

THE ALBERTA ENERGY REGULATOR

IN THE MATTER OF Application Nos. 1709793,
001-00247548, and 00303079
to the Alberta Energy Regulator

AER PROCEEDING

FINAL ARGUMENT

Calgary, Alberta

December 11, 2018

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1 Proceedings taken at Govier Hall, Calgary, Alberta

2

3 December 11, 2018 Morning Session

4

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7 W. Klassen Hearing Commissioner

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25 Wilderness Society Northern

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5
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7 Nation and Clearwater First
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10 M. Gustafson Mikisew Cree First Nation
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13 R. Drummond Government of Canada
14 J. Elford Government of Canada
15
16 J. Asterick Keepers of the Athabasca
17
18 C. Longacre, RPR, CSR(A) Official Court Reporter
19 A. Porco, CSR(A) Official Court Reporter

20

21 (PROCEEDINGS COMMENCED AT 9:02 AM)

22 Opening Remarks by the Chair

23 THE CHAIR: Good morning. Please be
24 seated.

25 Good morning, everyone, and welcome back. My
26 name's Alex Bolton, and I'll be chairing today's

1 proceeding. On my right is Rob McManus, and on my
2 left, William Klassen.

3 So this is a continuation of the public hearing
4 into the proposed Teck Frontier Oil Sands hearing that
5 commenced in Fort McMurray on September the 25th, 2018,
6 and was adjourned on October 24th, 2018, pending
7 receipt of hearing reports from Alberta's Aboriginal
8 Consultation office. Those reports were received from
9 the Aboriginal Consultation Office on Monday, November
10 26th and circulated to the hearing participants. The
11 purpose of today's session is to hear final oral
12 argument from the proponent and other hearing
13 participants who chose to provide oral closing
14 argument.

15 Counsel assisting the Panel during these
16 proceedings are Meighan LaCasse and Alison Doebele of
17 the AER law branch and Charles Birchall representing
18 the Canadian Environmental Assessment Agency, or
19 "CEAA". Also assisting the Panel is Tara Wheaton of
20 the AER hearing services branch and David Haddon, the
21 panel manager from CEAA.

22 I'd also like to note the presence of Neil Gray.

23 Neil, if you could just stand briefly.

24 Mr. Gray is our security liaison, and he'll take
25 the lead in the event of a fire alarm or other
26 situation.

1 All of the AER staff in attendance will wear name
2 tags, and if anyone has any questions, please feel free
3 to approach Ms. LaCasse, Ms. Doebele, or Ms. Wheaton
4 for assistance. Please do not attempt to communicate
5 with the hearing panel other than in the context of the
6 formal hearing proceeding. Again, it's important that
7 any communication between the participants and the
8 Hearing Panel take place in an open and transparent
9 manner, and we appreciate everybody's understanding and
10 observance of this request.

11 I would also like to advise that a live audio
12 stream of this proceeding is available to the public
13 through the AER's website. The audio recording is not
14 the official transcript of the proceeding. If anyone
15 has concerns about this, please see AER counsel at one
16 of the breaks to explain your concerns.

17 To make the audio webcast work well, everyone must
18 use the microphones, and you have to turn the
19 microphone on to speak, and please try and remember to
20 turn it off when you're done speaking just to avoid
21 feedback.

22 Ms. Wheaton, could you please read out the safety
23 procedures and the particulars of this proceeding?

24 MS. WHEATON: In case of a building
25 emergency, announcements will be made through an
26 audible and visual alarm system. Follow the directions

1 announced and those of an AER employee. Evacuate using
2 the stairs located to the left of the main doors, and
3 muster in the lobby of Eau Claire Tower, which is
4 directly west of us at 600-3rd Avenue South West.

5 In the event of a medical emergency, call 911
6 immediately. Then alert an AER employee, who will
7 notify building security to direct EMS of the location
8 of the victim. A portable defibrillator is located
9 next to the sink in the foyer area. For any other
10 emergency, please alert an AER employee immediately.

11 Govier Hall is the only AER room on the third
12 floor. All other conference rooms are private and not
13 to be used as meeting rooms unless you are notified
14 that a room has been booked for you.

