICATE OF TRANSCRIPT:

2

3 I, Tran Huynh, 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 2nd day of April 2018.

10

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Tran Huynh



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Tran Huynh, PSR(A)

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Official Court Reporter

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EXHIBITS ENTERED

MARCH 21, 2018

PAGE NUMBER:

EXHIBIT 1 - Hard Copy of Information Package 24
Provided by Government of Nunavut Community
and Government Services on behalf of Hamlet
of Pangnirtung, Consisting of
Public Hearing Summary (English/Inuktitut)
and PowerPoint Presentation (English)

EXHIBIT 2 - Hard Copy of PowerPoint 55
Presentation from Fisheries and Oceans
Canada: Type "A" Water License for the Hamlet
of Pangnirtung (English/Inuktitut)

EXHIBIT 3 - Hard Copy of Executive Summary 55
DFO Comments (Inuktitut)

EXHIBIT 4 - Hard Copy of Executive Summary 55
DFO Comments (English)

1	EXHIBIT 5 - Hard Copy of PowerPoint	64
2	Presentation from Environment and Climate	
3	Change Canada: Type "A" Water License for the	
4	Hamlet of Pangnirtung Type "A" Municipal	
5	Water Licence Application Government of	
6	Nunavut - Community Government Services	
7	(English/Inuktitut)	
8		
9	EXHIBIT 6 - Hard Copy of PowerPoint	72
10	Presentation by Indigenous and Northern	
11	Affairs Canada: Hamlet of Pangnirtung	
12	Renewal Application for Water Licence	
13	#3AM-PAN----(3BM-PAN1217)	
14		
15	EXHIBIT 7 - Hard Copy of Executive Summary of	73
16	INAC Comments (Inuktitut)	
17		
18	EXHIBIT 8 - Hard Copy of Executive Summary of	73
19	INAC Comments (English)	
20		
21	EXHIBIT 9 - Hard Copy of Caduceon	95
22	Environmental Laboratories Final Report,	
23	Report No. B17-22112 (English)	
24		
25		
26		

1	EXHIBIT 10 - Hard Copy of PowerPoint	116
2	Presentation from Nunavut Water Board,	
3	Community Session Presentation	
4	(English/Inuktitut)	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		

A	19:14	145:19	Affairs (55) 2:25	82:5 85:9
abandoned (3)	acronym (3)	address (4) 61:16	3:20,23,26 4:16	104:23 109:17
28:14 36:9	74:14 115:26	80:26 110:21	6:13 14:15	140:1 141:7
127:12	143:20	133:5	16:23 17:9	142:3 146:19
abbreviation (1)	Act (29) 8:11,14	addressed (7)	18:20 21:17,20	148:13,20,24
116:1	18:14 56:15,16	19:7 31:24 79:8	44:3,6,10 62:17	149:2
abbreviations (1)	59:3 66:5,6,7	79:14 105:8	62:20 70:15,18	agreement (8)
11:10	75:14,16,17,17	144:2 146:25	71:9 72:26 73:8	7:25 8:13 70:5
ability (3) 58:26	75:18 90:10	addressing (1)	73:19,24,26	75:14,15 117:11
137:7 152:7	103:10 104:12	43:19	74:13 83:5,13	144:22,22
able (12) 59:8	104:15 135:6	adequacy (1)	86:26 92:17	agreements (2)
68:16 96:19,23	137:10 138:26	106:1	93:9,16,26	75:12 144:20
100:22,22 103:4	139:1,2 144:21	adequate (2)	94:19,24 95:12	ahead (36) 24:24
111:23 114:8,23	144:22,23,25,25	81:23 146:21	104:3 107:25	25:18 26:16
141:10 148:25	145:1	ADJOURNED ...	108:8 110:4	39:15 40:11
Aboriginal (4)	acting (12) 5:18	151:7	112:19 115:10	41:16 44:4
56:11 59:1	6:9,14 9:5 20:11	ADJOURNME...	119:11 120:16	47:24 49:11
134:25 137:8	21:11,19 65:1	23:5 39:11 40:9	120:24 121:16	50:20 51:18,22
Abraham (1)	73:23 114:9	59:21 92:12	142:21,22 143:2	54:2 55:22 73:9
122:15	137:26 143:1	101:21 111:8	143:4,12,19	85:4,5 86:10
accept (2) 95:2,4	action (11) 11:24	administered (2)	144:16 146:18	87:22 89:24
acceptable (2)	50:10 88:22	75:22 145:5	154:11	90:3 91:6 92:15
59:7 131:7	105:12 106:3,17	administers (6)	affirm (3) 23:16	93:6 95:25
acceptance (1)	107:13,26 108:4	65:25 66:3	54:16 72:13	96:15 98:12
88:21	109:21 148:19	75:19 138:21,25	affirmed (14) 3:4	107:10 108:3,18
accepted (2) 83:2	actions (1) 105:14	145:2	3:8,13,15,17	109:7,19,24
149:25	activities (1)	administration ...	25:6 26:5 55:7	116:17 137:22
access (2) 19:4	117:26	5:16 8:26 9:4	63:18,26 72:8	150:6
104:20	acts (5) 65:6,25	113:23 114:6,19	72:14,15,16	air (2) 65:16
accommodate (1)	66:2 138:21,24	Administrative ...	aftercare (1)	138:12
35:23	acute (6) 67:20,21	5:23 20:13	34:25	Alberta (1) 152:8
accredited (4)	68:3 140:15,16	administrator (5)	afternoon (5)	aligned (1) 131:16
38:6,7 40:5,16	140:24	5:19 9:6 16:1	59:18 73:20	allowed (3) 76:15
accuracy (1)	acutely (2) 67:18	19:3 114:10	127:8 148:13	79:15 146:1
11:22	140:13	advance (1) 35:26	150:1	allowing (4) 79:13
accurate (5)	add (5) 31:22	advice (5) 42:23	agencies (1) 22:22	80:6,15 102:24
11:13 114:25	54:3 80:18	57:1,12 75:24	agenda (10) 10:17	alteration (2)
115:16 116:7	93:26 105:16	145:7	19:26 23:8	56:18 135:2
152:4	added (1) 47:13	advised (1)	110:10,11,17	altogether (2)
achieve (3) 66:21	addition (4) 11:26	132:19	113:18 116:13	85:24 106:14
99:17 139:15	15:26 83:18	Advisor (3) 5:20	116:13 134:7	AM-PAN---- (2)
acknowledge (1)	114:18	9:9 114:16	agendas (4) 17:18	12:11 13:8
56:20	additional (10)	Advisory (1)	18:16,23 113:12	AM-PAN/3BM...
acknowledges (2)	14:12 17:4 18:2	135:13	ago (1) 35:18	20:8
67:25 140:20	18:8 76:7	aeration (3) 61:10	agreed (18) 15:10	amendment (5)
acquisition (1)	103:22 118:17	84:14 126:25	38:1 67:7 68:13	16:11 20:10
	119:2 120:20	aerial (1) 147:2	69:10 78:19	26:20 82:22

123:6	10:12 12:15	52:9 64:10 73:1	78:16 147:8	82:2 144:24
amendments (2)	13:9,10 17:23	74:2,8,17,19	April (3) 13:10,26	associations (2)
82:20 149:19	18:2,19 20:1,4	76:2,10 79:18	152:9	20:22 22:23
amount (4) 12:14	23:9 42:11	83:1 111:16,22	aquatic (1) 42:25	Assol (6) 9:7 48:2
60:22,22 90:21	43:11 44:1,11	112:1,14,16,17	Arctic (7) 75:18	92:24 114:14
analysis (1) 105:5	44:25 45:24	112:21 113:24	104:12,13,14	116:24 122:11
analyze (2)	47:22,24 48:4	116:4,15,26	127:23 128:7	assume (1) 63:18
106:17 132:16	49:11 51:13	117:6,6,8 118:8	144:26	assuming (1) 59:6
and/or (4) 56:18	54:12 59:26	118:13,19 119:9	area (28) 8:1	assurance (17)
63:12 81:14	62:6 73:21	119:17,20,25	33:17 36:22,24	15:14 30:17
117:24	76:15 77:3,24	120:3,6,7,11,21	38:11,14,20,21	40:2,3,14 66:14
Anne (2) 21:14	78:4,6 79:22	121:18 123:6	38:22 44:20,22	66:18,19,21
65:4	80:2,8,10,23	143:7,14,23	45:1,12,19,21	67:2,9 139:9,13
announce (1)	81:1,10,19,21	145:10,14,16,21	46:1 81:15	139:14,15,22
84:16	82:18 87:21	149:24 151:1,4	84:24 112:24	140:3
announced (1)	91:6,6 94:25	151:6 154:5,12	113:5 114:11	assurance/quali...
132:21	98:12 104:5	applications (1)	117:14 120:2,2	81:26
annual (17) 27:12	105:1 108:2,18	119:16	120:3 129:5,26	assure (1) 89:9
35:6 38:10	109:19 112:15	applied (1)	133:7	Atlantic (1)
40:20,20 47:3	115:6 118:17,18	119:21	arrangement (1)	104:14
57:17,18 58:9	119:1 120:26	applying (3)	126:1	attachments (4)
78:24 81:22	121:1,10,14	68:10 85:18	arriving (1) 9:15	13:14,19 14:3
93:16 96:13	134:2 142:26	141:5	arsenic (1) 93:20	14:17
106:18 135:23	144:2 146:1,19	appreciate (8)	Article (3) 7:24	attendance (2)
147:17 149:4	146:26 147:12	10:15 11:11,23	8:12 117:11	12:8 25:26
annually (4)	148:24 149:2,8	43:8 61:25 62:4	asked (3) 56:26	attending (2)
12:24 60:7	149:20 150:3,6	113:6 116:8	85:23,25	113:26 115:9
67:19 140:14	applicant's (4)	appreciated (4)	asking (2) 39:1	attention (2)
answer (3) 43:16	17:3 43:24 77:2	26:2 103:17,19	89:11	90:15 109:13
97:2,20	83:1	109:18	aspect (1) 79:17	audience (9) 27:1
answered (1) 52:1	applicants (5)	appreciates (4)	Assessing (2) 57:3	34:22 36:1
answers (1) 59:25	70:1 83:7	10:11 73:26	135:14	40:25 52:23
anticipated (1)	107:10 108:3	113:3 143:4	assessment (12)	60:5 87:23
103:17	111:7	approach (2) 9:19	6:10 15:4 21:12	127:8 133:3
anybody (1) 25:5	application (89)	94:22	56:21 57:23	audio (2) 10:9
anymore (3)	1:7 7:7 8:3,16	approached (1)	65:2 75:17	114:21
36:15 127:13	8:26 10:1 12:9	11:17	135:7,9 136:3	audit (2) 51:18,19
131:15	12:10,17 13:8	approaching (1)	138:1 144:25	August (17) 14:12
anyway (1) 61:5	13:11,17,19	150:18	assist (7) 9:15	14:19 15:1,2
apologies (1) 25:4	14:5,11 15:25	appropriate (1)	11:7 12:6 94:15	17:10,12 43:3
Appearances (1)	16:3,4,8,12,17	82:12	114:23 115:2,16	43:16 50:1,1,4,7
2:7	16:26 17:2,5,15	approval (1)	assistance (5)	57:26 60:12
append (2) 67:1	17:24 18:6,25	19:21	11:11 19:1	77:22 79:23
139:21	19:24 20:10	approve (6) 119:9	92:23 96:26	136:7
applicable (2)	22:6,19,26	119:12,13,16,18	116:9	auspices (1)
75:12 144:20	23:10 26:21	119:19	associated (6) 7:9	135:12
applicant (73) 8:4	45:20 47:22	approximately ...	8:8 12:21 15:24	authorization (8)

7:8 13:12 59:3,5 59:6 117:4,25 137:10 authorizations (... 75:20 117:23 145:3 authorize (2) 8:7 12:20 Autut (7) 5:13 9:1 92:5,6 110:15 110:16 114:2 availability (2) 76:24 146:11 available (23) 9:10,18 10:4,18 11:1 15:25 16:1 18:26 36:19 55:10 56:22 58:16 77:8 95:4 96:14 100:26 101:17 106:1 112:23,24 113:9 113:13 135:9 average (6) 57:17 57:22 58:9 135:23 136:2,14 avoid (4) 11:10 59:8 113:1 115:26 avoiding (2) 56:12 135:1 await (1) 100:17 aware (3) 58:17 69:3 141:23	26:11 B17-22112 (2) 95:23 154:23 Bachelier (8) 3:17 6:17 21:22 72:5,5,16 74:4 143:8 back (21) 10:18 23:7 43:16 59:17 97:19 100:14,18,21 101:2,7,14,17 101:19,22,23 104:7 105:6 114:7,10 115:1 121:2 background (6) 7:21 19:23 76:19 78:10 117:2 147:1 backup (1) 119:25 bad (1) 99:20 Baffin (1) 87:26 bag (4) 132:3,4,4 132:5 balance (1) 19:11 bang (1) 109:5 barrels (1) 99:12 based (9) 12:14 51:11 57:8 94:20 98:16,20 117:21 118:9 135:16 basement (1) 126:1 basic (2) 56:21 123:21 basically (12) 44:16,17,18 45:12 87:3,10 104:17,24 105:1 105:5 108:11 149:10 batteries (3) 38:14,17 84:26 bed (2) 28:10,11	beginning (7) 7:14 50:2 79:2 104:18 108:12 125:23 145:14 behalf (9) 7:18 16:13 20:11 24:19 74:7 98:14 120:8 143:12 153:9 believe (3) 26:14 97:9 99:16 believes (2) 66:22 139:17 Ben (4) 9:3,12 114:6,18 benefit (3) 96:4 110:20 117:18 benefited (4) 61:19,19,20,20 berm (8) 15:21 29:7,16,16 33:6 45:1 78:3 80:1 Bernard-Lacail... 3:8 6:9 21:10,11 43:25 62:13 63:21,22,26 64:20 65:1 71:7 89:19 97:1,16 98:1 101:15 102:23 137:20 137:23,26 best (4) 34:7 98:25 99:19 152:6 better (6) 44:14 72:10 126:13 131:3 148:9,15 Bhabesh (25) 2:14 20:15 23:24 24:5 26:25 35:15,26 46:16 47:8 48:18 49:12 51:10,15 52:14 53:20 60:3 70:2 83:14 95:4 106:6 107:19	108:4 109:20 123:8,14 Bible (6) 23:20,21 24:4 25:7 26:8 63:17 big (1) 132:3 bigger (1) 91:22 biggest (1) 124:13 bioassay (6) 68:2 68:13,17 140:23 141:8,11 biochemical (1) 131:5 Biologist (5) 6:5,6 21:3 56:3 134:17 bioreactor (2) 78:14 147:6 bit (3) 21:13 91:19 100:14 blanks (8) 66:20 66:23,26,26 139:15,17,20,20 Bliss (13) 2:18 5:25 20:18 26:6 26:10,10,12,13 35:2,10,10 98:13,14 block (1) 132:2 blue (2) 130:12,12 Board (180) 1:1 2:10 3:1,25 4:4 4:6 5:6,11,15 7:3,11,19,22,23 8:14,19 9:3,12 10:11 11:19,20 11:23,25,26 12:1,3,4,10 13:9 13:13,21 15:10 15:24 16:9 22:2 22:16,19 23:1 23:10,18 24:10 25:24 30:9 34:14,16 37:26 38:9 40:5,17,22 43:5 47:23,26 51:4,11,24 53:7	54:10,21 55:1 56:1 62:25 63:1 63:16,25 64:2 64:25 65:10 66:10,13 68:8 69:20 70:24,26 71:13,19,24 72:18 73:14,21 73:21 74:8 75:23 76:1 77:3 80:12 81:13 90:1 92:3,6,14 92:16,19 94:5,6 94:15 95:6,15 96:3,17,25 97:4 97:8,19,22 98:4 100:11,24,25 101:10,24 102:1 102:3 103:1,6 103:15 104:4 105:18 106:7,21 109:9,26 110:16 111:11,15,19 112:4,12,13 113:3,16,20 114:6,18 116:5 116:19,22,25 117:3,4,9,11,15 117:22 118:11 118:13,16,19,23 118:25 119:3,8 119:15 120:9,11 120:19,21,26 121:2,8,20,22 121:24 122:3,4 122:6,9 134:11 137:24 138:6 139:6,8 141:3 142:13,24,25 143:13 145:6,12 155:2 Board's (12) 11:12,18 14:10 17:17 75:25 76:11 115:5 116:14 121:26 122:3 145:8,22
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B

b (9) 5:15,24 6:20
8:6 12:13 45:17
67:21 118:2
140:16
B-A-C-H-E-L-...
72:6
B-E-R-N-A-R-...
63:22
B-H-A-B-E-S-...
24:1
B-L-I-S-S (1)

BOD (2) 30:10 127:1	133:10	3:20,23,26 4:10	56:11 65:9,14	28:21 83:17
BOD/TSS (2) 86:3,6	building (11) 28:13,14 46:20	4:13,16 6:3,8,13	65:17,18 66:17	84:2,14 86:14
body (4) 68:11	126:2 127:2	14:16,16,17	67:8 68:20	86:14 128:1
131:2,3 141:6	128:19,25,25	16:24 17:8,8	134:25 138:10	CG&S (1) 20:17
bone (4) 28:21	131:14 133:4	18:20,21 20:25	138:13,14 140:2	Chair (192) 2:10
128:1,3,8	136:26	21:3,7,13,17	140:6 141:14	4:4 5:7 7:3,4,11
bore (1) 91:20	buildup (1) 31:18	30:15 42:15,18	142:7	7:18 8:22 20:21
born (1) 33:1	built (10) 33:1,23	43:23,26 44:3,6	Canadian (3)	21:6,16,18,24
bottom (4) 29:2	35:19 36:7	44:10 54:23	66:5 135:12	23:6,15,17 24:9
79:12 122:1	77:13 91:12	55:15,25 56:5	139:1	24:14,16,23
148:1	123:26 124:13	56:26 57:4	Canadians (1)	25:2,3,14,16,22
boundary (3)	126:22 127:14	62:14,17,20	117:20	26:14,15 35:8
29:21 65:21	burn (1) 50:20	63:8 64:8,19,21	capacity (3) 27:12	35:12,25 39:5
138:17	burnable (2) 69:1	65:3,20,25 66:8	124:14,16	39:12,19 40:6
brand-new (3)	141:21	66:22 67:25	capital (8) 31:6	40:10,13 41:14
41:2,13 133:18	burned (2) 68:22	68:15,26 69:6	32:9 33:9 41:9	41:15,23 42:5,6
break (12) 23:3,4	141:16	69:15,25 70:4	49:18,19 50:18	42:8,9 43:10,21
23:7,7 39:5,8	burning (12)	70:13,15,18,20	51:17	44:2,24 45:5,23
59:14,15,23	19:18 31:2,3,5	71:1,5,9 72:26	captured (2)	46:5 47:6,17,20
73:15 92:11	31:10 50:10	73:8,19,24,26	79:10 103:9	48:14 49:6,11
102:2	68:21 69:7,10	77:17 80:23	captures (1) 16:9	51:1,3,13,22,23
breaks (2) 11:2	141:15 142:1,3	83:5,13 86:26	car (1) 132:26	53:4,6,18 54:6,8
23:3	burns (4) 50:14	89:17,18,20	care (2) 31:25	54:20,22,26
bridge (1) 61:11	50:16,17,19	92:17,22 93:9	63:12	55:9,12,21
brief (9) 12:8 16:7	business (1)	93:10,16 94:11	carried (3) 58:24	59:12,23 61:23
23:9 74:15	110:23	94:13,19 95:12	135:12 137:5	62:1,5,9,10,16
102:22 110:19	bypass (4) 13:24	96:5,18,23 97:2	case (6) 35:2 59:7	62:22,26 63:3,7
112:10,22	15:1 34:17 35:1	97:17 100:17	59:8 71:22	63:15 64:2,13
143:21	C	101:11,16 102:6	94:22 137:11	64:15,25 69:24
briefly (4) 56:7	cadmium (1)	102:10,16,21,24	catch (1) 128:6	70:7,14,17,21
65:6 102:9	93:20	103:1 104:3	catching (1) 25:23	70:25 71:2,8,12
134:20	Caduceon (2)	107:25 110:4	catchup (1) 55:24	71:18,23 72:9
bring (5) 86:12	95:21 154:21	112:18,18,19	categories (2)	72:17,19 73:5,7
87:6 90:14	Calgary (1) 152:8	115:8,9,10	75:6 144:12	73:13,16 83:4,8
130:5 148:7	calibration (3)	120:16,17,23,24	cause (1) 91:13	83:10 86:22,23
bringing (1)	77:1 124:3	120:25 121:15	caused (1) 90:12	87:20 89:15,16
104:16	146:13	121:16,17 134:9	CCME (1) 126:26	89:22 90:3 91:5
brings (1) 105:6	call (8) 7:23 43:22	134:17 135:15	cell (1) 11:5	91:25 92:5,7,10
broad (2) 75:9	124:15 130:23	137:18,19 138:2	Centre (1) 5:1	92:13,18 93:6
144:17	131:4 132:12	138:16,21 139:3	certain (3) 11:24	93:24 94:2,4
broke (1) 108:9	137:4,17	139:16 140:20	86:14 88:12	95:1,6,14,20,24
brought (4) 52:2	called (4) 28:17	141:9,20 142:8	certainly (2) 43:2	96:2,8,15,16
52:6 106:23	83:23,25 135:13	142:17,21,22	91:3	97:7,21 98:3,12
109:12	Canada (145)	143:2,4,13,19	Certificate (2)	98:13 100:3,10
build (2) 85:10	2:22,25 3:6,11	144:17 146:18	4:18 152:1	100:12 101:1,5
		153:16 154:3,11	certify (1) 152:3	101:6,9,19,22
		Canada's (16)	cetera (8) 22:23	101:26 103:14