15 On November 29, 2018, a public notice was issued
16 announcing the timing and format of final arguments.
17 Also, on November 29, a schedule for final arguments
18 was sent to parties. Parties were advised they could
19 elect to provide either written argument on
20 December 5th or oral argument on December 11. Parties
21 who provided written argument are: Athabasca Chipewyan
22 First Nation, Deninu Kue First Nation, Canadian Parks
23 and Wilderness Society, Katl'odeeche First Nation, Fort
24 McKay First Nation, Smith Landing First Nation. Copies
25 of written arguments can be found on the CEAA registry,
26 and any party who elected to provide oral argument were

1 advised they must be present to register at the start
2 of today's proceeding.

3 THE CHAIR: Thank you, Ms. Wheaton.

4 So we'll now register the participants in today's
5 proceeding.

6 Who's representing Teck Resources?

7 MR. IGNASIAK: Good morning, Mr. Chair, Panel
8 Members. Martin Ignasiak with Osler Hoskin & Harcourt.
9 With me is Justin Fontaine and Danni Chu and Mr. Scott
10 McKenzie from Teck. Thank you,

11 THE CHAIR: Thank you, Mr. Ignasiak.

12 Who's representing Canadian Parks and Wilderness
13 Society Northern Alberta?

14 MR. YEWCHUK: Hello. Drew Yewchuk.

15 THE CHAIR: Thank you, Mr. Yewchuk.

16 Who's representing the Oil Sands Environmental
17 Coalition?

18 MR. ROBINSON: Good morning, Mr. Chair,
19 Panel. Barry Robinson representing Oil Sands
20 Environmental Coalition. Also with me is Kurt
21 Stillwell as cocounsel.

22 THE CHAIR: Thank you, Mr. Robinson.

23 Who's representing the Original Fort McMurray
24 First Nation and Clearwater River Band?

25 MR. MALCOLM: Good morning, Mr. Chairman,
26 respected Panel Members. My name is John Malcolm.

1 I'll be representing both bands, one as the interim
2 chief of the Original Fort McMurray First Nation, and
3 the other as the band manager for the Clearwater River
4 Band 175.

5 And I had to, unfortunately, bring you to the
6 attention that our situation of funding and ability to
7 be here -- we have a breach of contract with Canada,
8 and we did not receive no funding to be here to come
9 from Fort McMurray. And I just want it on the record,
10 and I'll be addressing it in my final argument.

11 THE CHAIR: Okay. Thank you, Mr. Malcolm.

12 Who is representing Keepers of the Athabasca?

13 MS. ASTERICK: Good morning, Mr. Chair, Panel
14 Members, and everybody. I'm here, Jule Asterick, ED,
15 for Keepers of the Athabasca. Our cochair Jean
16 L'Homme-court is also here with me, and presenting
17 tomorrow as well will Regan Boychuk, one of our expert
18 witnesses.

19 THE CHAIR: Okay. Thank you.

20 MR. ASTERICK: Thank you.

21 THE CHAIR: Who is representing the
22 Mikisew Cree First Nation?

23 MS. BROOKS: Good morning, Mr. Chair and
24 Panel Members. Karey Brooks and Mark Gustafson.

25 THE CHAIR: Thank you, Ms. Brooks.

26 Who is representing the Government of Canada?

1 MR. DRUMMOND: Good morning, Mr. Chair, Panel
2 Members. My name is Robert Drummond for the Attorney
3 General of Canada along with my colleague James Elford.
4 Thank you.

5 THE CHAIR: Thank you, Mr. Drummond.

6 Okay. I believe that's all the participants.

7 In terms of the process for final argument, the
8 proponent, Teck Resources, will present first followed
9 by the participants in the order you were just
10 registered. The proponent will then be given the
11 opportunity to reply to the participants' final
12 arguments. Time limits for argument have been
13 previously communicated to the parties, and the Panel
14 intends to adhere to those limits.

15 Following final arguments and the closing of the
16 public record, the Panel will issue a report setting
17 out the Panel's rationale, conclusions, and
18 recommendations regarding the environmental review of
19 the project and the decision on Teck's applications to
20 the AER. The report will be submitted to the Federal
21 Minister of Environment and Climate Change for a
22 decision, as well as to the Government of Alberta, and
23 be made public.

24 As for today's schedule, we propose to break for
25 lunch around 12:00, depending on where we're at in
26 final argument, reconvene approximately 1:00. We'll

1 also take breaks mid-morning and mid-afternoon, and
2 we'll look for an appropriate time for those breaks.
3 We'll try to be flexible to accommodate the different
4 presentations and not to interrupt the flow of people's
5 final argument.

6 Copies of the -- oh, sorry. Wrong page. I think
7 that is it for the procedures. If there are no
8 questions, I think there's at least one preliminary
9 matter we need to deal with, and then I'll call for any
10 other matters.

11 So the matter I was going to raise was around a
12 figure that OSEC wanted to include as part of their
13 final argument. So, Mr. Robinson, could you come and
14 speak to that issue?

15 Submissions by Mr. Robinson

16 MR. ROBINSON: Yes, I will. Barry Robinson
17 again. The figure in question that I wanted to show is
18 simply a graphical representation of some data that is
19 already on the record. There's no new evidence
20 provided in that figure. In fact, all of the data
21 represented in that figure is from Teck's own response
22 to JRP IR 3.15(e) with the exception of one data point
23 which is from Mr. Gorski's [phonetic] report, which is
24 also on the record. I would be happy either now or
25 during my oral argument to lead the Panel to the source
26 of the data that's represented in that figure.

1 The purpose of the figure is simply to assist the
2 Panel in understanding the evidence with respect to GHG
3 emissions. It is intended to have both an efficient
4 and expeditious presentation of our argument.

5 I understand Mr. Ignasiak asserts that this is new
6 evidence, and I would ask that if he maintains that
7 assertion that he would identify for you the data
8 points in that figure that are new evidence because
9 certainly, from my point of view, all the data is
10 already on the record.

11 THE CHAIR: Okay. Thank you,
12 Mr. Robinson.

13 Mr. Ignasiak.
14 Submissions by Mr. Ignasiak

15 MR. IGNASIAK: Thank you, Mr. Chair. We
16 would object to the filing of that -- of that figure
17 first. At this stage of the proceeding, it's extremely
18 rare to introduce new exhibits other than the written
19 argument containing transcript references or the ACO
20 reports. Other than that, typically no new exhibits
21 are entered at this point.

22 Second, I appreciate the comments that this
23 represents data that's already in different places on
24 the record, but I don't think that does anything to
25 justify including it. If I came here with a figure
26 showing pictures of bison in different locations on --

1 and I took Mr. Wiacek's evidence, I took Mr. -- or
2 Mr. Jalkotzy's evidence, and other people's evidence
3 and combined them into one figure, that's evidence, and
4 that's something that's supposed to be done during the
5 course of submissions or the hearing, not during
6 argument.

7 So even if the data points are on the record in
8 various places, it still constitutes new evidence. My
9 experts don't get a chance to look at it. They don't
10 get a chance to speak to it. And they don't get a
11 chance to give their characterization of the figure and
12 what it actually represents. So I think it's improper
13 to allow it now, and I think it would be unusual.
14 Those would be my submissions on that.

15 And I will have another preliminary matter after
16 this one.

17 THE CHAIR: Okay. Thank you.

18 MR. IGNASIAK: Thank you.

19 THE CHAIR: Mr. Robinson, anything further
20 to add in response to Mr. Ignasiak's comments?

21 Submissions by Mr. Robinson

22 MR. ROBINSON: I believe it's not that
23 unusual, particularly in court settings, for evidence
24 to be presented in graphical form and to help aid the
25 Court or the Tribunal in understanding. I don't think
26 there's anything unusual here.

1 Certainly if there's something in there that
2 Mr. Ignasiak would like to respond to, he has an
3 opportunity to reply at the end of the hearing. And I
4 think this, as I said, was simply to assist the Panel
5 in understanding some data.

6 Certainly if our opportunity to present that
7 figure is denied, we would request some additional time
8 because we're going to have to walk through verbally
9 what was intended in the figure.

10 THE CHAIR: Okay. Thank you,
11 Mr. Robinson.

12 Okay. Thank you. We'll reserve our ruling on
13 that for now. We'll deal with it at a break. And so
14 then let's proceed to the next preliminary matter.