103:26 105:17 106:20 107:10 107:16,22,23 108:3,6,18 109:6,8,19,24 109:25 110:1,6 110:15,23,26 111:11,12,19 112:8 116:23 122:3,11,12,13 134:1,2 137:14 137:20,22,24 142:16,23 150:4 150:12 chaired (1) 122:2 chairing (2) 111:20 113:18 Chairman (5) 44:8 48:3 50:26 55:26 56:1 chairperson (2) 7:10 8:21 challenges (1) 98:15 challenging (2) 67:26 140:21 chance (3) 95:18 137:5,6 change (72) 3:11 4:13 6:8 14:16 16:24 17:7 18:20 21:7,13 30:14 38:3,4 43:23,26 62:11 62:14 63:8,11 64:8,16,19,21 65:3,9,14,24 66:8,17,22 67:8 67:24 68:15,20 68:26 69:6,15 69:25 70:4,19 71:5 80:23 89:18,20 96:5 97:2,17 100:17 101:16 102:24 103:1 112:18 115:9 120:16,23	121:16 137:18 137:19 138:2,10 138:20 139:3,16 140:2,6,19 141:9,14,20 142:7,8,17 154:3 channel (8) 10:6,6 10:7 28:11 112:25,25,25,26 char (2) 127:23 128:7 characteristics ... 42:2 characterizatio... 52:5,13 80:13 105:22 107:9 characterize (1) 106:2 check (4) 16:16 16:20 19:2 120:10 checked (1) 37:12 checklist (1) 48:11 checks (1) 120:13 chemical (2) 127:3,4 chloride (1) 86:13 chlorine (2) 126:8 126:8 chlorine/total (1) 126:8 circle (1) 101:2 City (1) 152:8 civil (1) 15:13 Claims (3) 7:25 75:14 144:22 clarification (14) 52:10 53:8 60:4 68:25 83:16 84:22 86:10,19 91:26 92:20,23 94:5 97:3 141:19 clarify (3) 76:15 86:21 146:1	classification (1) 118:14 clean (5) 27:18,19 27:22 124:21 128:5 cleaning (1) 60:8 clear (1) 29:22 clearly (6) 11:9 31:3 37:23 75:5 115:19 144:11 Climate (70) 3:11 4:13 6:8 14:16 16:24 17:7 18:20 21:7,13 30:14 43:23,26 62:11,14 63:8 63:11 64:7,16 64:19,21 65:3,8 65:14,24 66:8 66:17,22 67:8 67:24 68:14,20 68:26 69:6,15 69:25 70:4,19 71:5 80:23 89:18,20 96:4 97:2,17 100:17 101:16 102:24 102:26 112:18 115:8 120:16,23 121:15 137:18 137:19 138:2,10 138:20 139:3,16 140:2,6,19 141:9,14,20 142:6,8,17 154:2 close (4) 22:8 72:10,11 108:25 closely (2) 22:11 107:20 closes (1) 94:14 closest (1) 22:9 closure (2) 82:1 149:5 co-managemen... 75:10 144:17 coffee (4) 10:26	23:4 113:9,11 coliform (1) 86:3 collaboration (1) 76:26 collapse (1) 61:12 colleague (3) 21:5 123:14 134:18 colleagues (4) 71:14 87:1 102:26 105:10 collect (6) 29:10 29:18 130:5 132:13,14,15 collected (5) 33:13 78:11 80:13 147:3 148:19 collecting (2) 80:15 87:13 collection (4) 80:12,19,20 87:12 collector (16) 29:5 29:8,9,17,17 33:2,4,8,13 130:3,5,6,12,16 130:17,17 collects (1) 80:19 come (19) 48:26 59:17 71:21 97:19 100:14,21 101:7,17,19,22 102:11 106:7 112:5 113:13 125:15 128:6 132:7 149:19 151:2 comes (1) 88:24 coming (36) 23:7 27:9 28:6,19,22 30:4 32:4,19 33:12,18 36:25 37:20 43:15 52:21 88:6 100:18 101:23 104:5 111:13 119:24 123:25	126:26 127:14 128:18 129:6 130:15,25 131:18,21,22,24 131:24 148:10 148:16 149:21 150:18 COMMENCE... 7:2 comment (16) 11:20 30:21 32:24 34:26 61:25 66:18 67:12 68:21 73:10 85:7 90:1 107:26 108:8 139:12 140:7 141:15 commentary (1) 103:21 commented (1) 144:2 commenting (1) 90:21 comments (68) 11:11,18,24 14:13 16:20,22 17:7,11,13 22:18 30:16,17 32:19 42:11 43:19 44:13 52:2,4 53:10 55:18,20 56:9 59:10 65:7 73:4 73:18 74:20,22 74:24 75:3,5 76:10 81:16,18 83:2 84:19 89:1 96:9 103:16 106:23 107:25 110:5 112:20 115:13 118:21 120:15,17,22 121:1,3 122:10 134:22 137:13 137:15 138:4 143:26 144:8,11
---	---	--	---	---

145:21 149:9,26 149:26 150:6,14 153:20,23 154:16,19 commercial (4) 56:11 58:26 134:25 137:8 commission (3) 13:15 33:24 126:23 commissioned (4) 78:12 124:2,10 147:5 commissioning ... 51:8 69:4,12 141:24 142:5 commit (3) 34:5 107:12,15 commitment (4) 62:4 106:24 107:6 109:10 commitments (7) 15:10,13 18:3,7 65:12 138:8 150:2 committed (8) 41:19 42:3 52:22 53:15 61:15 81:21 108:10 149:7 common (1) 31:4 commonly (1) 36:14 Communicatio... 9:4 114:7,19 Communicatio... 5:17 communities (3) 85:2 99:14 129:2 community (55) 4:3 5:1 10:18 14:9 16:13 18:11,17,23 19:25 22:17,20 24:18 27:13 31:6 32:15	33:23 38:17 41:4,8 49:23,24 61:14 64:11 68:16 74:9,26 85:4,6 88:3 99:14 100:5,15 110:12,18,21 111:2,5,10 113:12 116:10 116:20 121:23 125:1 126:20 127:21 132:22 133:16,17 141:10 143:6,15 149:23 153:8 154:6 155:3 complete (12) 10:16 11:13 18:24 34:15 37:17 46:24 79:24 81:11 84:17 113:7 151:6 152:4 completed (9) 13:18 39:2,3,25 45:14 76:25 78:7 80:3 146:12 completeness (5) 16:16,20 76:3 120:10,13 compliance (15) 30:7,9 42:23 82:11 86:1,2,5 86:12 87:18 88:18 127:10 128:15,17 130:26 149:9 component (4) 27:2,2,4 123:22 compound (1) 38:14 computer (1) 63:9 concentrated (1) 98:19 concentration (4) 98:20,22 99:4	99:17 concentrations ... 93:19 99:1 concept (1) 126:11 concern (11) 31:15,16,24 79:4 87:10,14 93:12,14,22 104:16 146:23 concerned (8) 35:3,16 36:21 38:23,26 52:10 77:10 104:10 concerning (1) 48:5 concerns (5) 74:11,22 78:21 143:17 147:14 conclude (2) 75:7 144:13 concludes (3) 69:19 116:12 142:12 conclusion (3) 82:26 133:16 149:22 concordance (1) 118:16 condition (9) 58:11 67:14,16 85:18 88:24 90:6 136:15 140:9,10 conditions (9) 43:1,6 58:13 65:19 68:9 107:2 136:17 138:15 141:4 conduct (9) 8:18 16:19 17:1 58:11 67:15 120:12,18 136:16 140:9 conducted (10) 16:15 42:3 67:19,24 76:9	120:9 135:8 140:14,19 145:20 conducting (1) 118:7 conducts (2) 118:16,23 conference (14) 15:12 17:16,20 18:6 19:8 68:24 76:14 118:24,24 121:5,7,8 141:18 145:26 confident (1) 75:1 confinement (1) 124:15 confirm (7) 40:25 51:10 52:23 63:12 101:11 105:20 108:17 confirmation (2) 106:24 107:5 confirmed (5) 75:1 77:3 78:6 87:8 118:15 confirming (1) 11:21 confirms (1) 118:13 conformity (1) 13:16 confusion (2) 108:9,17 conjunction (1) 40:16 connect (2) 32:11 61:14 connected (1) 29:18 connection (2) 32:22 49:17 consensus (1) 106:7 conservation (1) 117:16 conserve (4) 65:17,17 138:13	138:13 conserving (1) 126:4 consider (2) 90:18 122:4 consideration (9) 66:11 75:25 76:11 83:2 112:4 139:6 145:8,23 149:25 considered (2) 17:25 18:9 considering (3) 56:24 57:6 118:8 considers (2) 68:18 141:12 consisting (3) 12:22 24:20 153:10 consists (1) 120:1 constitutes (1) 57:13 constructed (1) 82:23 construction (1) 132:24 consultant (4) 34:13,24 102:4 105:19 consume (1) 126:3 consumption (2) 27:13 124:17 contact (3) 35:5 121:24 122:8 contain (2) 99:10 104:25 contained (3) 45:8 99:5 132:6 containment (5) 27:19 81:6 87:3 87:10 124:15 contains (1) 27:4 contaminants (...) 44:16,19,21 45:20 80:6 87:4
---	---	--	---	---

87:8,11,15 148:7 contaminated (1) 88:19 contaminates (1) 79:15 contamination ... 45:3 52:6 148:9 148:16,17,21 contents (3) 2:1 19:20 84:12 contingency (15) 13:24,25 14:26 15:2 31:11,14 32:15 34:17 35:1 38:26 39:1 39:20,21,25,26 continue (4) 11:14 35:11 39:9 104:17 continued (5) 12:26 13:2 69:17 79:19 142:10 continues (3) 69:5 81:5 141:25 contract (1) 126:5 contributed (3) 8:25 113:22 121:17 contributions (3) 74:18 143:24 145:10 control (21) 15:14 30:17 37:14 40:3,4,15 44:18 66:14,19,20,21 67:2,9 81:8,26 139:9,13,14,16 139:22 140:3 conversation (3) 99:10 100:16 104:4 conversations (1) 102:8 coordinate (2) 65:21 138:17	Coordinator (4) 6:10 21:12 65:2 138:1 copies (9) 15:23 16:3 69:21 95:4 95:9,17,19 96:1 142:14 copper (1) 93:20 copy (26) 16:2 24:7,11,17 55:9 55:13,17,19 64:3,6 72:20,24 73:3,17 95:21 116:18 153:7,14 153:19,22 154:1 154:9,15,18,21 155:1 correct (3) 108:20 110:17 118:14 corrected (2) 81:19,22 correction (2) 30:19,20 corrections (1) 81:20 correctly (1) 137:21 correspond (2) 38:2 89:6 correspondence... 14:8 15:24 16:18,25 17:10 cost (2) 127:2,4 counsel (20) 5:12 23:18 24:10 25:23 54:15,21 55:1 63:16,25 64:1 71:13,19 71:24 72:18 73:14 95:15 96:3 100:11 113:24 114:12 country (1) 127:7 couple (7) 48:3 50:22 51:25 79:1 91:9 92:8 105:24	course (4) 74:21 76:1 144:1 145:12 court (9) 6:24 9:23 11:7 39:17 48:16 114:26 115:1,17 152:15 cover (4) 13:17 14:14 50:15,23 covered (3) 78:15 105:14 147:7 covers (2) 26:22 26:23 create (1) 99:18 created (1) 7:24 criteria (29) 19:15 53:10,12,16 78:25 80:13,24 82:15 88:1,2,4 93:5,11 94:7,10 94:15,20 96:21 96:26 97:4,5,10 97:14 98:16,20 99:16 103:3 118:9 147:18 cross-section (5) 14:21,22,23 27:9 125:17 Crown (4) 75:11 75:21 144:19 145:3 Crown-Indigen... 119:11 crustacean (2) 67:22 140:16 cube (1) 27:14 cubic (16) 12:23 12:25 27:12,15 27:23 60:7,9,11 60:13 118:1,4,6 119:23 124:14 124:17,24 culvert (8) 36:26 37:6 79:13 91:9 130:8,8,9 131:18 culverts (14)	29:12,13,18 77:14 83:20,21 84:1 90:2,7,18 91:16,17,23 130:7 cumulative (3) 57:9,20 135:17 current (6) 58:13 84:7 109:13,13 119:7,20 currently (4) 46:4 76:26 91:16 146:13 cut (3) 33:6 124:5 125:24 cutoff (3) 78:2 136:13 146:25 cycle (1) 149:19 cycles (1) 80:5 <hr/> D <hr/> D (1) 5:14 daily (8) 58:5 65:18 68:22 136:10 138:14 141:16 149:11 149:13 damage (1) 102:7 Daphnia (4) 67:22 68:4 140:16,25 dash (1) 63:22 data (14) 19:13 56:22 61:20 67:3 78:23 93:18,18 94:20 94:23 105:6 106:1 135:9 139:23 147:16 date (7) 13:9 16:5 42:4 67:24 75:26 140:19 145:11 dated (11) 13:13 13:14,24,25,26 14:1,7,19,26 15:6 152:8	dates (2) 51:7,9 Dave (8) 51:2,22 92:15 94:3 101:8,25 104:3 109:24 David (24) 9:2 35:24 37:11 51:3,23 53:6 62:26 70:25 92:18 94:4 95:6 96:15,16 97:7 97:21 98:3 101:9 102:1 103:14 105:17 106:20 109:8 114:3,4 day (11) 9:16 11:3 12:26 21:14 108:12,13,21 118:2,4,6 152:9 days (4) 106:12 118:21 122:6 125:6 deadline (1) 53:2 deal (3) 84:2 85:15 144:6 dealing (1) 133:7 death (2) 56:17 135:2 debating (1) 85:14 December (11) 15:12 17:17,19 17:22 18:1,5 68:25 76:13 82:25 141:19 145:25 decide (2) 119:13 119:13 decision (12) 11:18,25 13:14 18:6 118:25 119:9,16,18,19 121:9 122:5,7 declaration (1) 34:22 declared (1) 127:7
---	---	---	--	---

declaring (1) 133:8	80:25 81:1,5,7,9 81:16,17 82:26	106:3 148:19	difficulties (6) 52:15 68:7,17 114:22 141:2,11	discussion (14) 4:1 93:3 96:10 96:20,24 97:25 100:12,20 101:12,16 103:2 105:26 125:7 144:4
decommission (6) 36:19 78:20 124:8,11 127:19 129:24	102:25 121:14 126:6 134:18 138:25,26 139:7 139:19 140:18 140:22 141:2,23 141:26 143:20 143:24 144:1,20	determined (2) 53:16 80:14	dilute (1) 98:19	discussions (13) 46:4 76:15 93:10 102:3,6 102:11 106:22 109:12 121:19 144:7 146:1 148:12 149:2
decommissione... 34:5,6 36:16 82:6 147:13	decommissioni... 14:8 35:16 82:2 82:7 149:6	develop (4) 39:23 40:16 80:24 148:20	diluted (2) 88:12 131:25	disposal (2) 85:1 120:3
decommissione... 14:8 35:16 82:2 82:7 149:6	decommissioni... 14:8 35:16 82:2 82:7 149:6	developed (4) 53:12 58:23 107:1 137:4	DINNER (1) 111:8	dispose (1) 8:15
defer (4) 77:16 80:22 98:7 102:9	department's (1... 65:5 67:6,10,12 68:12 69:9,13 74:6,16 79:25 81:13 90:15 138:3,5 139:26 140:4 142:2 143:10,22	developing (5) 93:5,11 94:10 96:26 98:15	direction (6) 32:18 96:25 100:18 107:3 131:19,24	distributed (4) 17:18 18:22 95:9,19
deficiencies (2) 34:12 81:14	depend (2) 71:16 109:2	development (2) 94:15 144:21	directly (3) 22:7 88:11 115:19	ditch (2) 78:2 146:25
define (2) 98:26 99:20	depends (1) 34:7	device (6) 32:6,7 43:17 49:15,25 149:12	director (11) 5:13 5:14,15 9:2,2,3 12:5 114:2,4,6 114:18	ditches (1) 104:19
defined (3) 53:21 56:17 135:1	deposit (3) 7:8 12:21 117:24	DFO (33) 30:15 31:15 55:18,20 55:22 58:3,20 59:12,17,19,24 59:26 61:3,24 62:12,15,20,23 63:2,5 70:11 82:14 89:23,23 89:24 91:5 125:11 134:7 136:23 137:14 137:15 153:20 153:23	discharge (18) 19:13,14 56:22 57:17,18,22 58:9 78:25 79:13 97:5,10 103:3,10,24 130:24 131:8 147:18 148:8	diversion (1) 148:25
definitely (4) 30:25 43:19 47:9 95:4	deposits (1) 8:7	DFO's (1) 56:7	discharged (3) 67:16 97:6 140:11	diverts (1) 104:19
degree (1) 36:13	description (2) 2:3 12:9	DFO-built (1) 91:11	discharges (2) 102:14,19	divided (2) 75:3 144:9
delegated (1) 8:15	design (3) 34:25 125:21 136:25	DIAND (1) 75:13	discharging (3) 43:14 78:15 147:7	division (1) 46:22
deleterious (1) 103:11	desk (1) 24:7	Dicta (2) 9:23 115:1	discuss (4) 12:1 45:9 100:24 102:25	document (14) 15:21 24:6,7 30:18,19 37:11 40:19,19 52:24 56:24 67:1 109:15,23 139:21
deliver (4) 77:1 125:25 126:10 146:14	detailed (3) 65:19 136:16 138:15	diesel (8) 27:10 32:1,14,14 48:21 125:4,18 146:5	discussed (13) 74:23 77:6 104:17,18,22,24 105:1,11,15,21 107:4 144:3 150:1	documentation ... 13:21 16:12 18:2,8 19:2
demand (2) 126:9 131:5	details (2) 18:24 45:8	different (8) 27:4 38:12 47:12 51:19 52:16 86:4 109:22 133:13	discussing (5) 12:10 19:24 43:6 105:9 132:14	documents (6) 13:7,11 16:4,6 19:5 121:25
demolition (1) 46:19	detectable (2) 58:25 137:6	differently (1) 123:17		doing (19) 30:25 32:22 33:25 41:19 46:10 48:11 49:5 50:13,16,22
demonstrated (2) 67:18 140:12	determination (4) 13:16 19:14 43:6 58:22			
denying (1) 11:21	determine (4) 42:22 58:14			
department (65) 9:24 65:7 66:3,4 66:12,25 67:23 68:1,7 69:3 74:7 74:13,18,21 75:1,9,19,21,26 76:8,13 77:20 78:21 79:19,21 80:3,7,14,18,22				

62:4 85:6 86:4,7 86:11 90:9 99:22 112:1 129:2 dollars (1) 127:3 domestic (9) 28:16,22 29:25 36:9,14 127:17 129:2 132:9 133:5 dozen (2) 65:25 138:21 draft (3) 17:18 18:16 119:10 drain (17) 29:6,8 29:10,17,17 33:2,4,8,13 130:4,5,6,13,16 130:18 131:17 131:25 drainage (23) 14:19 19:17 37:3,16 39:3,4 39:23 45:15 46:24 52:19,20 79:23 80:2,9 81:8 87:13 89:2 89:13 97:11 103:7 105:12 108:1,5 drastically (1) 131:10 draw (1) 124:6 drawing (1) 15:13 drawings (1) 46:23 drill (2) 91:19,19 drink (1) 126:9 drinking (5) 8:9 15:5 61:12 88:15 111:23 due (5) 22:3 68:6 83:2 141:1 149:25 dump (43) 14:21 14:22 28:26 29:6,11,23,26	36:22,24 37:4 38:12,14,22 45:11,21 50:20 52:4,7,18 53:11 79:6,8,9,20 80:20 81:2 84:25 87:5 88:6 97:11 104:6,21 106:15 129:17 129:25,26 147:22,23 148:4 148:15,24,26 150:8 dumped (1) 130:2 dumping (2) 132:4,5 duplicate (1) 81:25 duration (1) 48:7 duty (1) 90:11 Duval (36) 12:24 19:12 27:6,9,11 31:16,23 32:1 33:16 42:2 56:21 57:19 58:11,17,25 76:21 77:6 82:10 83:19,25 119:24 123:24 124:19,25 125:2 125:4,8,18 135:7,25 136:16 136:21 137:7 146:5,8,21 Dwyer (5) 5:19 9:5 16:1 19:3 114:10 dying (1) 137:2 dyke (6) 29:5,6,6 29:7 130:3,3	earpieces (1) 112:23 easier (2) 26:3 32:17 easily (2) 133:23 148:25 Eastern (2) 101:14,17 easy (1) 104:23 ECCC (2) 93:4 120:23 ECCC's (1) 30:16 ecological (4) 57:3 77:14 90:24 135:14 economic (1) 127:22 effect (1) 87:19 effectively (2) 58:23 137:5 effluent (46) 14:24 19:13 28:6,9 30:6,22 35:20 36:8,11 52:13 53:23 67:15,16 68:3,4 78:25,25 80:13 80:15,24,26 81:2 85:16,21 86:4 94:7 97:9 97:14 102:20 103:7 105:22 106:2 126:18,25 127:14,20,25 128:13 131:11 140:9,10,24,25 147:18,18 148:21 effluent-quality... 102:17 103:24 either (5) 11:19 11:21 65:26 66:3 138:22 Elder (2) 22:5 116:5 Elders (6) 22:3 116:3,4 122:16	122:17,19 electrical (9) 13:22 15:15 32:13,16,16 49:14,16,17,18 electricity (1) 32:16 electronic (1) 16:2 electronically (1) 96:7 elevated (1) 93:19 elevation (1) 104:20 email (1) 98:9 emergency (1) 31:12 empty (2) 27:22 60:9 encourage (2) 82:13 115:14 encourages (3) 69:7 121:22 141:26 End-of-Pipe (2) 58:21 136:24 ends (1) 79:9 enforce (3) 65:20 106:8 138:16 enforces (2) 75:19 145:2 engaged (4) 43:14 43:18 46:3 89:5 engineer (10) 5:24,25 20:16 20:16,18,18,19 34:24 49:4 123:9 English (13) 10:5 10:6 13:18 24:22 55:20 73:11,18 95:23 112:25 153:12 153:23 154:19 154:23 English/Inuktit... 24:21 55:16 64:12 116:21	153:11,17 154:7 155:4 enhance (2) 65:15 138:11 ensure (12) 58:6 58:18 67:4 76:23 87:18 114:25 116:7 136:21 139:24 146:10,20 148:5 enter (7) 31:20 79:15 80:15 103:12 104:21 148:5,25 ENTERED (1) 153:1 entering (5) 44:19 44:22 81:3 147:23 148:23 enters (2) 104:13 148:6 entire (1) 28:24 entrance (6) 10:14,19 19:4 112:24 113:5 114:11 environment (1... 3:10 4:12 6:8 14:16,26 16:24 17:7 18:19 21:7 21:12 30:14 42:25 43:22,26 44:17,19,22 45:21 52:7 62:11,13 63:8 63:11 64:7,16 64:19,21 65:2,8 65:14,16,24 66:5,8,17,22 67:7,24 68:14 68:20,26 69:6 69:15,24 70:4 70:13,19 71:1,5 79:10,16 80:6 80:16,22 81:3 87:19 89:17,17 89:20 90:26
---	---	--	---	--

92:22 93:10 94:11,13,23 96:4,18,22 97:1 97:15,17 98:22 98:24 100:17 101:11,15 102:6 102:10,16,21,23 102:26 103:9 104:9 112:18 115:8 120:16,23 121:15 137:17 137:19 138:1,10 138:12,20,26 139:3,16 140:1 140:6,19 141:8 141:14,20 142:6 142:8,16 148:8 148:10 154:2 environmental ... 6:9 21:12 26:22 65:2,22 66:5 95:22 132:17 138:1,18 139:1 154:22 equip (1) 133:24 equipment (3) 32:21 77:4 82:12 especially (2) 88:7 134:11 establish (1) 88:2 established (4) 54:2 88:1 117:10 132:12 et (8) 22:23 28:21 83:17 84:1,14 86:13,14 128:1 evaluate (2) 57:24 136:3 evening (16) 100:14 101:4 110:18 111:12 111:14,14,26 112:6 114:17 116:24,25 134:10 137:23 142:24 146:16	150:21 evening's (3) 116:13 144:5 150:19 event (3) 105:4 108:14 134:12 events (1) 105:3 eventually (2) 79:9 97:15 evidence (3) 25:6 71:15 122:4 exactly (3) 46:18 86:10,20 exceed (5) 57:11 57:14 58:6 77:10 135:20 exceeding (2) 12:25 136:11 excellent (2) 128:22 131:13 exchange (1) 119:4 Excuse (1) 35:24 executive (15) 5:13 9:2 12:5 24:12 55:17,19 72:21 73:3,12 73:17 114:2 153:19,22 154:15,18 exercise (1) 49:21 exhibit (25) 24:15 24:17 54:17 55:11,13,17,19 64:5,6 72:24 73:3,17 95:18 95:21 116:18 153:7,14,19,22 154:1,9,15,18 154:21 155:1 exhibits (4) 4:20 72:22 95:3 153:1 existing (9) 26:22 28:3 31:8 46:19 47:14 54:2 124:8 126:17	133:2 EXP (11) 20:19 31:21 32:5 43:14,18 46:3 48:26 49:20 52:26 89:5 98:14 expect (2) 10:1 44:23 expected (4) 45:14 50:17 79:24 84:17 expecting (6) 82:21 111:4 133:11,20,22 149:13 expedite (1) 46:23 experience (2) 60:20 114:22 experienced (3) 34:23,24 109:3 experiencing (1) 52:15 expert (3) 6:11 21:15 65:4 expertise (6) 66:10,12 75:24 139:5,7 145:7 expired (2) 8:6 12:14 explained (5) 32:21 38:24 39:22 60:6 122:22 explaining (2) 27:3 40:15 export (1) 128:2 extent (2) 53:15 88:13 extra (1) 48:23 extract (6) 27:11 27:14 31:16,23 60:6 125:2 extracted (3) 12:24 82:10 149:11 extracting (1)	27:15 extraction (10) 15:8 48:19 49:2 49:22,26 50:1,5 77:4,10,21 <hr/> F <hr/> F-O-R-T-E (1) 72:4 facilitate (1) 96:24 facilitating (2) 74:8 143:14 facilities (27) 8:10 14:7,20,24 15:18,20 26:22 40:26 41:2 46:20 87:9,12 87:15 97:10,14 102:15,19 103:25 105:23 107:8 111:24 119:23 123:18 129:9 133:2 134:1 148:17 facility (29) 13:3 31:8,8 41:5,11 41:13 79:7,14 79:16 82:23 85:10,11,12,13 87:5 104:21 119:26 133:4,12 147:2,21,24 148:2,5,6,10,15 148:26 149:21 fail (1) 60:16 fair (1) 100:14 fall (2) 75:5 144:11 far (8) 45:3 74:19 94:21 102:12,18 109:11 143:25 145:11 fast (3) 98:2 115:22,22 faster (1) 32:17 fauna (2) 65:17	138:13 February (5) 42:20 78:5 80:1 80:11 81:12 federal (2) 65:22 138:18 feed (1) 127:3 feedback (2) 10:9 113:2 feel (4) 31:12,19 99:19 124:18 feeling (1) 123:10 fellow (1) 142:26 fence (2) 38:21 132:19 fence-in (1) 46:1 fenced (1) 84:24 field (2) 47:5 139:19 fields (1) 66:25 file (4) 17:20 19:9 21:23 95:17 filed (5) 8:3 13:10 16:12 19:2 120:7 filing (1) 72:22 fill (12) 12:15 27:11,23 32:2 33:4 48:21 60:16,23 124:16 124:23 125:5,25 filled (2) 60:15 126:5 filling (4) 60:11 61:8 125:20 126:4 filters (4) 78:13 124:4 125:14 147:6 final (18) 11:20 15:14 18:22 31:21 47:1 65:9 67:6 68:12 69:9 77:2 78:1 80:11 95:22 121:10 138:5 139:26 142:2 154:22
--	---	---	--	---

finalized (3) 15:12 52:19 89:14	3:6 4:10 6:3,4,6 14:17 17:8	flow-measuring... 32:20	52:23	FTP (4) 15:26 18:26 96:14
finally (3) 11:7 41:12 89:14	18:21 20:25	flow-meter (1) 49:9	forward (20) 32:9 32:18 33:21	121:26
find (8) 31:21 32:5 37:13 57:8	21:2,3,3,5 42:12	flows (4) 90:24 98:21,23,26	51:12,20 52:2 68:18 69:17	fulfilled (1) 126:6
57:25 61:6	42:15,18 54:22	focus (1) 79:1	80:25 82:6	full (2) 17:1 120:18
82:17 137:3	55:14,25 56:3,4	follow (9) 10:19 38:4 48:12 51:5	98:10 102:12,15	fully (3) 43:18 58:23 137:4
finding (1) 19:1	56:4,9,12,15,15	51:25 54:4	102:20 105:2,21	function (1) 34:12
finds (1) 80:3	59:2 66:7 70:8	94:11 109:10	106:3 107:7	functioning (1) 131:13
fine (2) 54:3,4	77:17 90:10	113:14	141:12 142:10	funding (1) 49:19
finished (1) 51:20	103:10 112:17	followed (1) 121:9	found (8) 37:15 46:22 52:24,24	further (26) 33:26 45:6,8,9,14 46:6
Fiord (1) 87:25	115:8 120:23	following (24) 12:22 13:6,11	52:25 60:25	46:8 47:18 51:2
first (23) 10:3 24:14 27:2	121:15 134:9,15	13:20 14:5 15:9	79:25 89:4	53:5 54:6 62:5
30:16 34:18	134:15,16,16,17	30:12,13 49:1	four (10) 41:20,21 42:4 61:15	74:23 76:5 78:4
44:23 66:17	134:23,26 135:1	53:15 61:1	77:25 81:20	81:20 94:3
76:3 79:5 83:14	135:5,15 137:9	66:24 67:19	84:17 85:23	96:20 103:20
83:21 85:15	137:10 139:2	75:11 85:23	106:13 146:20	105:20 106:22
93:2 94:16	146:17 153:15	89:12 90:5	four-to-five-yea... 27:17,21	107:18 110:5,8
97:25 104:22	five (13) 60:7 76:5 91:18 106:14	115:11 117:23	frame (2) 51:21 97:23	144:3 150:14
107:14,26	108:11,15,16,22	120:6 125:11	framework (5) 56:23 57:2	Furthermore (2) 68:6 141:1
117:25 125:21	108:24 109:1,5	139:18 140:13	90:24 135:10,13	future (7) 33:12 38:16 46:11
126:12 139:12	124:21 145:17	144:19	free (3) 44:16 45:20 126:7	69:12 85:1 99:3
146:4	fix (3) 39:8 40:8 104:23	follows (3) 9:1 12:18 90:13	freeze-thaw (1) 80:5	142:5
fish (55) 13:2,25 14:7 19:19 28:4	fixed (3) 39:9,14 90:16	forecast (2) 65:18 138:14	freeze-up (2) 108:20,24	G
28:5,5,6,8,9,18	floor (5) 10:6 21:26 43:11	foregoing (1) 152:3	frequencies (1) 102:13	G (1) 6:9
28:21 31:20	112:26 122:22	foreground (1) 146:6	frequented (1) 103:11	G-A-B-R-I-E-L... 63:22
35:20 36:7,11	flora (2) 65:16 138:12	form (2) 13:19 113:4	fresh (3) 8:1 12:23 117:13	Gabriel (15) 3:8 21:10 43:25
43:3 48:5,13,24	flow (42) 14:24 49:13 57:3,10	formal (5) 16:26 17:22 18:12	freshet (3) 97:12 105:3 108:12	62:13 63:21,26
56:16,18,19	57:15,16,21,21	93:9 121:18	freshwater (7) 58:21 75:10,21	64:20 65:1
58:16,19,19,21	57:26 58:4,7,8	formula (1) 89:13	103:8 136:24	89:19 97:1,16
77:14 78:17	60:18,18,20,22	Forte (10) 3:15 6:16 21:22 72:3	144:18 145:4	101:15 102:23
84:12 90:19,26	61:6,7,7 77:11	72:3,15 74:5	front (4) 10:22 24:7 87:7	103:16 137:25
91:1 103:11	77:15 88:5,10	87:16,16 143:9	110:22	garbage (5) 68:22 69:1 111:25
125:12,14	90:22,22,23	fortunate (4) 37:10 91:11		141:16,21
126:17,18	91:4 98:17 99:4	126:20 133:17		gauge (1) 61:6
127:14,15,20,22	106:11 108:14	fortunately (1)		gauged (2) 58:4 136:10
127:23 128:1,6	135:10,14,20,22			general (8) 22:14
129:6 135:2,3,5	135:23 136:1,2			
136:20,22,24,26	136:6,8,9,14			
147:10 149:15	flow-measur... 82:12			
fish-bearing (5) 77:9 83:19 84:4				
84:9 103:8				
fisheries (56) 2:22				

75:7,8 112:13 117:20 144:12 144:13 149:9 generally (4) 12:18 69:16 135:4 142:9 generated (1) 13:5 getting (10) 41:11 126:18 131:9,9 132:3,9,10 133:12 137:1,1 give (4) 92:6 110:19 116:2 126:13 given (15) 19:23 22:8 54:5 57:1,7 58:16 83:2,16 85:17 86:2 98:22 135:19,21 136:20 149:25 gives (1) 57:5 giving (4) 25:5 64:22 69:20 142:13 glad (3) 33:20 84:19 125:22 GN (10) 95:8 98:6 102:4 105:19 106:4,25 107:6 107:18 109:11 149:22 GN's (1) 51:11 go (70) 20:21,22 20:25 21:26 24:24 25:17,17 26:16 29:10 33:14 37:4 39:15 40:10,24 41:6,16 42:13 44:4 47:17,24 48:24 49:11,16 50:20 51:20,22 54:2 55:22 56:8 72:9 73:9 75:13 79:3 85:5 86:10 86:15,16 87:21	88:11,12,12,13 88:13 89:24 90:3 91:6 92:15 93:6 95:25 96:1 96:15 98:12 101:4 106:12 107:10 108:3,18 109:7,19,24 115:26 116:17 122:24 125:12 129:26 130:20 133:7 134:20 137:22 150:6 goes (2) 91:22 111:14 going (76) 7:12,13 9:24 11:19 16:7 24:8 25:5,19 26:25 28:20 29:4 30:15 31:7 36:11,16,26 37:6,6 38:21 40:23 41:4,9 44:12,18 45:3 45:18,26 46:1,2 51:18 59:4,13 61:16,22 63:17 63:18 70:8 71:14 72:13 79:1,2,3 82:16 83:24 85:10 86:17,26 87:1,6 89:12 92:14,24 98:1,7 105:1,2 105:13 106:8 108:1,11,13 123:16 124:1 128:8,8 129:24 129:24 130:4,14 130:18,26 131:18,26 132:22 145:9 150:9 good (17) 7:4 20:6 27:1 31:5 60:22 64:25 73:20 80:17 111:12	116:24 126:26 127:7 128:21 133:24 134:10 137:23 142:24 government (32) 7:24 14:9,9 16:12,13 20:16 24:18,19 64:10 64:11 65:23 68:15,16 74:9 74:10,25,26 112:2 117:10 120:8,20 138:19 141:9,10 143:15 143:15 149:23 149:24 153:8,9 154:5,6 granular (2) 36:18,18 gravel (6) 28:10 28:10 29:4 50:15,23 128:13 great (1) 45:16 greater (2) 57:20 135:26 Grise (1) 87:25 group (1) 41:16 grouped (2) 75:6 144:12 growth (1) 127:22 guaranteed (1) 125:16 guess (18) 10:19 44:20 45:9,17 79:6 93:2 94:8 94:11,17 96:19 97:24 102:18 103:20 104:7,8 105:20 106:24 110:11 guidance (2) 135:19 136:25 guideline (3) 58:21 131:4 136:24 guidelines (7) 40:17,22 49:1	58:20 125:11 126:26 136:23 <hr/> H H (2) 68:9 141:4 habitat (6) 56:16 56:18,19 135:2 135:3,5 half (1) 23:13 Hamlet (158) 1:6 2:20,23,26 3:2 3:22 4:8 5:22 7:7,19 8:3,4 12:12,13,16,19 13:5,12 14:4,12 15:7,11 16:14 17:12 20:4,10 20:11 24:19 26:17,21 31:9 32:5,10,18 35:19,20 36:17 38:20 41:1,10 41:12,19 42:2 42:15,19,22 43:9,13 44:7,26 45:25 47:26 48:19,20,26 49:5 50:6,12 51:10 53:15 55:15 58:3,14 58:15 59:8 60:13,23 61:19 64:9 65:12 66:24,25 67:7 68:2,13,25 69:3 69:7,10,17 70:12 72:26 74:2,10 76:1,8 78:19 83:12 89:5 90:6 91:8 92:21 94:8 95:16,25,26 96:8,12 98:7,14 98:26 99:17 102:4 103:6 105:19 106:4,25 107:11,20	108:19 109:11 111:17,17 112:3 112:3,15 115:6 117:1 119:21 120:8 121:3 122:25 123:1,3 123:6 132:19 134:4,12,23 135:8 136:11,19 138:9 139:18,19 140:1,23 141:7 141:19,23,26 142:3,10,25 143:6,16 145:13 145:20 148:13 148:20 149:10 150:7 151:3,3 153:9,16 154:4 154:11 Hamlet's (7) 8:5,8 8:16 12:15 15:8 82:9 112:14 hand (11) 22:7,13 23:20,21 24:4,4 25:7,8 26:8,8 96:9 handles (1) 13:4 happen (4) 88:17 88:18 132:7 149:5 happened (2) 32:26 34:23 happens (1) 88:7 happy (5) 34:18 125:22 126:11 133:3 134:19 hard (28) 24:7,17 55:9,13,17,19 64:3,6 69:21 72:20,24 73:3 73:17 95:3,21 116:18 129:13 142:14 153:7,14 153:19,22 154:1 154:9,15,18,21 155:1 hardness (1)
--	---	--	---	--