15 Mr. Ignasiak.
16 Submissions by Mr. Ignasiak

17 MR. IGNASIAK: Sir, this one just came up
18 this morning during the roll call, but I think I heard
19 Ms. Asterick say that Mr. Boychuk would be presenting
20 part of the final argument tomorrow on behalf of
21 Keepers. We would object to that.

22 He was a purported expert. I don't actually think
23 he's an expert in any way, but he purported himself to
24 be an expert when he took the stand, and he gave
25 evidence in the proceeding. It would be highly unusual
26 for someone who takes the position they're an expert to

1 then be providing closing argument, in particular when
2 the role of the expert is supposed to be -- apparently
3 it's not the case here, but it's supposed to be an
4 independent expert, and now we have that same
5 independent expert advocating on behalf of Keepers in
6 the course of closing argument. I've never seen it
7 done, and I think it's highly unusual, and I think it's
8 improper. Either he is an advocate for Keepers and --
9 then he should not have been seated as an expert at any
10 point, or he's not entitled to give argument on behalf
11 of Keepers. They have two cochairs here who are able
12 to give argument on their behalf. I don't think their
13 expert witness -- it's appropriate for the expert
14 witness to take on that role.

15 THE CHAIR: Okay. Thank you,
16 Mr. Ignasiak.

17 Ms. Asterick.

18 MS. ASTERICK: Thank you, Mr. Chair.

19 The reason Keepers recruited Regan Boychuk as an
20 expert witness is because of his research that really
21 speaks to this hearing, and because he is the expert,
22 he's much better able to read out the statement. I
23 could do it too, but it would not have the same
24 intonation that's proper for a financial expert report.
25 And, yeah, we -- we object to the objection because
26 it's -- we're -- we're not experts in the financial

1 field, and it would just make a lot more sense for you
2 and for the Panel to have it coming from Regan's --
3 through Regan. He -- he's the one that developed
4 the -- the -- the argument, so he can present it much
5 better than I would be able to and more understandably,
6 more -- more cohesively than -- than I would be able
7 to. So please do reconsider that -- or consider that.

8 THE CHAIR: Okay. Thank you.

9 Mr. Ignasiak, any further comments?

10 MR. IGNASIAK: Well, sir, I'm not an expert
11 on methylmercury or human health risk, but I'm going to
12 be talking about those things during the course of
13 argument. So I don't accept that just because the
14 advocates aren't experts in the area they came to speak
15 to. That's -- that's the format we follow. He was --
16 he was tendered as an independent expert witness, and
17 it's highly inappropriate for him to now advocate on
18 behalf of Keepers in the course of argument.

19 THE CHAIR: Thank you, Mr. Ignasiak.

20 Okay. We'll reserve our judgment on that one as
21 well and deal with it after a break.

22 Any other preliminary matters?

23 Okay. Then, Mr. Ignasiak, you can proceed with
24 your closing argument.

25 Final Submissions by Mr. Ignasiak

26 MR. IGNASIAK: All right. Thank you,

1 Mr. Chair.

2 We have on USB -- I think pursuant to the
3 instructions issued by the Joint Review Panel, we have
4 on USB a copy of the argument that I'll be delivering
5 that includes transcript references and references to
6 various exhibits so that I don't have to take an
7 additional hour or two reading out those references.
8 So my understanding is that'll be filed as an exhibit,
9 and we also have three paper copies for the benefit of
10 the Joint Review Panel, whether it be the members or
11 the -- or counsel or whoever would benefit best from
12 that.

13 THE CHAIR: Okay. Thank you. Yes.

14 Please provide them to counsel.

15 MS. LACASSE: Just so we have this taken
16 care of now, the next document number will be 696.

17 MR. IGNASIAK: Mr. Chair, the first two pages
18 of what we've just filed as Document 696 contains a
19 table of abbreviations and acronyms. As you know,
20 there's -- there's plenty in -- in the regulatory
21 world. What I'll do is simply make a point for the
22 record that the -- the acronyms and abbreviations used
23 in the argument are here. I'll try to repeat them as I
24 go as opposed to listing them all now, but they are
25 there for the reference of anyone who, during the
26 course of the argument, isn't sure what we're referring

1 to when referring to an acronym.

2 Mr. Chairman, it's a pleasure to be here on behalf
3 of Teck Resources and to have taken part in a long but,
4 I think, fruitful hearing in Fort McMurray over the
5 course of -- of a good part of five weeks, including in
6 Fort Chipewyan.