86:13	42:1 43:8 44:12	130:4	97:24 98:2	128:21
hardship (1)	55:12 64:5	hillside (2) 29:8	hours (1) 97:24	imbedded (1)
99:19	69:22 72:23	36:25	household (2)	109:16
harm (10) 56:13	94:14 102:16	historically (1)	69:1 141:21	immediately (2)
56:14,17 59:2,4	112:9 113:6,13	84:5	housekeeping (3)	81:4 91:2
59:9 90:12	115:16 116:11	history (3) 16:8	10:2 112:10,22	impact (5) 13:13
135:1,3 137:9	118:7,26 119:6	117:6 126:13	hung (1) 77:13	98:22,24 99:2
hazardous (14)	119:7,8 121:12	Hohnstein (50)	Huynh (4) 6:24	132:17
13:5 19:17	121:14,23 122:2	5:14 9:2 35:24	114:26 152:3,14	impacts (4) 57:24
28:17,22 38:11	122:5 123:4	35:24 36:3	hydraulic (7)	58:25 99:13
38:12,19 45:12	142:15 150:17	37:12 51:3,4,23	41:20,26 42:2,3	137:7
81:6 84:23,26	150:21 151:1	51:24 53:6,7	60:25 61:5 84:7	implement (3)
120:2 129:4	153:11	54:6 62:26 63:1	hydrological (2)	80:4 89:11
132:18	HEARING/CO...	70:25,26 92:18	56:20 135:8	107:20
head (4) 47:17	1:13	92:19 94:4,5	hydrology (9)	implementation...
127:26 128:3,7	hearings (1)	95:1,6 96:16,17	41:20 58:11	81:24 149:4
heading (3) 52:15	122:19	97:7,8,21,22	77:19,20,25	implemented (5)
75:6 144:12	heavy (4) 99:8	98:3,4 101:9,10	84:7 136:16	47:4,9,15 79:22
heads (1) 28:21	105:3 106:10,14	101:18,26 102:1	146:16,19	89:12
headset (2) 9:19	held (3) 68:24	103:14,15		implementing (1)
114:23	121:8 141:18	105:17,18	I	80:9
headsets (1) 111:3	Hello (1) 48:2	106:20,21	I-A-N (2) 44:9	imply (1) 11:24
headway (1)	help (14) 9:15,19	107:17 109:8,9	72:1	importance (2)
101:3	9:24 10:15 11:2	109:25 114:3,3	I-N-A-C (2) 74:14	81:6,9
health (3) 23:3	19:4 58:12,13	114:4 129:12	143:20	important (10)
124:7 126:7	113:6,10 114:24	hold (2) 40:6	Ian (20) 3:13	10:2,14 61:8,13
hear (7) 42:25,26	136:17,18,26	110:6	21:19 44:9	84:10 85:14
43:3 101:16	helper (1) 9:17	holding (5) 67:26	62:19 70:17	90:25 113:5
134:13 137:13	helpful (1) 98:5	68:7 121:4	72:1,14 73:22	122:18 127:21
137:21	helping (1)	140:21 141:2	86:25 93:8,15	improve (2) 124:7
heard (12) 45:15	114:17	hole (1) 91:20	93:25 94:18,24	131:11
51:7,7 77:23	helps (1) 9:13	homes (4) 77:1	95:11 104:2	improvement (5)
82:16 87:5	Hi (5) 41:18 43:13	78:11 146:14	107:24 108:7	32:23 33:26
101:12 116:9	44:26 91:8	147:3	110:3 143:1	38:25,25 81:14
146:15 147:12	150:7	hope (1) 87:26	idea (3) 37:7	in-person (1)
149:14,20	high (2) 108:14	hopefully (7) 53:1	38:15,20	18:10
hearing (66) 2:9	127:22	96:19 98:2	identification (4)	INAC (52) 30:15
5:7 7:5,6,11,12	high-water-flo...	102:6 111:13	2:12 19:22,26	32:19 35:3,15
7:14,22 8:2,18	77:22	123:10 133:21	22:25	36:21 37:2
10:2,5,15,17	higher (6) 36:13	hopes (2) 68:15	identified (2) 19:7	38:23,26 39:20
11:1 12:2 16:2	57:26 70:6	141:9	80:12	40:18 45:6 46:6
17:26 18:9,10	98:23 104:20	hoping (2) 37:16	identify (3) 9:20	47:2,17 52:2,5
18:13,15,16,18	131:23	84:9	22:15 93:14	73:4,18 74:14
18:23 19:7,25	highest (2) 126:24	hosted (2) 17:17	identifying (1)	80:6 86:19,24
20:2,8 22:4,16	136:6	17:19	12:7	87:16 89:2,18
23:2 24:15,21	highly (1) 70:3	hosting (1) 134:12	ill (1) 87:19	89:21,26 90:4
24:26 26:19	hill (3) 33:13,18	hour (3) 23:14	imagine (1)	92:2,20 93:2,4,6

94:17 95:7	48:25 53:12	informal (1)	19:18 48:5,13	10:4 112:23
99:22 102:3	81:12 84:4	121:19	49:9	interpreters (10)
103:1,21 104:1	94:25 127:20	information (35)	installed (2) 48:7	9:10 11:8 39:17
106:7 107:23	129:6	14:13 15:9 17:4	77:5	48:16 55:24
110:2,8 143:20	indicates (2) 78:4	24:17 40:1 57:7	instantaneous (8)	72:11 111:7
150:4 154:16,19	93:19	58:16 60:5	57:15,16,21	114:17 115:17
INAC's (1)	indicating (1)	65:20 69:16	58:4,7 77:11	115:26
104:11	61:2	76:5,7 77:8,19	135:22 136:1	INTERPRETE...
INAUDIBLE (2)	indicator (2) 68:3	82:24 84:12	institution (2)	6:19
21:4 26:6	140:24	89:4,5 94:9	7:24 117:10	interpreting (1)
INCA (1) 77:25	Indigenous (54)	96:12 98:9	institutions (4)	9:16
incinerator (3)	2:25 3:19,23,26	117:3 118:17	77:2 78:11	interval (3) 27:17
28:14 128:25	4:15 6:13 14:15	119:2 120:20	146:14 147:4	27:21 106:12
131:14	16:23 17:8	121:21 122:8	insufficient (2)	intervener (4)
include (10) 41:25	18:20 21:17,20	136:20 138:16	66:23 139:17	54:23,24 63:7
48:12 67:3,7	44:3,6,9 62:17	142:9 145:15,17	intake (18) 31:17	142:20
83:26 84:9,10	62:19 70:15,18	145:19 148:18	31:20 38:24,26	interveners (17)
117:26 139:19	71:9 72:25 73:8	153:7	48:20,21,22,22	6:1 10:12 14:14
140:1	73:19,24,26	informing (1)	49:10 82:14	20:1 54:14,14
included (8) 35:4	74:13 83:4,12	122:16	83:17 125:7,8,9	73:22 101:25
67:15 68:9 78:1	86:25 92:16	infrastructure (1)	125:10,12 137:1	111:7 112:17
107:2 140:9	93:8,15,25	82:2	149:15	115:7 117:7
141:4 145:16	94:18,24 95:11	infrastructures ...	intakes (1) 136:23	119:4 120:22
includes (9) 66:4	104:2 107:24	82:8	integrity (1) 33:7	121:2,11 142:26
66:25 82:3	108:7 110:3	inherited (1)	interact (1)	interveners' (2)
118:3,5 119:25	112:19 115:10	91:12	105:13	17:11,13
120:3 138:26	120:15,24	initial (1) 34:13	interest (5) 35:4	intervening (1)
139:23	121:16 142:20	Initially (1)	91:9,15,24	20:23
including (10)	142:22 143:2,4	126:22	96:19	intervention (6)
8:17 10:12	143:12,19	Innirvik (1)	interested (4)	64:17 70:9 71:4
13:11,20 14:17	144:16 146:18	114:21	16:5 75:23	71:8 74:1 143:6
15:18 17:4	154:10	inside (11) 29:11	121:24 145:6	interventions (2)
65:16 108:5	individuals (1)	29:16,25 31:20	interference (1)	22:24 119:5
138:12	113:25	33:17 48:24	10:9	introduce (6) 20:4
inclusion (7)	industrial (4)	52:21 79:9	interim (4) 45:18	20:23,26 21:8
58:10 94:7	13:1 36:14	125:12 129:5	45:26 80:8	113:16,25
96:21 103:22,23	127:17 133:6	130:24	104:26	introducing (1)
103:23 136:15	infiltrates (1) 79:7	inspection (3)	interior (1)	12:7
Incorporated (2)	infiltrating (1)	79:11,26 147:25	129:25	Introduction (3)
20:20 115:1	80:1	inspector's (1)	internal (4) 16:15	2:12 19:22 20:1
increase (1) 17:23	infiltration (2)	79:11	67:2 120:9	introductory (1)
Indian (1) 144:21	79:22 80:8	inspectors (3)	139:22	112:10
indicate (2) 65:11	infiltration/drai...	79:25 81:13	international (2)	Inuktitut (12)
138:7	79:20	104:11	128:2,3	6:20,21,22 10:5
indicated (12)	inflow (1) 30:4	install (4) 32:10	interpret (2) 9:13	10:5 13:18
10:3 37:24	inform (3) 40:25	61:6,17,18	9:24	55:18 72:21
46:21,21 48:25	87:23 122:6	installation (4)	interpretation (2)	73:4 112:25

153:20 154:16 invite (2) 115:11 122:19 inviting (1) 56:1 involve (1) 115:4 involved (3) 49:19 49:19,21 involvement (2) 100:19,19 Iqaluit (4) 21:21 73:25 143:3,11 iron (1) 93:20 isolated (3) 38:22 84:24 132:20 Israel (3) 9:17 40:8 114:21 issue (27) 32:3 39:13,17 40:11 40:18 41:6 61:16 65:11 67:10 68:18 69:13 77:15 78:8 82:17 84:9 84:10 87:3 96:20 101:3 102:26 117:4,23 119:15 138:7 140:4 141:12 142:6 issued (8) 16:18 16:25 17:10 18:5,12,15 84:18 121:8 issues (8) 18:9 19:6 79:20 100:25 118:19 118:24,25 121:19 issuing (3) 42:4 119:9 122:5 it'll (1) 89:8 item (8) 19:26 23:8 40:2,14 53:9 85:19 116:12 122:25 items (6) 10:2 43:7 51:25,26	105:20 112:22 <hr/> J J (1) 6:6 J-A-N-U-S-Z (3) 42:18 55:5 62:3 January (2) 18:1 18:12 Janusz (25) 3:4 6:4 21:1,2 42:17 42:17 43:20 55:4,4,6,7,26 56:2 59:20 61:25 62:2,2 63:6 70:11,11 89:25,25 90:4 134:10,14 Jeff (3) 21:5 61:2 134:19 job (1) 49:4 join (2) 111:13 123:9 joined (5) 21:4,21 74:3 134:18 143:8 joining (3) 21:14 64:26 137:25 July (10) 15:6 17:6 43:2 57:26 60:12 76:12 77:22 94:1 136:7 145:23 July/August (1) 125:3 jump (2) 87:1,1 June (9) 14:1 16:20,22,25 17:3 76:3,6 120:14 145:18 <hr/> K K (1) 5:18 Karen (3) 9:4 98:8 114:8 keep (3) 34:1 59:15 124:10 kept (7) 32:15	38:15,17,20 82:5 84:26 114:26 key (3) 13:6 16:4 18:25 Kharatyan (4) 5:18 9:4 98:8 114:8 Kilabuk (4) 6:21 9:12,14 114:20 kill (1) 99:8 kind (12) 28:11 31:7 37:14 38:5 84:5 86:12 106:7 112:1 132:8,9 133:13 136:10 kitchen (1) 10:24 knock (1) 32:13 know (44) 9:11 26:1 33:21 34:23 35:13 37:3,14 45:4 53:2,12 61:4,11 61:21 64:22 86:18 88:4,14 88:24 95:2 97:13,23,24 98:5,5 99:3,22 102:5,5,10,11 102:13,15,19 105:23,26 106:2 107:1,5 114:1 122:10 127:21 128:12 133:3 136:11 knowing (1) 149:18 knowledge (2) 90:19 122:18 known (1) 135:4 knows (1) 113:7 Kogvik (6) 5:15 6:20 9:3,12 114:6,18 Kubeisinova (14) 5:20 9:8 48:2,3	49:8 50:8,25 93:1,13,23 114:14 116:23 116:24 122:12 <hr/> L L (2) 5:7 6:17 L-A-C-A-I-L-L... 63:23 L-A-D-D (1) 25:11 L-D (1) 25:10 L-I-S-A (1) 72:5 lab (5) 38:6 40:5 40:16 67:1 139:21 lab's (2) 67:1 139:21 Laboratories (2) 95:22 154:22 laboratory (2) 38:7,7 lack (1) 136:20 Ladd (29) 2:16 5:23 20:6,12 23:11,13 24:24 24:25 25:5,10 25:10,12,13,20 26:18 31:3 41:18 43:13 44:26 45:25 50:12 91:8 95:26 107:11,11 108:19 123:2,2 150:7 lagoon (27) 14:7 28:3,3 35:17,17 35:21 36:5,6,15 36:16,19,20 78:17,19 82:4 120:4 126:17 127:11,12,18,19 129:19,23,23 131:16 147:9 149:7 land (15) 7:25 13:15 37:15	41:6 46:22 75:11,14,21 104:20 130:18 131:23 133:9 144:19,22 145:3 landfall (1) 148:8 landfill (49) 14:20 14:22 19:16 28:17,26 29:15 29:15,24,25 30:1 36:20 37:5 37:20 38:13 41:7 44:14,20 44:22 45:19 50:17 51:6,9 53:11 69:4,12 79:13 81:3 87:4 87:19 88:6 99:15 104:6 106:26 107:13 120:1 128:4,9 129:3,7,11,17 129:18 130:11 130:13 133:10 141:24 142:5 148:2,15 Lands (3) 52:25 75:17 144:25 language (15) 6:20,21,22 9:6,7 10:10 21:24 57:12 59:1 70:22 115:24 116:1 134:7 135:19 142:18 large (1) 50:16 latest (6) 15:6 41:2 95:13 97:24 98:6 133:18 Law (2) 9:7 114:12 laws (2) 75:12 144:20 leachate (24) 15:3 29:19 37:7,20 37:22 53:10
---	--	--	---	---

85:17,22 86:7	13:7,19 17:23	114:9 117:4	143:3	LUNCHEON (1)
88:5,16 93:18	19:10 20:9,14	118:11 142:11	location (2) 28:20	59:21
104:5,11,13,25	26:20,22 27:2	life (1) 149:19	128:23	
106:16 107:8	30:23,24 37:23	light (3) 69:11	log (1) 15:7	M
130:15,18	37:23 38:3,4	100:12 142:4	long (10) 29:4	M (4) 5:8,9 6:22
131:21,22,23,24	40:26 41:13	limit (10) 44:21	35:17 36:23	20:18
leads (1) 21:23	42:4 47:11,11	68:13 86:14	49:25 80:4	M.A (1) 20:15
learned (1) 71:20	49:4 53:21 54:1	88:15,15,16,19	88:11 89:3,4	Mablick (3) 6:26
leave (3) 87:9,15	54:1,5 56:8 57:6	108:23,24 141:7	91:19 128:12	9:18 114:21
105:15	58:10 64:10	limited (6) 43:2	long-term (2)	Madeleine (1)
leaving (2) 87:11	66:9 67:14	77:21 93:21	58:14 136:18	114:20
87:18	68:11 73:1 74:3	94:20 98:16	longer (5) 77:15	magna (2) 67:22
led (1) 122:3	74:17,21 75:22	109:1	78:7,19 82:3	140:17
left (10) 8:24	76:2 78:26	limits (2) 102:18	147:11	magnesium (1)
23:20,20 24:4	79:18 82:3,5,9	103:24	look (12) 29:21	86:13
25:7 26:8 29:13	82:15,21 83:22	line (7) 39:6,7	82:6 86:17	main (6) 13:10
29:24 102:1	83:22,23,24,25	49:17 128:14	94:22 95:19	56:17 68:11
113:20	83:26,26 84:2	130:2,12,12	98:10 99:2,11	87:14 123:18
legal (20) 5:12	84:18 85:16,18	lined (2) 27:18	102:15,18	141:6
23:18 24:10	87:26 94:8	124:14	150:17,17	maintain (1)
25:23 54:15,21	96:22 107:3	liner (2) 27:20	looked (3) 93:17	33:11
54:26 63:16,25	111:16 112:15	124:22	150:22,23	maintenance (11)
64:1 71:13,19	114:10 117:2,5	lines (1) 101:12	looking (18) 32:9	13:22 14:1,2,6
71:23 72:18	117:26 118:3,5	link (1) 122:1	36:17 52:3 57:1	15:16,17,19,20
73:14 95:15	118:8,14,15	Lisa (6) 3:17	57:7 92:22 94:6	34:9 48:9
96:3 100:11	119:10,14 123:5	21:22 72:5,16	94:19 96:1 97:9	133:26
113:24 114:12	123:18,22	74:4 143:8	97:13,23,25	major (4) 16:9
legislation (2)	128:26 132:12	list (10) 4:20 13:6	98:1 99:22	31:15 40:26
66:2 138:24	133:22 134:22	15:13 18:3,7,8	101:13 106:24	98:24
legislations (1)	136:15 139:4	19:6 54:23	107:5	Makabe (2) 8:24
65:6	140:8 141:6	74:17 143:23	looks (4) 69:17	113:21
lesson (1) 71:20	143:8,23 144:1	listed (2) 75:12	80:25 142:10	making (5) 10:15
let's (4) 7:15,16	145:5,13 147:19	85:24	148:17	11:11 54:17
86:21 122:26	149:8,17 154:5	litre (2) 131:6,6	Lootie (2) 7:10	113:6 116:9
lethality (6) 67:21	154:12	litres (2) 57:8	111:18	man (1) 25:18
67:21 68:3	licences (1) 87:25	135:16	lot (1) 99:18	manage (2) 88:26
140:15,16,24	License (4) 55:15	little (15) 21:13	low (6) 57:13	115:23
letter (4) 13:12,17	64:8 153:16	48:24 60:11,14	58:24 98:21	management (56)
14:14 42:20	154:3	76:18 78:10	136:8 137:5,6	6:16 7:26 8:9
level (4) 57:23	licensed (1) 123:7	91:21 93:17	low-flow (2) 58:1	13:3,3,26 14:18
126:24 136:2,13	licensee (4) 17:11	98:10 123:16	136:13	19:11,18,20
levels (2) 57:19	20:12 92:21	129:19,21 130:3	lower (5) 29:16	26:24 28:15,16
135:25	123:3	131:23 147:1	58:8 79:12 91:9	28:16 32:24,25
library (1) 37:13	licensing (12)	local (2) 20:22	136:13	36:8,22 41:1,5,6
licence (104) 1:7	5:18,19 9:5,5	90:18	lucky (1) 33:23	41:8,11 52:3,8
7:6 8:5,6,6,17	15:26 19:3	located (4) 10:13	lunch (2) 59:15	66:15 74:5 75:5
12:11,13,17,19	69:18 98:8	113:4 129:9	59:24	75:11 79:2

80:21 81:17,18 82:22 85:10 105:7 106:26 107:8 109:16 117:13 119:22 123:21 129:1,3 133:15,20 139:10 143:10 144:10,19 146:23 147:21 149:1,3 150:9 151:4 manager (8) 5:18 6:14 9:5 21:19 73:23 98:8 114:9 143:1 managing (1) 79:21 mandate (11) 56:7 65:5,14 66:10 75:9 117:21 134:21 138:3,10 139:5 144:17 manner (1) 117:18 manual (10) 13:22 14:2,18 15:16,17,19 34:9,13,15 109:14 manuals (1) 13:20 map (12) 28:24 39:2,2,22,22,24 39:25 46:10,12 46:13,14,24 March (17) 1:26 2:5 5:4 13:13,14 13:17 16:11 18:15,18,22 40:21 81:22 106:8,19 120:6 151:7 153:2 marine (4) 14:25 52:7 97:15 103:8 mark (1) 24:14	market (2) 128:2 128:3 marking (2) 55:11 64:4 master (1) 89:6 material (3) 28:18 129:4 133:11 materials (12) 13:4 14:5 24:12 54:16 55:10 64:3 72:20,21 81:7 132:20,24 133:1 matter (1) 77:16 matters (8) 8:15 11:21 12:2 24:16 25:15 54:19 64:14 73:6 Meadows (47) 5:12 9:6,7 23:17 23:18,25 24:3,9 24:10 25:3,12 25:14,22,23 26:7,13 54:20 54:21,26 55:6,8 63:15,16,24,24 64:1,1,13 71:12 71:13,18,19,23 72:7,17,18 73:5 73:13,14 95:14 95:15 96:2,3 100:10,11 114:12,12 mean (8) 57:17,22 60:18 80:14 86:10,20 99:12 136:14 means (10) 30:9 41:26 57:9 60:15 124:24 126:9 127:1 130:26 131:7 135:17 measure (7) 32:4 60:20 61:6 82:10 124:5	149:10,13 measurements (...) 77:23 measures (4) 19:16 45:14 58:23 137:4 measuring (2) 77:4 149:12 mechanical (25) 13:21 15:15 27:26 28:2 32:6 32:6 34:21 36:6 36:10,12 41:3 49:15,20,25 60:19 126:16,20 127:13,15 129:10 133:8,9 133:12,21,23 media (3) 11:17 11:22 12:3 meet (1) 82:14 meeting (26) 15:11 17:16,20 18:4 19:8 20:7 30:13,20 31:2 37:11 66:1 68:24 76:14 77:8 82:24 87:7 105:16 111:21 118:23 121:5,7 123:13 131:1,25 138:23 141:18 meeting/prehea... 145:26 meetings (1) 17:18 meets (7) 56:23 58:19 77:26 78:25 90:25 136:22 147:18 melt (1) 88:7 melted (1) 33:17 member (3) 5:8,9 22:17 members (17) 8:23,25 10:12 12:1 22:14	47:21 63:4 64:25 71:3 73:21 113:17,19 113:20,22 137:24,24 142:24 membrane (3) 78:13 126:25 147:6 memo (1) 78:3 memorandum (4) 76:6,12 145:18 145:23 men's (1) 10:24 mention (1) 22:17 mentioned (6) 32:3 36:1 43:7 48:6,9,10 mercury (1) 93:20 mesh (5) 31:22,22 48:22,23 49:1 met (1) 126:9 metal (44) 14:21 14:22 28:17,21 28:26 29:6,11 29:23 36:22,24 37:4 38:13,22 45:11,21 52:3 52:18 53:11 79:6,8,9,20 80:20 81:2 84:21,25 87:4 88:6 104:5,21 106:15 120:2 129:3,5,10,17 129:25,25,26 132:11 147:22 147:23 148:4,26 Metallic (1) 28:20 metals (10) 52:7 97:11 99:9 130:2 132:23,24 133:5,6 148:14 148:24 meteorological ... 65:20 138:16 meter (5) 32:3	49:14,16,24 83:17 metering (1) 32:2 method (1) 15:8 metre (9) 27:12 27:13,15,24 60:9,11,13 124:14,24 metres (10) 12:23 12:25 60:7 78:16 118:1,4,6 119:23 124:17 147:8 mic (3) 42:13 72:10 92:24 micron (3) 125:14 125:14,14 microphone (15) 10:7 11:8 20:26 22:8,9,11,12 112:11 113:1 115:13,18,20 116:6,14 123:14 middle (3) 50:1 91:20 129:13 milligram (2) 131:6,6 million (1) 127:2 mind (1) 91:1 mindful (1) 115:25 minimal (1) 98:21 minimization (2) 19:18 50:9 minimize (7) 50:19 57:26 69:7,10 136:7 142:1,3 minimum (7) 31:19 60:18 67:20 105:24 118:21,26 140:14 Minister (5) 59:5 119:10,12,17,18 minor (1) 30:19 minute (1) 126:4
---	--	--	--	---

minutes (4) 23:4 23:14 92:7 126:3	50:15 62:12 64:25 71:20 97:26 111:1 112:9 123:17 127:8 132:14,21 144:5 148:12 150:26	47:6,24 48:2,15 51:14 53:18,19 55:2 56:2 60:1 62:1,6 63:19,21 64:17,26 70:1,9 70:16 71:26 73:22 83:10 91:7 93:7 111:18 113:26 115:3,19 116:24 134:14 137:25 142:26	34:3,7 41:5,11 42:4 46:20 47:11 51:8 54:1 69:4,12 76:24 82:22 85:10,11 85:13 88:2,3 111:16,22 119:25 124:1,4 124:9 125:21,23 126:11,13 132:2 133:4 141:24 142:5 146:11 149:20	108:8 110:4 112:19 115:10 119:11 120:15 120:24 121:16 142:20,22 143:2 143:4,12,19 144:16,21 146:18 154:10
missing (1) 84:8	motions (1) 22:26	Nartok (2) 8:24	newcomers (1) 10:21	Nortok (1) 5:9
mitigation (3) 19:16 58:23 137:3	move (8) 9:26 19:6 44:16 45:21 85:4 103:20 116:12 134:6	national (2) 117:17,17	Newfoundlande... 115:22	note (2) 116:2 135:7
mix (3) 37:7 88:10 132:23	moving (13) 31:5 33:21 51:12 52:7 68:18 85:12,12 102:12 102:20 105:21 106:3 107:7 141:12	natural (4) 57:10 65:15 88:5 138:11	news (1) 31:5	noted (3) 51:9 67:23 140:18
model (1) 133:18	Moyer (3) 6:6 21:5 134:19	nature (1) 27:19	nighttime (1) 50:14	notes (2) 59:15 152:6
modern (1) 41:3	Mrazek (3) 5:8 8:23 113:20	near (1) 90:9	non-burnable (2) 69:2 141:22	notice (4) 16:26 18:12 118:19,25
moment (1) 25:2	municipal (17) 5:24 7:9 12:21 13:4 20:9,16 26:20 49:4 64:9 68:4 78:18 83:23 123:5,9 140:25 147:10 154:4	necessary (3) 39:23 78:5 82:20	non-functionin... 120:4	notified (1) 17:14
momentarily (1) 101:13	municipality (4) 76:20 83:21,23 146:7	need (27) 9:18 11:14 18:26 27:14 32:3 33:7 35:26 36:15 37:25 39:5,7,7 40:16 49:17 60:9,10,13 64:23 74:23 84:22 86:9 94:10 95:9 114:24 132:14 144:3 148:5	non-operating (1) 120:4	noting (1) 81:14
monitor (4) 54:5 61:9 85:23,25	N	needed (1) 91:14	non-segregated ... 69:8,11 142:1,4	November (1) 13:16
monitored (1) 136:9	Nakurmiik (2) 83:3 150:3	needs (6) 25:6 54:15 71:10 79:8,14 148:9	normally (9) 28:3 28:17 30:22,23 38:6 49:3 50:1 60:10 88:8	now-expired (2) 67:14 140:8
monitoring (46) 29:23 30:2 37:22,24 38:1 42:22 47:12,13 49:3 52:12,16 52:17 53:22,25 53:26 61:3 67:17 68:10 84:1 85:16,19 85:20,21,22 86:5,7,8,11 102:12 103:22 105:2,3,6,11,23 106:1,9,9,26 107:21 130:22 132:11 133:26 140:12 141:5 148:14	name (53) 7:10 9:11,23 11:9 21:10,18 23:22 23:25 24:1 25:8 26:1,9 35:8,13 35:14 41:17 42:14 43:12 44:5,25 45:24	negative (1) 56:19	non-operating (1) 120:4	NRCAN (2) 37:12 52:25
monitoring/sam... 106:11		never (2) 114:3,8	North (1) 104:14	number (18) 8:17 12:11,13 13:8 29:24 30:2,2,7 31:12,13,14 51:7 84:25,25 85:19 108:25 131:13 153:5
monitors (1) 58:3		new (44) 8:4,6 12:11,19 15:13 19:10 30:23 31:8 33:23,24	Northern (56) 2:25 3:20,23,26 4:16 6:13 14:15 16:23 17:9 18:20 21:17,20 44:3,6,10 62:17 62:20 70:15,18 71:9 72:25 73:8 73:19,24,26 74:13 83:5,12 86:26 92:17 93:9,16,26 94:19,24 95:12 104:3 107:25	numerous (2) 66:1 138:23
month (1) 89:8				Nunavut (157) 1:1,25 2:10 3:1 3:25 4:4,6 5:2,6 5:11 7:3,11,19 7:22,25 8:1,10 8:10,13,13,14 13:9,13,15 14:9 14:10 16:13 18:13,14 20:11 20:17 21:21 23:18 24:10,18 25:24 26:21 28:2 33:1,22
monthly (2) 105:4 108:14				
months (5) 34:6 67:20 77:22 128:10 140:14				
morning (18) 7:4 20:7 21:1 27:1				

34:19,19 38:6 40:17 47:26 51:4,24 53:7 54:21 55:1 56:1 63:1,16,25 64:2 64:11 65:10 66:10 68:8,15 69:20 70:26 71:13,19,24 72:18 73:14,24 74:6,8,9,25 75:11,14,14,15 75:16 76:1 77:3 80:11 81:13 87:24 88:1,3 92:16,19 94:5 95:6,15 96:3,14 96:17 97:8,22 98:4 100:11 101:10 102:1 103:15 105:18 106:21 109:9 110:16 111:11 111:15,19 112:2 112:4,12,13 115:5 116:19,22 116:25 117:3,9 117:11,13,15,17 117:21,25 118:11,15,19 120:8,9,20 121:26 122:3,9 125:21 126:21 127:6 133:17 134:11 138:6 139:5 141:3,10 142:13,24 143:3 143:11,13,15 144:19,21,22,23 144:24 145:5,12 149:23 153:8 154:6 155:2 Nunavut's (4) 15:5 75:20 117:19 145:3 NWB (24) 7:23 7:25 15:11	16:15,18,25 17:3,6,10,14,19 17:22 18:5,12 18:15,18,22 112:4 113:25 114:13 117:9 120:17 122:22 122:22 NWB's (4) 8:25 15:25 18:26 113:23 NWT (3) 33:1 34:20 124:13 <hr/> O O&M (8) 14:18 34:13,15 49:5 53:14 109:14,14 109:22 objections (1) 22:26 objective (2) 56:10 134:24 Objects (1) 117:15 obligation (1) 149:10 obligations (2) 66:1 138:23 obtain (1) 82:13 occasional (1) 147:10 occasionally (1) 78:18 occurring (1) 87:14 ocean (3) 78:16 90:25 147:9 Oceans (27) 2:22 3:6 4:10 6:3 14:17 17:8 18:21 20:25 21:3,5 42:12,15 42:18 54:23 55:14,25 56:4 70:8 77:17 112:17 115:8	120:24 121:15 134:9,16 146:17 153:15 October (7) 13:24 13:25 17:14 79:24,25 147:25 147:25 offer (1) 102:17 offering (1) 49:13 office (10) 21:21 37:13,14,15 52:25,25 73:25 74:6 143:3,11 Officer (2) 5:23 20:13 Official (2) 6:24 152:15 offline (1) 100:20 offsetting (1) 59:6 oh (2) 62:2 89:23 okay (34) 20:25 21:26 23:7 35:11 36:3 40:10 42:9 47:2 47:16,22 54:9 59:23 62:23 63:4,11 70:7 71:4,9 72:12 83:14 87:20 92:10,10 100:4 101:19 110:7 122:14,14 129:15,15,15 134:13 150:14 150:16 old (13) 28:14 33:20 34:1,1 38:4 82:2,4 85:12 119:25 124:10 128:25 131:14 149:6 omitted (1) 102:5 once (19) 30:5 34:14 38:8 39:9 51:19 61:18 67:19 95:18 98:9 121:5,6	122:7 124:9 125:24 126:5,8 140:14 148:6,18 open (15) 19:18 31:1 42:7,10 63:9 68:21 69:7 69:26 83:6 111:26 132:19 134:3 141:15 142:1 150:21 open-waste (1) 50:10 open-water (3) 76:21 146:8 149:14 opened (1) 41:7 Opening (5) 2:10 4:4 7:3,17 111:11 operate (2) 60:10 133:25 operating (2) 34:4 34:21 operation (10) 12:26 13:22 14:1,2,6 15:16 34:9 48:9,20 133:26 operational (3) 69:5 109:16 141:25 operations (3) 15:17,19,20 operators (1) 60:24 opinion (1) 90:22 opportunity (9) 21:26 22:20 69:20 74:1 100:23,24 103:2 142:13 143:5 optimization (1) 34:15 optimize (1) 33:21 optimized (4) 35:22 36:13	126:23 127:16 optimum (1) 117:18 option (1) 119:15 order (3) 65:24 94:16 138:20 originally (1) 17:24 Ottawa (4) 37:13 38:7,7 52:24 ourself (1) 133:24 outfall (3) 78:15 147:7 148:1 outline (3) 65:7 79:19 138:4 outlined (2) 18:3 147:26 outside (3) 52:21 79:7 147:23 outstanding (4) 65:12 76:17 138:8 146:3 Overall (1) 137:3 overcome (2) 68:16 141:11 overview (4) 9:26 16:8 74:15 143:21 oxygen (1) 131:5 <hr/> P P-A-R-S-O-N-S... 44:9 72:2 P18 (2) 8:20,21 package (6) 13:11 24:13,17 120:11 145:16 153:7 page (3) 2:3 85:19 153:5 pages (1) 152:3 PAN-2 (2) 30:5 130:23 PAN-3 (7) 30:11 67:17 85:20 86:1,5 130:23 140:12 PAN-4 (5) 30:11
---	---	--	--	---

37:21 52:16 53:24 85:21 PAN-5 (6) 30:11 37:21 52:16 53:24 85:21 106:16 PAN-6 (6) 30:11 52:17,17 53:24 85:21 132:12 panel (17) 5:8,9 8:18,19,20,21 8:22,22 12:1 54:10 63:4 71:3 113:19,19 115:12 122:3,4 panels (1) 110:8 Pang (11) 9:14 34:20 41:2 85:2 85:4 124:1 125:22 126:12 127:20 129:2 133:11 Pangirtung (2) 2:26 44:7 Pangnirtung (80) 1:6,25 2:20,23 3:2,22 4:8 5:1,2 5:22 7:7,20 8:3 8:19 12:12,20 13:12 15:7 20:4 20:10,12 24:20 26:17,21 33:22 41:19 42:16 43:14 45:1 46:13 48:1 50:13 55:16 58:15 64:9 72:26 74:10 76:8,21 83:12 90:6,8 107:12 108:19 109:3 111:5,17,18,23 112:5,16 113:8 114:20 115:7 117:1 119:21 122:25 123:1,3 123:6 126:21	132:22 133:4,9 134:4,12,23 135:8 136:19 142:25 143:16 145:20 146:8 150:8,20 151:3 153:10,17 154:4 154:11 Pangnirtung's (4) 74:2 76:2 143:7 145:13 paper (1) 16:3 papers (1) 113:14 par (1) 131:3 parameter (6) 53:26 54:1,3 86:3 88:16 131:4 parameters (13) 30:10 37:25 38:2 53:21,22 54:3 85:18,24 85:26 93:14 96:21 102:13 103:22 pardon (1) 58:3 park (1) 117:17 Parliament (2) 65:25 138:21 Parsons (48) 3:13 6:14 21:18,19 44:8,9 45:7 46:7 46:26 47:16,18 62:19,19 70:17 70:18 71:16 72:1,1,12,14 73:10,20,22 86:25,25 93:8,8 93:15,15,25,25 94:18,18,24 95:11,11 104:2 104:2 107:24,24 108:7,7,26 110:3,3 142:23 143:1 150:10 part (22) 31:20 45:17 48:19	52:12 53:14 59:5 65:26 66:4 68:9 80:21 95:3 95:5 104:24 109:13 123:15 127:26 128:14 128:26 129:13 132:8 138:22 141:4 participants (2) 105:15 112:2 participate (6) 94:13 96:20 103:2,4 121:22 122:20 participated (3) 76:13 121:18 145:25 participates (4) 66:8 75:22 139:3 145:4 participating (2) 20:2 150:19 participation (5) 69:18 116:8 117:7,7 142:11 particular (9) 35:2 37:24 81:24 82:21 99:14,16 117:19 122:19 132:1 particularly (1) 89:26 parties (26) 2:12 11:16,23 12:3,8 14:18 15:24 16:19 17:1,14 19:22 20:1,23 75:23 95:18 96:25 100:12,16 100:20 110:19 115:2 118:22 119:4 120:12,18 145:6 pass (3) 37:5 105:18 106:4 passage (2) 77:14	90:19 passing (2) 128:20 147:26 patch (1) 147:24 path (1) 14:24 pattern (3) 28:26 61:7,21 pending (1) 11:21 people (8) 20:24 25:25 90:9 111:4,13 113:8 114:1 133:25 percent (19) 27:16 30:1 57:11,14,17,20 57:22 58:7,9 60:18 77:11 124:18,24 135:20,23,26 136:1,12,14 performance (3) 34:7 78:22 147:15 performing (2) 67:25 140:20 period (7) 31:7 40:24 50:5 61:16 84:17 85:11 125:3 periods (4) 57:26 58:2 99:2 136:6 permanent (3) 56:18 80:9 135:2 permit (1) 90:1 permitted (1) 116:4 person (3) 9:14 48:10,12 pertain (2) 75:20 145:3 pertaining (1) 13:7 Ph (2) 20:16,18 Ph.D (2) 60:26 123:8 phase (1) 86:17	PHC (1) 17:16 phenols (1) 86:13 phone (8) 21:8,14 25:26 65:3 94:12 96:5,18 101:12 phones (1) 11:5 photo (1) 78:7 photos (1) 79:3 pick (3) 10:19 113:14 148:7 picture (12) 28:11 29:3,22 33:10 37:21 78:9 79:12 146:5,6 147:22 148:1,22 pictures (9) 76:18 79:5,5,6 146:4 147:20,21 148:3 148:4 pinhole (1) 91:21 pipe (11) 126:2,3 128:14,15 130:16,17 131:20,20,21 132:1 148:1 place (9) 24:3 26:7 37:3 52:11 82:17 93:3 101:13 103:12 128:5 plan (97) 13:24 13:25,26 14:1,6 14:8,19,21,22 14:23,26 15:2,6 15:15,20 31:11 31:14 34:9 35:6 36:19 37:3,16 37:18 39:1,1,3,4 39:20,21,23,25 39:26 40:2,3,4 40:15,15,22 45:15 46:12,16 46:18,19,24 47:1,2,14 48:9 50:10 51:11 52:8,11,12,19
---	--	---	--	--