7 Mr. Chairman, as everyone in this room is well
8 aware, development of Alberta's extensive oil sands
9 resources in the public interest to benefit all
10 Albertans and Canadians on balance is not an easy and
11 straightforward task. It requires financial strength
12 to provide the financial wherewithal to capitalize and
13 execute a multibillion-dollar project; technical
14 expertise to ensure optimal resource conservation and
15 value-added processes are constantly reviewed and
16 improved; environmental responsibility to ensure
17 environmental impacts of development are avoided,
18 minimized, or mitigated, and social responsibility to
19 ensure all of this is carried out in a manner that
20 provides information to Indigenous communities and
21 stakeholders, involves them in decisions that affect
22 them, and provide assistance and advice where
23 appropriate.

24 Teck embodies all those traits. As was stated by
25 Mr. McFadyen in his opening statement, Teck values
26 open, respectful, and professional engagement

1 throughout this application process. Teck operates in
2 accordance with its six core values of safety,
3 integrity, respect, excellence, courage, and
4 sustainability.

5 The result is that Teck has signed 14 out of 14
6 agreements with Indigenous communities most affected by
7 this project. This is a testament to the comprehensive
8 approach and dedicated effort put forward by Teck over
9 a decade of consultation. In addition -- in addition,
10 Mr. Chair, Teck has support from parties such the
11 Regional Municipality of Wood Buffalo, the
12 International Brotherhood of Electric Workers Local
13 424, and the International Brotherhood of Boilermakers
14 Local Lodge 146.

15 Sir, the application before the Panel is regarding
16 a Frontier Project which, as was discussed by
17 Mr. McFadyen during his opening statement, is a
18 proposed truck-and-shovel oil sands mine located
19 110 kilometres south of Fort Chipewyan recovering
20 roughly 3.2 billion barrels of bitumen over 41 years.

21 Once fully constructed, Teck aims to operate at a
22 production rate of 260,000 barrels per day. This
23 translates up to 7,000 direct jobs during the
24 construction phase and a further 2-and-a-half thousand
25 ongoing jobs during the mine life, and over \$70 billion
26 of direct government revenues over the mine life.

1 Teck's application for the Frontier Project today
2 includes the recovery of the entire resource base with
3 no future expansions contemplated. In the interest of
4 transparency, Teck has applied for the project in its
5 entirety. What is in the application is what Alberta
6 and Canada can expect for the life of Frontier.

7 Mr. Chairman, it's important to review the legal
8 framework the Joint Review Panel is operating under and
9 the dual roles and responsibilities of this Panel. On
10 recommendation from the Canadian Environmental
11 Assessment Agency, or the "agency", the federal
12 minister of the environment and climate change referred
13 the review of the Frontier Project to an environmental
14 assessment by an independent review panel. An
15 agreement was entered into by the Alberta Energy
16 Regulator, or the "AER", and the Government of Canada
17 on May 24, 2016, to allow a joint review of the
18 project, and an amended agreement was issued on
19 August 24, 2017.

20 The agreement was established in accordance with
21 the Canada-Alberta agreement for environmental
22 assessment cooperation and sets out the mandate and
23 authority of the Joint Review Panel, its composition,
24 and project review guidelines. This joint review must
25 satisfy the requirements of both the Canadian
26 Environmental Assessment Act 2012 and the Alberta

1 Responsible Energy Development Act, or "REDA", and the
2 Panel has distinct obligations under each Act.

3 As the AER, the Joint Review Panel's mandate,
4 pursuant to Section 2 of the Responsible Energy
5 Development Act, is, one, to provide for the efficient,
6 safe, orderly, and environmentally responsible
7 development of energy resources in Alberta through the
8 AER's regulatory activities.

9 While performing its AER function, the Joint
10 Review Panel, or "JRP", must also have regard to
11 Section 3 of the Oil Sands Conservation Act which
12 requires the AER to, amongst other mandates, effect
13 conservation and prevent waste of the oil sands
14 resources of Alberta; to ensure orderly, efficient, and
15 economical development in the public interest of the
16 oil sands resources of Alberta; and to assist the
17 government in controlling pollution in the development
18 and production of the oil sands resources of Alberta.