52:20 53:14	127:7,8,13,15	103:18 106:16	prayer (4) 7:15,17	110:19 113:18
66:20 68:22	127:16,20,22,25	110:17,24	112:6,7	115:4,6,11
79:21,23 80:2,4	127:26 128:1,7	116:16 128:15	precautionary (1)	116:19,20,22
80:9,26 81:26	128:11,24 129:6	129:12,12	94:21	122:26 123:1,16
89:2,2,6,7,10,11	129:10,16,22	130:26	prehearing (14)	134:9 137:16,18
89:14 103:12	130:22,24	pointing (1) 90:4	15:11 17:16,20	137:19 142:12
105:12,12 106:3	131:12 132:3	points (4) 87:17	18:5 19:8 30:12	142:14,17,19,22
106:17,26 107:6	133:18 140:11	87:18 91:9,24	68:24 76:14	143:5,18 144:5
107:13,13,26	147:5,5,10,16	pole (2) 32:11,12	118:23,24 121:5	144:6,8,13
108:1,4,5	147:18	policies (2) 65:22	121:6,8 141:18	150:2,5,15
109:12,13,14,15	plant/truck-fill ...	138:18	preliminary (6)	153:12,15 154:2
109:16,21,21,22	76:25 146:12	pollution (6) 66:6	16:16,19,22	154:10 155:2,3
139:14 141:16	plants (1) 149:3	75:18 104:12,15	120:10,12,14	presentations (5)
148:14,19	play (1) 104:12	139:2 144:26	prepare (1) 119:5	115:7 121:11
plan/drainage (1)	please (59) 10:8	positions (1)	prepared (3) 92:8	146:15 150:22
109:21	10:19 11:4,6,8	100:23	110:19,21	150:24
planning (7) 5:24	12:5 16:6 19:2	positive (1) 43:4	present (13) 24:8	presented (8)
13:15 75:16	20:4,25 21:8,25	possession (1)	65:5 69:21	55:10 64:4
81:1 85:5	22:5,7,9,11	98:10	71:14 100:23	74:24 78:23
127:18 144:24	23:16,20,23,26	possibility (3)	110:2 112:16,19	79:23 94:20
plans (15) 13:20	24:3,24 25:2,7,8	68:6 125:15	113:24 136:17	144:4 147:17
19:20,20,21,21	26:9 35:9 39:16	141:1	137:18 138:3	presenters (2)
51:11 76:16	43:11 48:16	possible (5) 31:9	142:14	83:16 134:7
81:17,18,20	54:18,25 55:3	81:10 97:18,19	presentation (1...	presenting (1)
82:7 105:7	55:23 60:2	98:2	2:20 3:6,10,19	54:17
146:2 149:1,5	63:20 64:18	posted (2) 46:17	4:6,8,10,12,15	presently (2)
plant (98) 8:8	65:13,23 66:16	121:25	18:19 23:8,10	50:13 82:11
13:1,2,26 14:2	67:11 68:19	potable (3) 27:6	24:11,22,24	presents (2) 66:2
14:20,25 15:1	69:14 70:16	123:25 124:26	25:18 26:16,17	138:24
27:25 28:1,2,5,6	71:26 111:12	potential (10)	26:26 41:16,24	preserve (2) 65:15
28:7,8,9,12,13	113:1,14 115:3	51:8 53:16	42:11,26 43:7	138:11
28:18 29:1,20	115:15,18,25	57:24 100:19	43:24 45:9 46:9	prevent (2) 10:9
30:3,4,8 32:12	116:2 122:10	102:12,17	46:21 48:6,25	77:14
33:10,22 34:3,8	138:9,19 139:11	103:23 107:2	49:13 52:1 53:9	prevention (6)
34:10,17,21,25	141:13 142:7	136:3 148:6	54:11,13,15	66:6 75:18
35:18,22 36:6	pleased (1) 112:4	power (3) 8:15	55:9,14,23,25	104:12,15 139:2
36:11,12,13	pleases (1) 43:5	32:11,11	56:6 59:13,16	144:26
41:3,4 67:17	plus (1) 108:14	PowerPoint (10)	59:19,24 60:1,5	previous (8)
78:10,12,13,17	PM (6) 22:21	24:22 55:13	62:12 63:5 64:3	37:21 51:9
78:22,24 84:20	59:22 101:14,17	64:6 72:24	64:7,19,22	67:13 83:16
86:6 99:8 105:2	111:8,9	116:18 153:12	69:19,21 71:5	85:15,18 140:8
107:21 111:25	point (24) 30:7,9	153:14 154:1,9	71:10 72:20,20	148:22
124:4,8,9	35:5 46:9 53:14	155:1	72:25 73:9,11	previously (2) 8:5
125:10,18	58:2 80:10 81:5	powers (1) 117:12	73:19 74:1,12	12:13
126:13,15,16,18	86:1,2 91:15	practice (2) 12:4	75:7 81:8 83:5	primary (1) 15:5
126:18,19,21,22	93:11 94:25	31:4	83:18 84:23	principal (2) 75:3
126:23,24 127:5	98:25 99:17	pray (2) 7:15,16	86:9,20 110:9	144:9

prior (5) 11:17 12:7 48:13 94:10 115:3	51:6 66:9 69:18 74:9,19,21 77:24 79:18	51:17 52:22	provide (20) 7:21 12:8 16:7,20 22:18 65:19	16:1,3 17:26 18:9,10,13,15 18:16,18,23
private (1) 102:7	85:3,7,8 86:18	promise (2) 50:2 51:16	74:15 96:23,25 107:3 112:12	19:7,25 20:2,8 22:14,16 23:2
probability (2) 58:24 137:6	87:6 112:1,13 117:5,8 118:12	promised (2) 43:3 107:21	115:12 117:15 117:18 118:18	24:21,26 26:18 44:12 47:21
probably (10) 35:19 37:17 44:10 51:26 84:10 92:22 105:24 108:22 108:23,24	121:17 122:23 125:18,23 126:16 133:8 139:4 142:11 143:14,25 144:1 145:10,14 151:5 151:5	pronounce (3) 9:23 114:9,15	pronouncing (1) 9:8	55:12 62:23 64:5 70:22 72:23 73:22
problem (6) 90:16 99:20,20,21,26 126:22	processes (2) 75:22 145:5	proper (5) 9:20 77:4 80:24 82:16 149:15	provided (36) 14:12 17:12 18:2 24:18 53:13 56:25 58:20,22 65:8 66:12 68:25 69:16 76:6,8,11 78:7 81:19 94:9 94:10,23 95:9 98:6 112:21 113:4 121:3,20 122:5 137:3 138:5 139:7 141:19 142:9 145:18,19,22 153:8	92:1 112:9 113:13 115:16 116:10 117:7,10 118:7,26 119:5 119:7,8 121:11 121:14,23 122:2 122:7 123:12 124:7 125:26 126:10 134:13 137:24 142:26 148:11 150:17 150:20,20,21,21 151:1 153:11
problematic (1) 99:26	processing (2) 8:16 13:2	properly (7) 9:8 40:7 68:23 111:4 114:9,15 141:17	provides (1) 136:25	published (3) 57:4 135:11 136:25
problems (1) 136:4	procurement (1) 36:17	proponent (5) 56:23 58:18 102:4 121:20 136:21	providing (12) 14:5 16:25 18:7 66:9 69:21 75:24 81:21 106:25 109:11 139:4 142:14 145:7	pump (13) 27:10 32:1,7,13,14,14 32:17 33:15 48:21 125:4,4 125:18 146:5
procedural (8) 16:8,10 18:25 24:15 54:18 64:14 73:6 117:6	program (16) 21:4 56:4,10 57:5 67:2,9,17 68:10 85:19 106:9 134:16,24 139:22 140:3,12 141:5	proponents (1) 90:9	Province (1) 152:8	pumped (2) 76:22 146:9
procedurally (1) 11:19	programs (2) 65:22 138:18	proposed (4) 58:22 94:8 96:22 105:23	provision (1) 56:16	pumping (2) 57:8 135:16
procedures (2) 12:5 47:4	progress (1) 102:22	proposes (2) 66:20 139:14	provisions (3) 66:6 135:5 139:2	purpose (3) 8:2 48:15 99:18
proceed (13) 7:12 7:14 10:20 17:15 23:3 54:18 92:25 94:16 112:6 113:17 122:24 122:26 150:25	progressed (1) 116:16	proposing (1) 32:10	PSR(A) (2) 6:24 152:14	Pursuant (1) 8:12
proceeding (5) 7:13 9:22 11:12 22:4 39:14	prohibited (1) 135:4	protect (6) 56:10 65:18 91:3 134:24 136:26 138:14	public (72) 1:13 2:9 7:5,6,12,24 8:2,18 10:1,13 10:17 15:25	pushed (1) 137:1
proceedings (8) 5:1 7:2 11:16 59:22 111:9 114:25 151:7 152:5	prohibition (1) 56:14	protected (1) 33:11		put (11) 11:5 23:20 24:13 25:7 26:4,25 52:11 88:16 105:1 132:25,26
proceeding (5) 7:13 9:22 11:12 22:4 39:14	prohibits (1) 103:10	protecting (1) 94:22		puts (1) 80:5
proceedings (8) 5:1 7:2 11:16 59:22 111:9 114:25 151:7 152:5	project (16) 13:17 31:6 32:9 33:9 37:9 41:9,10 49:18 50:18 51:17,19 59:7 66:11 75:17 139:6 144:25	protection (18) 6:4,6 21:2,4 56:3,4,10,15,16 58:19 66:5 90:23 91:1 134:16,17,24 135:5 139:1		putting (3) 48:23 99:12,16
process (40) 5:25 13:25 14:11 20:19 38:25 44:13 45:20	projected (1) 37:9	protocol (2) 67:3 139:23		
	projection (2)	proud (1) 126:12		

<p>Q</p> <p>QA/QC (12) 40:2 40:22 47:1,4,8 47:10,14 89:7 89:10,11,13,14 quality (58) 6:11 15:14,14 21:15 30:11,17,17 40:2,3,3,4,14,14 53:23 61:9 65:4 65:15 66:13,14 66:14,18,19,19 66:19,21,21 67:2,2,9,9 78:23 81:26 84:1,13 99:25 102:20 126:14 128:22 131:2,7,11,12 132:17 138:11 139:8,9,9,13,13 139:13,14,15,15 139:22,22 140:3 140:3 147:16 quantity (6) 61:10 82:10 84:13 99:24 128:8,10 quarter (1) 100:6 question (39) 30:14 33:24 40:24 42:1 43:23 44:17,23 45:11 46:8 47:1 49:8 50:9 51:5 52:6 53:8 56:26 59:16,26 60:4 62:11 70:3,9 78:1 83:20 84:21 86:21,21 88:20 89:10,26 90:2 92:1 93:2,2 95:7 96:18 97:3 97:18 99:5 questionable (1) 99:24 questioning (1)</p>	<p>101:24 questions (89) 2:22,26 3:1,22 3:25 12:4 14:10 14:13,15 22:18 42:7,10,15,19 43:9,11 44:1,4,6 44:11 45:6 46:6 47:18,21,23,26 48:4 51:2 52:1,4 53:5 54:7,10 59:10,13,25 62:5,14,20,23 62:25 63:2,4 69:22,26 70:12 70:19,22 71:1 71:17 74:11 76:16 83:6,12 87:21 89:18,21 92:4,9,14,16,20 92:25 96:8 110:8,21 115:12 115:15 119:3 122:10,15,21,21 122:24 134:3,4 134:4,6 137:13 137:15,15 142:15,18,19 143:17 146:2 150:6,14,23 quick (1) 95:7 quickly (1) 75:13 quite (1) 80:4 Qujannamiik (2) 20:6 24:25 Qumuatuq (2) 6:22 114:20 quotient (1) 85:14</p> <p>R</p> <p>R (3) 5:19,23 6:4 R-I-C-H-A-R-... 42:17 55:4 R-O-N-A-D (1) 25:10 R-O-Y (1) 24:2 rainbow (8) 67:21</p>	<p>68:2,5,14 140:15,23,26 141:8 rained (1) 108:21 rainfall (5) 105:4 106:10,14 108:14 132:6 rainfalls (2) 109:2 109:3 rainwater (1) 88:10 raise (7) 22:7,13 23:21 24:4 25:7 26:8 96:9 raised (6) 30:14 40:18 42:1 52:4 74:20 143:26 ran (1) 33:5 rate (6) 57:8 60:22 61:6,10 77:10 135:16 rates (1) 12:25 raw (2) 30:4 38:23 read (2) 129:13 150:12 ready (5) 25:17 25:17 42:7 59:24 125:25 realistically (1) 108:22 really (5) 9:22 72:11 108:10,15 114:8 reason (7) 36:9 50:17 104:9,9 104:10,16 148:3 reasonable (1) 60:15 reasons (1) 119:17 recall (1) 46:11 received (14) 14:14 15:23 16:5,23 17:3,6 17:22 18:18,24 120:15,19,21</p>	<p>121:7,25 receiving (6) 118:12 120:17 121:9 126:12 131:2,3 recess (3) 100:4 110:25 111:1 recharge (1) 124:18 reclamation (2) 82:1 149:5 recognizing (1) 100:13 RECOMMEN... 59:22 111:9 recommend (8) 58:2,17 68:8 100:15 136:5,9 136:21 141:3 recommendatio... 65:10 75:8 77:18 88:21,22 110:24 138:6 144:14 recommendatio... 17:13 65:8 66:24 67:4,8 74:25 76:4,10 138:4 139:18,24 140:2 145:17,22 recommended (4) 79:21 140:22 146:16,18 recommends (9) 66:25 68:1 77:20 80:7 81:2 81:9 83:1 139:19 149:24 reconvene (3) 23:6 59:17 111:1 reconvened (1) 106:23 reconvening (2) 101:2,14 record (22) 9:21 11:12 23:23,26</p>	<p>25:9 26:9 35:9 41:22 53:19 55:3 63:20 64:17 71:22,26 83:11 84:5 100:21 113:5 114:25 115:14 115:16 116:7 recorded (2) 11:12 22:10 recording (1) 15:8 recordkeeping (...) 35:13 recreational (4) 56:11 58:26 134:25 137:8 rectification (1) 34:11 red (1) 130:2 reduce (2) 31:4,10 refer (5) 7:23 8:4 74:12 77:16 143:18 reference (3) 58:5 95:10 136:10 references (1) 94:16 referred (2) 8:19 42:21 referring (1) 91:10 refrain (1) 11:23 regard (1) 59:16 regarding (19) 12:4 49:9 50:9 51:5 52:1,5,6 53:10 74:2 78:21 84:4 93:4 93:4 105:21,26 106:25 111:15 143:6 147:15 regards (16) 44:13 45:15 66:13,14,18 67:13 68:21 82:1 105:12 111:21 139:8,9</p>
--	---	---	---	--

139:12 140:7 141:15 146:24 region (1) 87:26 regional (6) 21:21 73:25 74:6 115:21 143:3,11 registry (2) 15:26 16:3 regular (1) 106:14 regulated (3) 30:9 94:7 96:21 regulation (3) 7:26 117:12 126:7 regulations (8) 66:3 75:16 117:22,22 118:10 138:25 144:24,26 regulators (1) 88:25 regulatory (2) 75:20 145:2 rehabilitate (1) 33:8 reiterate (1) 104:8 related (6) 8:15 52:20 68:7,17 111:26 141:11 relating (3) 65:21 138:17 141:2 relation (2) 18:25 112:14 Relations (1) 119:11 release (1) 11:17 released (1) 97:11 relevant (4) 65:6 66:2 121:19 138:24 remaining (1) 117:8 remains (2) 65:11 138:8 remarks (6) 2:10 4:4 7:3 111:11 112:10 116:12	remediated (1) 45:2 remediation (1) 32:22 remember (1) 108:21 remind (9) 11:4 25:24 31:26 39:16 54:14 90:8,8 103:6 104:8 reminds (1) 11:26 remove (2) 31:14 124:22 removed (1) 31:13 rendered (1) 122:7 renew (2) 74:3 143:7 renewable (2) 65:17 138:13 renewal (18) 16:11 20:9 25:1 26:19 47:10 73:1 74:17 76:2 76:9 79:18 83:1 123:5 134:5 145:13,14,21 149:24 154:12 renewed (2) 82:5 83:24 rep (1) 123:8 repair (1) 39:23 repairs (3) 15:22 78:3 146:24 replace (1) 8:5 replaced (2) 50:18 50:23 replenishment (1) 146:22 replicate (2) 66:26 139:20 reply (1) 83:21 report (17) 13:14 15:4 35:7 38:10 40:20,20 47:3	78:24 81:22 90:11 95:22,23 96:13 106:18 147:25 154:22 154:23 reporter (7) 6:24 11:7 39:17 48:16 114:26 115:17 152:15 reporting (5) 9:23 19:14 67:3 115:1 139:23 reports (6) 19:20 79:11 93:17 122:13 147:17 149:4 representations... 118:22 representative (6) 20:3,5,15,26 21:9 55:22 representatives ... 20:23 22:22 23:12 96:5 representing (2) 20:24 21:25 request (7) 17:22 22:15 23:9 82:19,22 118:17 134:5 requested (8) 12:12 17:24 82:18 111:17 112:3 120:12,17 120:26 requesting (5) 16:18,26 17:10 86:19 121:2 requests (6) 76:5 76:17 118:20 119:3 145:17 146:3 require (4) 23:12 55:24 59:5 118:1 required (18) 12:15 18:13	43:2 53:17 57:23,23 58:18 59:3 81:20 82:15 90:19,23 91:2,2 119:1 136:3,22 137:11 requirement (4) 42:21 68:9 118:26 141:4 requirements (...) 57:3 58:1 77:15 77:26 90:22 92:20 102:13 107:1,4 135:14 136:8 requires (2) 12:16 82:9 reservoir (46) 12:16 15:18,21 27:6,11,12,18 27:18,22,23 29:2 31:17 32:2 32:8,26,26 33:3 33:5,14,15,16 48:21 60:8,15 60:16,23 61:8 76:23 78:3 123:24 124:12 124:13,20,21,23 125:5,9,9,19,19 129:9,16 146:6 146:10,22,24 residents (2) 111:23 117:19 Resolution (1) 74:24 resolve (2) 100:22 121:19 resolved (12) 40:11 65:11 67:10 68:18 69:13 74:22 75:2 82:17 138:7 140:4 141:13 142:6 resolving (2) 76:16 146:2	Resource (3) 6:17 74:4 143:9 resources (13) 6:15 21:20 65:17,18 73:23 75:10,21 138:13 138:14 143:2 144:18,18 145:4 respect (14) 18:6 22:3 74:16,19 90:17 102:14,17 103:21 107:3,7 112:21 116:3 143:22,25 respected (1) 116:9 respectful (1) 115:25 respond (2) 43:9 120:26 responded (3) 17:11 30:18 45:13 responding (3) 14:10 74:11 143:16 response (23) 14:13 15:10 17:4 45:7 46:7 46:26 53:9 62:8 67:6 69:9,11 78:6 80:18 81:23 91:6 98:10 103:18,21 120:19 139:26 141:7 142:2,4 responses (3) 14:14 17:12 68:12 responsibilities ... 74:16 117:12 143:22 144:16 responsibility (3) 56:8 90:11 134:21 responsible (5) 7:26 48:10,20
---	---	---	--	--

65:26 138:22 rest (2) 100:18 132:20 resting (1) 123:11 restructure (1) 61:13 resubmit (1) 31:13 result (10) 33:6 38:8,9 94:26 96:11,13,14 98:18 106:17 119:8 results (9) 11:20 15:3,3 95:2,8,13 98:6 99:24 100:1 retained (1) 38:3 review (29) 8:2 13:13,21 16:16 16:19,22 17:1,7 56:9 76:3,9 87:5 94:1 112:20 113:23 118:16 118:20 120:10 120:14,18,22 121:3,17 134:22 139:4 143:14,23 145:10,21 reviewed (2) 46:12 145:15 reviewing (4) 16:5 19:1 80:25 82:7 reviews (1) 120:13 revise (2) 40:19 40:23 revised (11) 14:18 14:26 15:1 34:14,16 40:1 47:2,10 89:14 106:26 107:6 revolves (1) 45:11 Richard (15) 3:4 9:5 16:1,6 19:3 21:2 42:17 55:4	55:7 56:2 62:2 70:11 89:25 114:10 134:14 right (38) 8:24 20:14 23:21 24:4 25:8 26:8 28:4 29:13 31:18 41:24 44:15 47:15 49:16 51:16,17 51:20 63:8,9 86:11 93:16 98:16 99:23 100:13 102:9 105:9 108:5 113:20 123:7 124:2,7 126:24 127:12 128:5 129:22 132:1 134:13 147:22 148:23 Rights (5) 8:11,14 18:14 75:15 144:23 rigorous (2) 57:22 136:2 rip-rap (2) 78:15 147:8 risk (2) 15:4 57:13 river (60) 12:25 19:12 27:6,9,11 31:16,23 32:1,4 32:7 33:16 42:2 42:24 56:21 57:11,19 58:4 58:12,17,25 60:20,21 61:9 61:14,21 76:21 76:22 77:6,9,13 82:11 83:19,26 84:12 119:24 123:25 124:19 124:25 125:2,4 125:8,18 135:7 135:9,10,18,21 135:22,24,25,26	136:9,12,17,21 137:7 146:5,8,9 146:21 river-discharge ... 42:21 road (14) 29:4,9 29:12 36:23,26 77:13 91:10,12 91:23 128:12 130:7,7,9,10 road-crossing (1) 90:7 rock (1) 132:8 role (1) 104:11 roles (1) 144:15 Ron (20) 20:12 31:3 38:20 41:18,26 43:13 44:26 45:25 48:24 50:12 61:15 84:15,16 84:22 91:8 95:26 107:11 108:19 123:2 150:7 Ronald (3) 2:16 25:10,13 room (2) 101:23 110:13 Ross (2) 8:23 113:20 rotates (1) 91:22 roughly (1) 27:13 round (1) 76:24 Roy (57) 2:14 5:24 20:15 23:24,24 24:1,5 24:6,11 26:25 27:1 35:11,15 35:15 36:2,4 39:19 40:13 41:25 42:8 45:15 46:16,16 47:8,8 48:18,18 49:12,12 51:15 51:15 52:14,14 53:20,20 60:3,3	62:7 70:2,2 83:8 83:14,14 87:23 96:11 106:6,6 107:19,19 108:4 108:4 109:20,20 123:8,14,15 129:15 rules (2) 65:21 138:17 run (1) 99:7 running (7) 28:10 29:8 36:25 87:25 111:24 128:13 130:19 runoff (16) 19:13 29:10,10 33:12 33:18 37:4,5,8 37:19 53:11 80:20 99:1 104:20 130:15 132:9,10 <hr/> S <hr/> S (3) 5:13,25 6:16 S-A-R-A-H (1) 72:3 S-T-E-P-H-E-N... 26:10 safe (3) 42:24 126:9,9 safer (1) 32:17 sample (12) 38:6 94:26 98:19,19 99:23 106:13,14 107:14 132:13 132:14,15,16 samples (12) 67:1 67:20 80:12 81:25 93:22 100:1 106:15 108:11,12 139:21 140:15 148:14 sampling (9) 15:15 67:5 88:9 93:18 98:16,18 105:4 106:16	139:25 Sanikiluaq (1) 87:25 SAO (7) 10:25 31:2,20,26 41:18 107:11 123:3 Sarah (7) 3:15 21:22 72:3,15 74:4 87:16 143:9 Saskatchewan (1) 61:1 satisfaction (8) 34:4,12 67:11 69:13 70:6 127:9 140:5 142:7 satisfied (7) 62:8 62:8 69:16 70:3 77:26 88:4 142:9 satisfy (10) 30:10 70:5 86:6,14,15 88:17 119:2 126:6,26 131:7 save (2) 110:10,11 saw (2) 77:11,13 saying (3) 45:13 57:18 131:12 scanned (1) 96:6 Schedules (1) 118:9 science (4) 20:15 20:18 57:12 135:12 scientific (4) 66:9 66:12 139:5,7 scientists (3) 56:25 57:13 135:20 scope (5) 12:17 19:10 117:5 119:20 145:15 screen (16) 19:19 31:18,19 43:3 48:5,13 58:19
--	--	---	---	--

58:21 63:9 82:14 83:17 125:11 136:22 136:24,26 149:15 screening (1) 13:14 screens (2) 82:17 137:1 sea (14) 28:10 29:9,14 30:6 37:1,6 88:11,13 128:13 130:20 130:21,26 131:8 131:26 Sea-Can (4) 38:15 38:16,18 85:1 search (1) 89:4 searching (2) 37:10 49:25 season (7) 47:5 49:22,26 76:22 97:13 146:9 149:14 seasons (1) 105:24 second (14) 10:11 27:25 30:21 32:24 34:10 45:11 57:9 67:12 80:10 91:15 104:24 108:8 135:16 140:6 secondary (4) 78:2 81:6 125:1 146:25 Secondly (1) 113:3 Secretariat (1) 135:13 Section (4) 8:12 8:13 56:14 103:9 sediment (4) 27:20,22 84:13 124:22	sedimentation (1) 61:10 see (25) 27:8 28:8 28:25 29:3,5,14 29:23 33:10 41:12 63:17 81:24 88:25 101:3 105:5 109:14 121:26 122:8 128:12 129:26 130:1,11 131:10 132:16 146:4 148:23 seeing (3) 60:20 63:17 91:16 seek (1) 97:3 seeking (1) 7:7 seen (7) 45:19 46:11 95:8,12 99:1 106:12 148:22 seepage (1) 81:8 segregate (1) 133:1 segregated (4) 68:23 69:1 141:17,21 segregating (1) 132:25 segregation (4) 19:17 85:3,6 132:22 send (2) 38:6,9 senior (14) 5:23 5:25 6:4,9,11 20:12,19 21:2 21:11,15 56:3 65:1 134:17 137:26 sense (1) 56:23 sensitive (2) 68:4 140:25 sent (2) 96:6 98:7 separate (1) 84:2 separately (1) 85:4 September (2)	13:23 50:2 serious (10) 56:13 56:14,17 59:2,4 59:8 90:12 135:1,3 137:9 Serpentine (2) 126:2,3 serve (2) 98:26 99:18 Services (17) 5:14 9:3 14:9 16:13 20:19 24:19 64:11 68:16 74:10,26 114:5 114:22 141:10 143:16 149:24 153:9 154:6 session (26) 1:13 4:3 10:18 18:11 18:17,23 19:25 22:21 100:5,15 101:4 110:12,18 110:25 111:2,10 113:10,12 115:4 116:10,20 121:23 143:6 150:19,21 155:3 set (5) 7:21 78:25 98:20 118:9 147:19 setting (1) 150:16 Settlement (2) 8:1 117:13 seven (1) 108:16 sewage (26) 8:8 13:1 28:3 30:4 35:16,17 36:5 36:15,19,20 78:17 82:4 111:24,25,25 120:4 126:17 127:11,11,18,19 129:19 131:16 147:9 149:7 151:4 shared (1) 82:24 sheet (1) 15:7	sheets (3) 10:13 67:1 139:21 ship (1) 38:16 shipping (1) 99:13 short (2) 23:2 117:22 short-term (2) 94:14 96:24 shorthand (2) 152:5,6 shortly (1) 10:25 shot (1) 147:3 show (6) 79:3 129:21 130:20 145:9 147:17,21 showed (1) 10:25 showing (3) 15:7 147:22 148:3 shown (6) 30:24 36:22,24 37:21 129:20 131:20 shows (7) 78:24 79:12 131:4 144:15 148:1,20 148:21 sic (11) 20:8 24:26 26:19 32:10 33:20 82:18 104:23 119:23 123:5 144:21 148:8 side (11) 10:26 29:13,14,24 36:23 130:9,10 130:14,14 131:17,22 sidebar (1) 108:10 sign (1) 10:13 significantly (1) 131:26 signs (1) 113:4 silent (1) 11:5 similar (1) 110:20 single (3) 87:26 124:26 133:7	site (57) 14:22,23 15:26 18:26 19:2 28:17,18 28:23,26 29:1,5 29:15,15,20,23 29:24 30:1 31:6 36:20 37:4,5,20 38:12,13,14 41:7 53:24,25 69:4,12 80:12 80:19,20 84:25 88:6,6 96:14 99:13 106:15 121:26 128:4,9 129:4,5,7,11,17 129:17,18 130:11 132:10 132:11,25,26 133:10 141:24 142:5 sites (7) 14:21 28:21 46:20 87:9,12,13 99:15 sitting (1) 8:23 situation (1) 46:15 six (4) 67:20 89:8 108:16 140:14 size (1) 31:19 skill (1) 152:7 skip (1) 113:9 skipped (1) 89:23 slide (18) 35:26 65:13,23 66:2 66:16 67:11 68:19 69:14 81:21 130:21 138:9,19,24 139:11 141:13 142:7 144:15 145:9 slides (4) 64:23 74:15 79:1 143:21 sloped (1) 130:14 sloping (1) 130:13
--	---	---	---	---

slowly (6) 11:10 39:16 48:15 55:23 60:1 115:19	45:17 81:24	Specialist (3) 6:16 74:5 143:10	121:4,13 124:3 150:16	15:14,17 27:5 29:23 30:2
sludge (4) 29:26 29:26 120:2 132:3	sophisticated (3) 127:5,6,6	species (2) 56:12 134:26	stand (1) 7:15	33:20 34:1,2
small (11) 10:24 29:7,16 50:14 50:16 107:25 128:8,10,25 129:19 137:6	sorry (19) 32:25 35:10 36:2 62:2 70:12 76:26 80:7 81:17 89:17,23,24 99:24 108:2 114:3,14 115:21 134:15 149:23 150:10	specific (1) 136:20	standalone (2) 109:15,22	37:22,24 38:2 47:12,13 52:16 52:17 53:22,25 53:26 61:3,17 76:25 82:4 85:16,20,21,23 86:5,7 123:24 123:26 124:1 125:20 130:23 132:12 146:12 149:6
snacks (3) 10:26 113:9,11	sort (4) 56:26 101:2 102:14 106:22	specifically (2) 66:13 139:8	standing (1) 130:24	stations (2) 85:22 119:26
snow (2) 33:17 88:7	sorts (2) 130:1 132:23	spell (7) 23:22,25 25:8 26:9 55:2 63:19 71:25	start (24) 23:8 30:25 39:12,14 41:10 42:10,12 49:2 59:25 60:11,13 64:16 69:26 73:11 80:17 81:10 83:6,15 86:26 92:25 101:25 111:14 112:6,9	step (8) 30:15,16 32:22 54:24 104:7,26 115:13 115:15
snow-melt (1) 88:9	Sound (1) 6:26	spelled (2) 66:1 138:23	starting (3) 7:13 22:21 111:3	Stephanie (6) 9:1 92:4,6 110:14 110:16 114:2
so-called (2) 127:11 129:23	source (6) 27:7 123:25 124:26 124:26 125:1 146:21	split (2) 66:26 139:20	starts (1) 118:12	Stephen (8) 2:18 20:18 26:10,12 34:26 35:10 98:13 123:9
sodium (1) 86:13	sources (1) 15:6	SPOKEN (9) 9:6 9:7 10:10 21:25 70:23 115:24 116:1 134:8 142:18	state (38) 11:9 23:22,25 25:8 26:1,8 35:8,13 41:16,21 42:13 43:12 44:5,25 45:24 47:6,24 48:15 51:13 53:18,18 55:2 60:1 62:1,6 63:19 64:17 70:1,9,16 71:25 81:5 83:10 91:6 93:6 100:22 115:3,19	steps (5) 16:10 18:25 51:19 117:8 119:1
soil (2) 65:16 138:12	Sourcing (1) 77:6	spring (4) 91:18 97:12 105:3 108:12	stated (10) 31:3 67:16 68:26 80:2,10 81:7 93:12 94:1 140:10 141:20	Steve (2) 114:3,4
solid (30) 8:9 13:3 13:4,26 14:6,18 15:19 26:24 28:15,15,18 31:1 66:15 68:22 97:10,14 102:15 103:25 105:22 107:7 123:21 127:26 129:1,6,10 131:5 132:6 139:10 141:16 149:21	south (1) 85:1	staff (41) 3:1,25 5:11 8:24 9:13 12:1 17:17 47:23,24,26 49:7 51:2 54:9 62:25 70:24,26 73:21 92:3,7,13 92:16 100:26 101:24 102:3 103:26 109:7,14 109:26 110:7 111:7 112:11 113:17,22 115:5 116:6,14,17,17 121:25 122:9 142:25	statement (1) 22:6	stockpile (1) 85:4
solution (3) 43:15 45:26 46:2	speak (43) 11:9,9 12:5 22:5,7,10 22:11,13,15,24 25:19,26 35:12 39:16 41:17 42:14 43:12 44:5,25 45:24 47:7,25 48:15 51:14 55:23 60:1 70:1,10,16 72:9,11 93:7 100:8 110:14 115:14,18,19,21 116:4,6,26 117:2 122:17	stage (9) 7:21 33:25 34:10 56:21 119:7	statements (1) 11:22	stopped (1) 81:3
somebody (2) 61:2 84:6	speaker (2) 10:10 115:22		states (2) 68:22 141:16	stopping (1) 80:7
soon (10) 32:6 36:18 41:12 52:19 81:10 96:7 97:19 124:2 127:19 133:11	speakers (1) 25:25		static (2) 39:7,9	storage (15) 12:22 19:17 27:6 28:18 32:8 38:11 45:12 123:24 124:12 124:13 125:5,5 125:8,9 129:4
sooner (3) 45:16	speaking (5) 10:7 26:2 112:26 115:3,17		station (37) 13:23	straight (1) 33:5 strictly (1) 86:2 strongly (3) 69:6 82:13 141:26 structural (1) 33:7

structure (3) 91:11 124:16 125:17	149:3	136:19 144:9	47:14 58:5	65:7 66:18
structures (3) 36:23 84:1,3	substance (1) 12:2	146:7	80:21 123:19,19	67:12 68:6,17
stuck (2) 108:15	substances (2) 103:11,12	support (14) 9:17	123:20 126:25	68:21,24 74:20
108:16	substantial (2) 99:3,4	20:17 56:12	127:3 128:19,20	75:24 76:9,14
student (2) 60:26	successful (1) 28:1	57:3 58:10,26	133:23,25	77:7 79:17
60:26	successfully (2) 34:4,21	82:19 114:21,22	136:10	82:24 87:6 94:1
studies (1) 84:8	suggested (3) 37:2	134:26 135:14	T	100:26 112:20
study (18) 41:20	37:12 101:1	136:15 137:8	T (2) 5:12 6:24	113:23 114:4,15
41:20,26 42:3	suggesting (3) 11:18 87:17	149:18	table (12) 2:1	115:5 116:14,17
58:11 60:25	89:3	supports (2) 82:26 149:22	10:13 19:3	118:20,23
61:1,5,17 77:20	suggests (1) 39:21	suppose (1) 90:13	42:13,13 54:4	120:18,22 121:4
77:25 84:11,11	summaries (1) 112:20	supposed (1) 118:18	54:24 71:21	121:7,21 123:8
84:16 89:13	summary (18) 13:18 15:21	sure (20) 10:8,15	112:24 113:4,13	134:22 138:4
136:16 146:16	24:12,21 55:17	11:11 34:3 37:3	113:15	139:12 140:7
146:20	55:19 69:15	43:16 49:5	take (21) 39:5,8	141:1,11,15,18
stuff (1) 39:13	72:21 73:3,12	60:14 80:19	59:10,14 63:12	143:26 145:7,21
subject (2) 57:19	73:17 112:13	89:25 104:19	63:14 92:10	145:26
135:25	142:8 153:11,19	109:1,2,4 111:3	94:21 95:18	technically (1) 131:8
submission (12) 18:8 30:13	153:22 154:15	113:6 115:15	97:18 100:4	Technician (4) 6:17,26 74:4
45:13 76:4 77:2	154:18	116:9 125:16	104:7 107:13	143:9
78:1 80:11	summer (4) 31:23	128:16	108:1 110:24	technology (2) 78:14 147:6
81:12 94:1 95:5	38:21 97:12	surface (14) 8:10	111:1 118:21	teleconference (4) 17:15,21 51:16
95:17 118:20	108:21	8:14 18:14	122:23 128:16	115:9
submissions (15) 15:23 18:24	summertime (4) 27:10 88:8,8	32:24,25 33:12	130:9 136:12	telephone (1) 31:12
65:9 67:7 68:13	125:3	33:17 36:21	taken (8) 5:1	tentative (1) 18:10
69:10 72:19	super (2) 39:6	75:15 130:15	32:21 42:24	Teresa (31) 9:6
75:26 77:7	131:13	131:25 132:9,10	77:23 81:25	11:15 23:16,17
121:6,10 138:5	supplemented (1) 14:4	144:23	135:18,22 152:5	24:9,23 25:23
140:1 142:3	supply (25) 8:9	survey (1) 89:6	talk (4) 46:9 56:6	26:15 54:18,20
145:12	14:23 15:18	suspended (1) 131:5	123:4 149:20	54:26 63:12,14
submit (3) 30:20	26:23 27:3,3,5,8	sustainability (3) 15:5 58:14	talking (11) 30:21	63:15,24 64:1
106:17 118:22	34:10 38:23	136:18	31:1 32:20	64:15 71:10,12
submitted (15) 7:7 13:8 15:9	40:26 58:15	swear (6) 23:16	33:19 37:19,26	71:18,23 72:17
22:23 30:18	61:13 75:4	23:19 24:6	83:20 89:1 92:7	73:7,13 94:3
34:13,14,16	76:20 83:15	25:20 54:16	97:4 129:23	95:14 96:2
40:21 47:2 52:9	123:19,19,20,23	71:11	target (1) 102:20	100:8,10 110:13
78:4 89:15	133:14,19	switch (1) 64:23	tea (1) 23:4	114:12
96:11,13		sworn (10) 2:14	team (1) 37:26	term (9) 12:19
subsequent (5) 76:7 80:26		2:16,18 24:5	technical (66) 5:14,20 8:26 9:3	17:23,24,25
105:7 145:19		25:6,13 26:5,12	9:9 15:11 17:1,6	82:19,21 149:17
		63:12 72:8	17:15,19 18:3	149:17,18
		system (18) 26:23	19:8 20:14,17	
		27:5,8 32:14,23	30:12 31:2	
			37:26 39:13,13	
			40:11 42:1 56:9	

terms (5) 11:19 19:10 58:25 99:24 137:7	60:2 61:22,23 62:9,10,16,21 62:22 63:3,5,5,6 63:15,24 64:13 64:15,18,24 69:19,22,24 70:6,7,14,17,20 70:21,23,25 71:1,2,4,4,6,7 71:12,18,23 72:7,12,17 73:5 73:7,13,16 74:7 83:3,4,8 84:20 86:22,23 87:20 89:15,16,21,22 90:4 91:4,5,13 91:25,25 92:5 93:1,13,23,24 94:2 95:14,19 95:24 96:2 98:13 100:1,3,4 100:10 101:4,6 101:22,22 102:24 103:1,26 106:6 107:16,22 108:5,6,25 109:6,23 110:1 110:6,7,9,9,15 110:25,26 111:6 116:23 122:11 122:11,12 123:2 123:13,15 129:20 134:1,2 137:12,14,16,20 137:23 142:12 142:15,16,23 143:13 150:3,4 150:10,15,15,19 150:22 151:2	105:17 106:20 107:17 108:26 109:5,8,25 thaw (1) 97:13 themes (2) 75:4 144:9 thin (1) 128:14 thing (10) 32:20 43:4 90:21 97:25 99:19,23 102:14 104:18 104:22 105:10 things (9) 83:18 86:4 90:17 98:8 102:21 105:16 105:18 106:4 128:6 think (45) 31:2 35:26 36:1 38:24 39:12,13 40:11 42:6 43:5 46:8 51:6,8,26 52:5 53:8,20,25 59:14 61:2 62:7 70:23 80:17 83:15 85:24 88:19 89:2 98:25 100:4 101:6 103:17 104:22 105:10 105:14 106:21 108:22,25 110:4 110:10 111:6 124:12 125:22 128:7,9 133:14 133:17 thinking (1) 107:2 third (4) 25:18 68:20 89:10 141:14 Thirdly (1) 10:17 thoroughly (1) 149:26 thought (2) 51:9 108:9 three (18) 26:22 27:2,4 40:26	41:13 44:11 52:16 75:3,26 80:5 91:17 108:11 123:18 123:21 125:13 144:9 145:11 147:20 threw (1) 35:21 throw (1) 128:3 throwing (1) 30:6 tie (1) 39:21 time (51) 22:8,12 22:12 23:4,11 27:21,23 31:9 33:1,2,26 34:19 35:18 36:17 39:3 44:1 45:10 46:8 47:19 49:25 51:21 57:15 60:15,21 61:5 77:8 80:4 88:9 92:11 93:11 97:23 100:6,14 101:14 101:17 102:25 103:4,18 106:10 106:11 110:5 116:3 122:17 123:26 124:10 124:19 125:24 126:6,12 133:24 135:21 timeline (5) 18:10 49:10 80:5 120:5,5 timelines (1) 18:7 times (5) 68:1,7 136:8 140:22 141:2 timing (1) 105:11 titled (1) 57:2 TM (1) 17:16 today (32) 7:12 8:22 10:1 12:8 12:10 20:24 21:22 22:3 24:26 26:19	34:5,22 36:8 56:2,6 64:26 65:4,5 74:3 87:24 98:11 107:4 110:20 113:19,26 123:4 123:7 134:19 137:25 138:3 143:8 149:14 told (3) 52:26 61:2 131:15 tomorrow (9) 34:6 97:26 110:11 111:1 150:25,25,26,26 151:2 tongue (1) 115:21 tonight (15) 22:20 22:21 100:6 101:4 110:11 111:2,5,19,21 111:21 112:23 113:17 123:10 150:16,20 tonight's (5) 110:25 113:10 115:4 123:12 150:16 Toomasie (2) 5:7 111:18 top (8) 27:20 31:22 48:23 85:9 91:16 124:22 147:21 148:4 topic (1) 22:12 topo (11) 28:24 39:2,2,22,22,24 39:25 46:24 89:2,6,13 topographic (1) 46:2 topographical (2) 46:10,14 topography (2) 46:13 129:8 total (2) 86:3
--	---	---	---	---