19 The Panel has a broad mandate as the AER and must
20 consider the interest not only of the applicant and
21 interveners in this specific case, but also the
22 interest of all Albertans who own the resources and
23 have leased the right to and imposed -- imposed the
24 obligation on Teck to recover those resources.

25 The Panel is also required, pursuant to Section 20
26 of REDA, to act in accordance with the Lower Athabasca

1 Regional Plan, or "LARP". Section 20 of the REDA
2 states that, among other things, in carrying out its
3 powers, duties, and functions under REDA or any other
4 enactment, the AER shall act in accordance with any
5 applicable Alberta lands stewardship act regional plan,
6 such as LARP.

7 Accordingly, in the case of this Frontier
8 application, the Panel is required to act in accordance
9 with the Lower Athabasca Regional Plan. As set out,
10 you must do this, and you have no discretion to do
11 otherwise. The hearing of an individual application is
12 not the appropriate venue to discuss the merits of such
13 a requirement or the contents of LARP.

14 Sir, while we acknowledge some communities have
15 expressed concerns regarding LARP and, in particular,
16 the surface water quality management framework, or
17 "SWQMF", for the Lower Athabasca River, the Panel is
18 nevertheless required to act in accordance with LARP as
19 it exists today. The evidence in this proceeding is
20 that approval of the Frontier Project is in accordance
21 with LARP. There is no evidence to the contrary.

22 In determining whether a proposed energy
23 development, in this case the Frontier Project, is in
24 the public interest, the Panel is charged with
25 balancing the proponents' rights in its lease; the
26 public's legitimate expectation to receive values from

1 the resources it owns; the economic benefits of the
2 proposed project such as jobs, taxes, and royalties;
3 and the environmental, social, and economic impacts of
4 the project.

5 It is Teck's position that the evidence
6 overwhelmingly demonstrates that the Frontier Project
7 meets the purposes of the legislation, including LARP,
8 and that approving this project is in the public
9 interest.

10 Turning to the federal regime, under the Canadian
11 Environmental Assessment Act 2012 and the joint
12 agreement, the Panel must conduct an environmental
13 assessment of the project by collecting and considering
14 the evidence it considers necessary to make its
15 recommendations. The minister's primary task is to
16 consider whether is -- whether there is likely to be
17 any significant adverse environmental effects caused by
18 this project, taking into account the mitigations
19 proposed by Teck. It is this Panel's job to assist the
20 minister in making this determination.

21 The Panel must consider the environmental effects
22 of the project, the likelihood and significance of
23 those effects within temporal and spatial boundaries,
24 public comments, mitigation measures, and the need for
25 the project.

26 The Panel is also required to consider the

1 potential effects of the project on the outstanding
2 universal value, or "OUV", of Wood Buffalo National
3 Park, including the Peace Athabasca Delta, or "PAD" for
4 short.

5 Mr. Chair, as it pertains to determining whether
6 there are likely to be significant adverse and
7 environmental effects, we acknowledge that in past
8 decisions from joint review panels for Shell Jackpine
9 expansion and Total Joslyn projects, those JRPs
10 determined that harm to any individual of a species at
11 risk constitutes a significant adverse effect.

12 With respect, we are of the view that the Panel
13 should revisit this standard in light of the
14 information that has emerged throughout these
15 proceedings and, in particular, in light of how the
16 federal minister responsible for Parks Canada and
17 Environment and Climate Change Canada and the
18 Environmental Assessment Agency has made this
19 determination in the course of other assessments.

20 In its submission, Parks Canada has suggested that
21 there are likely to be significant adverse effects
22 because if potential effects are taking place to a
23 species that is listed under the Species at Risk Act,
24 or "SARA", and resides in a national park and world
25 heritage site. Our view, however, is that the Panel
26 should reject this suggestion because, one, there's no

1 legal support for it; and, two, the Government of
2 Canada does not apply this standard to its own
3 activities.

4 As this Panel knows, SARA prohibitions apply
5 within national parks because they are federal lands.
6 Therefore, pursuant to Section 32 of SARA, no person
7 can kill, harm, harass, capture, or take an individual
8 of a wildlife species that is SARA-listed. In
9 addition, it is also prohibited to destroy critical
10 habitat in a national park. SARA-listed species and
11 critical habitat can be killed or destroyed within
12 national parks if a permit is issued by the competent
13 minister pursuant to Section 73.