131:5	26:24 27:25,26	34:2 82:4	13:18 20:9	up-gradation (2)
totally (3) 32:13	27:26 28:2,6,12	119:26 123:24	26:20 55:15	34:11,11
124:14 132:6	28:13 29:1,20	123:26 124:1	56:7 57:6 64:8,9	upcoming (1)
touch (1) 65:6	30:3 32:12	125:20 149:6	83:25 97:4	149:14
tough (1) 88:23	33:10,22 34:3,8	Trucks (2) 77:1	111:16 112:15	update (6) 18:15
town (2) 28:25	34:17,21 35:18	146:13	117:1,5,25	102:22 144:6
29:4	35:22 36:6,10	try (5) 31:4,9	118:2,2,5,8,11	148:11 149:1,3
toxic (3) 67:18	36:12 41:1,3,4	81:11 90:18	118:14,15 123:5	updated (6) 15:17
99:9 140:13	53:17 67:17	98:26	134:22 153:16	35:6 105:7
toxicity (10)	75:4 76:24 78:9	trying (9) 49:22	154:3,4	109:11 140:3
30:22,25 66:15	78:12,22 79:16	49:26 50:3,6,19	types (7) 38:12	150:2
67:13,15,26	84:20 86:16,16	53:2 63:9 83:9	49:13 67:25	updating (2)
139:10 140:7,9	86:18 99:8	91:3	85:17 125:13	107:12 148:13
140:21	119:26 123:20	TSS (2) 30:10	127:23 140:20	upgrade (2) 19:16
track (1) 128:13	124:4,8,9	127:1	typist (1) 9:21	148:24
tradition (1)	125:10,23	turbidity (2)		upgraded (1)
116:2	126:15,16,16,19	124:5,6	<hr/> U <hr/>	126:23
traditional (1)	126:20 127:15	turbot (3) 127:24	undergoing (2)	upgrades (2)
90:19	127:16,26	128:5,6	76:26 146:13	19:21 104:19
train (1) 133:25	128:11,19,24	turn (10) 11:4	understand (5)	upper (1) 33:3
Tran (4) 114:26	129:10,16,22	19:26 22:25	58:13 136:6,17	upstream (1) 91:3
115:2 152:3,14	130:22,25	54:13 92:24	136:18 148:15	use (39) 7:8,26
transcribed (1)	131:12 132:2	102:21 112:11	understandable...	8:7 11:10 12:20
152:6	133:15,18,19,20	113:1 116:14	150:24	12:23 13:15
transcript (3)	140:11 144:10	123:13	understanding ...	28:4 32:3,7,12
4:18 152:1,4	146:11 147:2,5	turned (1) 10:8	44:15,15 54:22	32:16 35:19,20
transcripts (1)	147:15	two (42) 9:10	55:8 82:19	35:20 46:18,23
87:7	treatment/disp...	29:18 33:3 34:6	98:17	48:20 50:5 57:5
transition (2)	119:22	34:20 37:22	understands (1)	59:1 66:20
31:7 85:11	treats (1) 13:1	38:1 41:2 42:19	80:14	78:19 82:3,12
translate (1) 9:13	Tribunal (5) 8:11	43:19 44:10	understood (2)	82:13 115:26
translating (1)	8:14 18:14	49:13 60:10	116:10 148:9	117:12,23 118:1
9:16	75:16 144:23	61:14 72:19,22	undertake (1)	118:3,5 119:21
Translator (3)	trip (6) 66:20,23	76:4 77:13 79:5	146:19	119:23 127:13
6:20,21,22	66:26 139:15,17	79:6 82:7 83:17	undertaken (2)	127:18 128:1
transportation ...	139:20	83:22 84:25	15:22 77:21	139:14 147:11
84:13	trout (8) 67:21	86:4 91:16,24	undertaking (3)	uses (4) 66:26
treat (8) 22:3	68:2,5,14	93:22 97:24	7:9 12:22 77:24	78:13 139:20
36:15 78:14	140:15,23,26	100:1 107:25	undertakings (1)	147:5
88:18 127:16	141:8	108:13 114:17	117:24	utilization (1)
133:10,12 147:6	truck (9) 78:11	125:7,22 127:23	underway (1)	117:16
treated (5) 30:5	125:15,20,25,25	128:10 131:4	46:4	UV (3) 128:19,20
36:10 78:12	126:5,5 130:23	133:18 145:16	unfortunately (3)	128:21
124:6 147:4	147:4	147:21 148:4	50:21 102:5	
treatment (80)	truck-fill (14)	type (36) 1:7 7:6	103:3	<hr/> V <hr/>
8:8 13:1 14:2,20	13:23 15:13,16	8:4,6,17 12:11	university (1)	validity (2) 67:4
14:25 15:1	27:5 33:20 34:1	12:13,16 13:7	60:26	139:24

valuable (1) 121:20	10:21,23,24	78:22 84:20	56:1,7,24 57:1,6	122:9 123:5,19
verify (1) 54:16	washrooms (1) 113:7	85:16,20 86:4	57:10,14,15,20	123:19,20,22,23
version (3) 13:23	waste (101) 7:8	99:7 119:22,26	57:25 58:1,6,8	123:23,24,25,26
15:2,21	8:7,9 12:21 13:1	123:20 126:15	58:15 60:17,18	124:1,6,12,13
versions (2) 81:19	13:3,4,4,5,26	126:15,19	60:22 61:9,12	124:18,24,26
81:22	14:1,6,7,18,19	127:17,17	62:25 63:1,16	125:2,4,15,19
vested (1) 35:4	15:19 19:16,17	128:11,12,23	63:25 64:2,8,10	125:19,20,20,25
view (1) 58:2	26:24 28:4,15	129:16,22	65:4,10,16,18	126:9,14,25
viewing (1) 16:2	28:15,16,17,18	130:22 132:2	66:9,10,13 67:5	128:16,18,20,21
visible (1) 28:25	28:19,19,22,22	133:15,19	67:14 68:8,11	129:16 130:4,5
volume (3) 1:14	29:20,25,26	140:11 144:10	69:18,20 70:24	130:9,24,25
32:4 124:17	29:20,25,26	147:2,3,4,7,10	70:26 71:13,19	131:1,1,2,7,11
volumes (3) 77:4	31:1,6 36:14	147:11,15	71:24 72:18	131:11,17,18,23
149:11,13	38:11,12,19,22	water (401) 1:1,7	73:1,14,21,23	133:14,19,19
	41:1,5,6,7,11	2:10 3:1,25 4:4	74:3,4,5,8,21	134:11,22
	45:12 46:20	4:6 5:6,11 6:11	75:4,22,23 76:1	135:10,17,18,21
W	50:9 51:18,19	6:14,16,17 7:3,6	76:2,20,22,23	136:5,8,12,13
W (1) 6:21	53:24,25 66:15	7:8,11,19,22 8:1	76:24 77:1,3,6	136:19,23 138:6
wait (5) 11:8	68:22,23 69:2,8	8:5,6,7,9 9:12	78:3,18,23 79:7	138:12,14 139:4
37:17 46:15	69:11 75:4 79:2	12:11,13,15,16	79:8,10,19,22	139:6,8,25
52:26 115:18	80:21 82:22	12:19,20,23,24	79:26 80:11	140:8 141:3
waiting (1)	84:21,24,26	13:7,9,19 14:2	81:13 82:3,9,10	142:11,13,25
125:24	85:3,6,10 97:10	14:10,23 15:5,8	82:14 83:15,22	143:1,7,9,10,13
waits (1) 116:6	97:14 102:15	15:15,18,18,21	83:22,26,26	144:1,9,18
walk (2) 77:12	103:25 105:22	19:11,11 20:9	84:1,12,13,18	145:5,6,12,13
116:15	107:7 117:24	21:15,19 22:2	88:9,15,19	146:6,7,9,11,11
wall (3) 10:22,23	119:22 120:2,2	23:18 24:10	90:10,25 91:21	146:14,22,23
10:26	123:21 129:1,3	25:24 26:20,23	92:3,13,16,19	147:16,23,26
want (18) 22:2,5	129:4,5,6,10	27:2,3,3,4,5,5,6	94:5,6,15 95:6	148:5,6,16,23
22:7,13,17 34:1	132:18 133:6,13	27:8,9,11 28:9	95:15 96:3,17	148:25 149:11
39:15 44:14	133:13,15,20	29:2,8,13 30:9	96:25 97:8,22	149:13 151:4
59:25 60:14	139:10 141:16	30:11 31:16,17	98:4 100:11,25	153:16 154:3,5
86:11 87:1 88:2	141:17,22 142:1	31:23 32:1,4,7	101:10 102:1,3	154:12 155:2
92:6 101:24	142:4 144:10	32:12,24,25,25	103:15 104:4	water-taking (3)
105:16 108:17	147:20 149:21	32:26 33:5,9,14	105:18 106:6,21	43:1,17 135:26
116:5	150:8 151:4	33:14,15,15,16	107:8 109:9,26	waters (17) 8:10
wanted (8) 41:21	wastewater (63)	33:16,20,22	110:16 111:11	8:13 18:13
51:5,25 52:2	12:26 14:20,24	34:3,8,10 36:21	111:15,16,19,24	65:21 75:15,18
101:11 108:26	14:25 15:1,2	36:24 37:7,8	112:4,12,13,15	103:8,11,13
109:4,10	19:13 26:23	38:3,4,9,23,25	115:5 116:19,22	104:12,15
wanting (1) 52:10	27:25,26 28:12	40:5,17,22,26	116:25 117:1,3	117:16,19,21
wants (2) 80:18	28:13 29:1,20	41:4 42:23	117:5,9,13,15	138:17 144:23
122:17	30:3,5,8,22	47:26 48:8,19	117:24 118:1,2	144:26
warnings (2)	34:17 35:18,22	49:10 51:4,11	118:2,3,4,5,5,6	wave (1) 114:1
65:19 138:15	36:10 41:1,3	51:24 52:3,5,8	118:8,11,16,19	way (21) 9:20
washed (1) 91:23	67:17 75:4 78:9	52:21 53:7,26	119:21,24 120:9	35:22 42:24
washroom (3)	78:10,12,14,18	54:21 55:1,15	121:24,26 122:4	56:19 57:18

58:6 60:10,19 60:23 77:12 88:12 98:7 103:7 111:22 127:16 130:13 130:25 131:8,21 131:22 132:26 we'll (30) 27:23 30:25 37:9 39:14,24 43:16 43:17,19 54:4 92:10,25 95:17 98:6 100:14 101:25 102:9 103:20 106:16 108:24 110:10 110:10,12 111:2 111:13,14,22 112:6 122:24 134:3,6 we're (34) 7:12,13 7:13 22:4 27:15 40:18 43:15 46:1,2 47:3 50:13,16,19,21 57:5 58:17 61:22 72:12 79:2,3 88:17 91:3,10 97:9 99:9 104:10,16 107:14 108:15 131:12 132:3 134:19 148:3 149:12 we've (18) 41:19 43:14 44:13 45:19 46:3,11 46:12 51:6 87:5 93:11 101:3 102:11 104:17 105:10 135:19 148:22 149:14 149:20 weather (2) 65:19 138:15 wee (1) 91:21 week (2) 118:7	122:2 weekly (1) 15:7 weeks (1) 108:13 welcome (12) 7:4 7:5,5,19 9:12 11:2 20:7 69:22 111:12 123:12 134:12 142:15 well-kept (1) 38:15 went (1) 77:12 weren't (2) 108:10 109:1 wetland (8) 29:19 36:26 37:6 88:12 120:1 130:18,19,20 whatsoever (1) 45:3 William (3) 9:11 9:13 114:19 willing (3) 30:19 40:19 94:13 Wilson (3) 6:11 21:14 65:4 winter (2) 132:5,5 wise (1) 50:21 wish (6) 22:18 23:19 26:4 72:8 113:10 115:12 withdraw (3) 58:1 58:8 136:8 withdrawal (11) 12:25 19:11 48:7,8,13 57:9 57:14,20 58:6 135:11,17 withdrawals (2) 56:24 57:2 withdrawn (4) 57:10,16,25 136:5 witness (2) 55:2 63:19 witnesses (6) 23:16,19,22 71:22,25 72:7	women's (1) 10:23 wondering (7) 45:17 46:14 47:3 48:8 53:13 97:17 107:26 word (1) 41:25 work (14) 40:4 49:18 50:4 69:5 78:2,5,6 81:10 81:11 90:9,15 96:6 141:25 147:24 working (16) 31:21 32:5,18 34:24 40:7 41:10 48:26 60:24 78:23 80:23 107:20 111:4 127:7,9 131:15 147:16 works (1) 80:8 wrap (1) 106:22 writer (1) 9:21 writing (1) 9:21 written (9) 29:5 65:9 76:6,11 118:22 119:5 138:5 145:18,23 WWTP (1) 13:24 X Y yeah (12) 25:20 36:2,4 41:25 46:8 63:21 64:20 107:12 108:26 109:4,20 109:21 year (20) 27:14 34:2 38:9 41:10 45:2 47:10 60:21 76:24 84:18 85:7,8 108:21 119:24 120:7 124:16,19	124:23 127:4 128:9,10 year-round (1) 146:10 yearly (1) 146:22 years (19) 17:25 33:4,12 41:12 41:20,21 42:4 50:22 60:7,21 60:24 77:25 83:24 87:24 124:21 127:13 133:22,24 146:20 years' (2) 61:16 84:17 yesterday (4) 77:11,12,12 89:5 young-of-the-ye... 90:26 Z zinc (1) 93:21 zonal (1) 15:6 zoning (5) 46:12 46:13,16,18,19 0 1 1 (8) 1:14 10:6 24:17 79:5 108:13 112:25 125:14 153:7 1.5 (1) 33:19 1:00 (2) 59:17,18 1:09 (1) 59:22 10 (13) 14:4 16:11 57:11,14,20 58:7 77:10 116:18 126:4 135:20,26 136:11 155:1 10-year (1) 17:24 100 (1) 124:23 10th (1) 120:7	11 (1) 16:15 11:00 (1) 50:14 11:30 (2) 59:14,21 111 (1) 4:4 116 (2) 4:6 155:1 12 (1) 126:3 120 (2) 119:23 131:6 120,000 (8) 12:23 27:12,14,23 60:9,11 124:14 124:24 120,000-cubic-... 76:23 146:10 123 (1) 4:8 13 (3) 7:25 8:12 117:11 13.3.6 (1) 8:12 134 (1) 4:10 137 (1) 4:12 14 (2) 15:6 87:24 140 (2) 78:16 147:8 142 (1) 4:15 15 (8) 17:25 23:4 83:24 87:25 106:12 108:13 133:22,24 15-foot (1) 91:19 15-licence (1) 82:18 15-year (4) 12:19 149:17,18,19 152 (1) 4:18 153 (1) 4:20 16 (3) 13:13 16:11 16:15 16th (1) 120:6 17 (2) 13:15 16:18 18 (1) 8:21 180 (1) 131:6 180/120 (2) 86:3 131:9 19 (2) 2:12 17:6 1980 (1) 60:26 1995 (2) 58:20 136:25
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<p>2</p> <p>2 (6) 10:6 55:13 79:5 112:25 118:9 153:14</p> <p>2.1 (1) 34:26</p> <p>2.2 (4) 35:11,15 36:1,5</p> <p>20 (5) 13:17 17:3 17:12 18:1 125:14</p> <p>20-minute (2) 125:24 126:5</p> <p>2000 (1) 147:25</p> <p>2003 (1) 126:22</p> <p>2008 (1) 61:11</p> <p>2012 (1) 15:4</p> <p>2013 (2) 57:4 135:11</p> <p>2014 (5) 14:1 149:21 150:9,11 150:13</p> <p>2015 (3) 15:3 78:13 147:5</p> <p>2016 (8) 13:16,23 13:24,25 76:25 78:24 146:12 147:17</p> <p>2017 (52) 12:14 13:10,13,15,17 13:26 14:4,7,12 14:19 15:1,2,3,4 15:6,12,20,22 16:11,15,18,21 16:22,25 17:3,6 17:10,12,14,19 17:22 18:1,5 45:1 68:25 76:3 76:6,12,13 78:24 79:23,24 79:26 96:12,12 120:14 141:19 145:18,24,25 147:17,26</p> <p>2018 (22) 1:26 2:5 5:4 18:1,12,15 18:18,22 35:6</p>	<p>40:20,20 42:20 47:4 80:1 81:22 105:24 106:18 149:3,5 151:7 152:9 153:2</p> <p>2019 (7) 35:7 40:21 77:5 81:11,23 105:25 106:18</p> <p>2020 (12) 37:9,17 39:26 45:14 46:25 52:22,26 53:1 80:3 89:2,7 89:9</p> <p>2021 (2) 50:18 51:8</p> <p>2022 (1) 82:22</p> <p>2023 (1) 82:23</p> <p>2024 (6) 51:9 69:5 141:25 150:9,11 150:12</p> <p>21 (5) 1:26 2:5 5:4 14:12 153:2</p> <p>21st (1) 79:23</p> <p>22 (6) 13:16 17:3 18:1,5 85:24 151:7</p> <p>23/'24 (1) 51:21</p> <p>23rd (4) 78:5 80:1 80:11 81:12</p> <p>24 (4) 2:14 85:19 85:24 153:7</p> <p>25 (1) 2:16</p> <p>25/20 (1) 131:10</p> <p>25/25 (1) 127:1</p> <p>26 (2) 2:18,20</p> <p>28 (2) 17:6 76:12</p> <p>28th (2) 94:1 145:23</p> <p>29 (1) 8:13</p> <p>299 (2) 12:25 118:3</p> <p>2nd (3) 79:25 147:25 152:9</p> <p>3</p> <p>3 (13) 10:7 12:11</p>	<p>13:8 20:8 30:7 55:17 79:12 81:5 100:7 112:26 116:12 118:9 153:19</p> <p>3.2 (1) 36:21</p> <p>3.3 (2) 37:19 53:9</p> <p>3.4 (1) 38:11</p> <p>3:00 (1) 102:2</p> <p>30 (12) 17:14 23:14 30:1 57:16,21 58:8 60:18 118:21 122:6 135:23 136:1,14</p> <p>300 (1) 118:6</p> <p>31 (2) 13:24,25</p> <p>31st (2) 40:21 106:19</p> <p>32 (2) 57:8 135:16</p> <p>35 (2) 56:14 127:4</p> <p>36(3) (1) 103:9</p> <p>3AM-PAN (1) 123:4</p> <p>3AM-PAN---- (3) 1:7 8:17 111:17</p> <p>3AM-PAN----(... 73:2 154:13</p> <p>3AM-PAN-3BP... 26:19</p> <p>3AM-PAN/3B4... 24:26</p> <p>3BM-PAN0810... 67:14 140:8</p> <p>3BM-PAN1417... 12:14</p> <p>3BM-PAN417 (1) 123:4</p> <p>4</p> <p>4 (9) 13:10 17:10 19:26 30:2 55:19 85:19 101:14,17 153:22</p> <p>4.5 (2) 39:20 46:9</p> <p>4:00 (3) 101:2,7</p>	<p>101:20</p> <p>4:22 (1) 111:8</p> <p>40,000 (1) 127:4</p> <p>42 (1) 2:22</p> <p>44 (1) 2:25</p> <p>45 (2) 122:6 125:5</p> <p>47 (1) 3:1</p> <p>5</p> <p>5 (8) 2:7 15:12 17:19 18:15 30:2 64:6 125:14 154:1</p> <p>50 (4) 27:15 118:1 118:3 124:18</p> <p>55 (6) 3:4,6 60:6 153:14,19,22</p> <p>55,000 (2) 27:13 124:17</p> <p>5th (1) 17:17</p> <p>6</p> <p>6 (8) 15:12 16:20 16:22 17:19 29:24 72:24 120:14 154:9</p> <p>60-day (1) 118:26</p> <p>60,000 (2) 60:7,13</p> <p>63 (1) 3:8</p> <p>64 (2) 3:10 154:1</p> <p>65,000 (1) 60:13</p> <p>6th (1) 17:17</p> <p>7</p> <p>7 (9) 2:10 17:22 18:18,22 22:21 73:3 76:3 111:3 154:15</p> <p>7:00 (3) 100:6 110:12,18</p> <p>7:13 (1) 111:9</p> <p>72 (4) 3:13,15,17 154:9</p> <p>73 (3) 3:19 154:15 154:18</p> <p>7th (2) 76:6 145:18</p>	<p>8</p> <p>8 (5) 18:12 23:8 73:17 126:4 154:18</p> <p>83 (1) 3:22</p> <p>9</p> <p>9 (5) 16:25 18:18 18:22 95:21 154:21</p> <p>9:00 (3) 111:2 150:26 151:7</p> <p>9:04 (1) 7:2</p> <p>92 (1) 3:25</p> <p>95 (1) 154:21</p> <p>96 (1) 4:1</p> <p>9th (1) 42:20</p>
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