14 The competent minister may only issue that permit
15 if: One, they are satisfied that all reasonable
16 alternatives have been considered; two, all feasible
17 measures will be taken to minimize the impact; and,
18 three, the activity will not jeopardize the survival or
19 recovery of the species. Therefore, the legislation
20 explicitly allows for the killing of SARA-listed
21 species provided that, among other things, the activity
22 will not jeopardize the survival or recovery of the
23 species.

24 Mr. Chairman, the standard for significant adverse
25 environmental effects used by Parks Canada in their own
26 environmental assessments is completely unrecognizable

1 compared to the standard they have used to assess
2 previous oil sands projects and the Frontier Project.

3 In Gros Morne National Park, Parks Canada issued
4 itself a permit for the harassing of marten, a
5 SARA-listed species, as an activity incidental to the
6 activity of trapping snowshoe hare. The justification
7 was that as residents were older, trapping will
8 decline, and, therefore, it was unlikely to threaten
9 the survival or recovery of the species.

10 In Grasslands National Park, Parks Canada issued
11 itself a permit for the moving and killing of sagebrush
12 and native grasses, critical habitat for the greater
13 sage grouse, a species that is subject to an emergency
14 protection order under SARA. The justification was
15 that the population and distribution objective for the
16 species was not expected to be impacted by the project.
17 The test was not that a SARA-listed species or critical
18 habitat was being killed or destroyed; it was that
19 there was no effect on the objective for the species.

20 And in Jasper National Park, a world heritage
21 site, Parks Canada issued itself a permit for the
22 construction and operation of a 44.7-kilometre
23 transmission line, linear disturbance, and new
24 substation resulting in the clearing of 27,000 trees
25 and 74 hectares of critical habitat which was not going
26 to be reforested for the Jasper/Banff population unit

1 of caribou. Parks Canada determined this project would
2 not cause significant adverse environmental effects.

3 Mr. Chairman, the loss of critical habitat and
4 impact on the Jasper/Banff population unit of caribou
5 was not likely; it was absolutely certain. And, yet,
6 Parks Canada determined it would not cause a
7 significant adverse effect. The activity was not
8 30 away -- 30 kilometres away from a national park and
9 world heritage site; it was directly inside it.

10 So in every case, the Parks Canada Agency has
11 granted -- has been granted permits by the federal
12 minister of ECCC because the activity would not
13 threaten the survival or recovery of the species. This
14 is the test in the legislation, and it is the test that
15 the Parks Canada Agency and the federal minister of
16 environment and climate change relies on when deciding
17 to kill SARA-listed species and destroy critical
18 habitat. It should, therefore, be the test this Panel
19 uses as well.

20 Sir, in your ruling on the production of a
21 detailed impact assessment done for the ATCO Electric
22 Jasper interconnection project, you stated, and I
23 quote: (as read)

24 The Panel understands the point that
25 Mr. Ignasiak is making, that a loss of
26 critical habitat within a national park is

1 not considered an adverse -- significant
2 adverse effect and that there seems to be an
3 inconsistency between that and Parks Canada
4 views about the effects of a project on Wood
5 Buffalo National Park. Clearly Parks Canada
6 uses different tests under different
7 circumstances.

8 Mr. Chairman, therefore, we submit that: One, the
9 test to be applied when determining significance should
10 take into account whether the activity will jeopardize
11 survival or recovery of the species; and, two, we
12 submit that the Parks Canada Agency's submissions
13 regarding whether Frontier may cause significant
14 adverse environmental effects should be completely
15 disregarded because those submissions are inconsistent
16 with the test the agency and its minister regularly
17 applies in other situations.

18 Mr. Chair, just give me a moment, please.

19 Mr. Chair, I'll now turn to addressing the need
20 for and purpose of the Frontier Project. Work on the
21 proposed development commenced in 2008 with the
22 acquisition of oil sands leases, planning, exploratory
23 drilling, establishment of the EIA terms of reference,
24 baseline environmental assessments, and initial public
25 and Indigenous consultation and involvement. As
26 addressed in Mr. McFadyen's opening statement, the

1 project was originally applied for in 2011 and
2 consisted of two distinct development areas separated
3 by leases owned by Shell.

4 In 2013, Teck and Shell exchanged leases resulting
5 in a more workable set of leases for both companies and
6 several significant benefits. In particular, the
7 exchange allowed for greater resource recovery than
8 would have occurred with the original proposal and,
9 therefore, greater income and royalties, a smaller
10 footprint having less environmental impact and fewer
11 boundary issues. An optimized project design was filed
12 in 2015 as a result of the changed leases along with
13 the updated impact assessments.

14 Mr. Chair, Teck has an obligation to the people of
15 Alberta to advance the development of the project to
16 recover the bitumen resources within those leases in a
17 timely and responsible manner. The fact of the matter
18 is that Canada and the rest of the world will continue
19 to demand oil. I put it to the Panel that, as stated
20 by Mr. McFadyen, it is not in the public interest for
21 Canada to acquire its oil from foreign sources and
22 allow other jurisdictions to supply oil to meet
23 long-term domestic and global demand. What is in the
24 public interest is to responsibly develop our own
25 valuable resources here at home. It's not only better
26 for the global environment but for all Canadians who

1 will economically benefit.

2 Mr. McFadyen articulated the need and three main
3 objective for Frontier succinctly in his opening
4 statement. First, to maximize the value of a product
5 essential to everyday life; second, generate
6 significant economic benefits and opportunities for
7 Indigenous communities, local communities, for the
8 province of -- for the Province, and Canada; and,
9 third, to responsibly create value for Teck investors.

10 It is Teck's mandate to develop resources and
11 supply energy in a responsible way and as a sustainable
12 developer and responsible member of the communities in
13 which it operates. Mr. Chair, Teck has been doing this
14 for more than 100 years. To illustrate this point,
15 benefits have already, in fact, begun accruing to the
16 communities in relation to Frontier. As was pointed
17 out by Mr. McFadyen, Teck has already spent about
18 \$24 million on contracted goods and services with
19 Indigenous companies in relation to Frontier. This
20 amount will only grow as Teck continues its work on
21 Frontier. As stated by Mr. Crichton of the
22 International Brotherhood of Electrical Workers
23 Local 424, Teck is, and I quote: (as read)

24 A good company and a Canadian company that is
25 prepared to invest billions of dollars in our
26 province at a time when these jobs are

1 desperately needed.

2 Mr. Chair, Teck cannot agree more.

3 I'd like to briefly address Teck's qualifications
4 to advance Frontier. Frontier is not only an energy
5 project; it's a mining project. And Teck is a leading
6 mining company that is qualified and up to the task of
7 developing this incredibly valuable world-scale
8 resource for the people of the region, Alberta, and
9 Canada.

10 As a leading mining company, Teck has had over a
11 hundred years to establish and reinforce its commitment
12 to the six values that Mr. McFadyen highlighted in his
13 opening statement. Again, these are commitments to
14 safety, integrity, respect, excellence, courage, and
15 sustainability. Teck's commitment to these has led to
16 over 70 separate awards in Canada, the United States,
17 and Chiles -- sorry -- Chile in areas including
18 reclamation excellence, social environmental
19 performance, environmental policy, and management
20 systems.

21 Teck employs more than 10,000 people worldwide,
22 including over 8,000 employees in Western Canada alone.
23 Teck is traded on the Toronto and New York Stock
24 Exchanges. In addition, Teck owns or has interest in
25 14 producing operations in North and South America. Of
26 particular significance is Teck's 21.3 percent

1 ownership in a new Fort Hills oil sands mining facility
2 and 100 percent ownership in the Frontier Project that
3 is the subject of these proceedings.

4 Mr. Chair, Teck is no small player in the mining
5 industry. Teck is a global leader, and Teck seeks to
6 bring its knowledge and experience to bear on the
7 Frontier Project. Teck has also consistently shown a
8 commitment to innovation. This includes inventing
9 technologies that are now standard in the global mining
10 industry, including the use of airborne magnetic
11 surveys, differential froth flotation, and even, as we
12 heard, the walkie-talkie.

13 Teck has shown it brings its spirit of innovation
14 to all of its endeavours, and oil sands projects are no
15 different. As a founding and very active member of
16 Canada's Oil Sands Innovation Alliance, or "COSIA", in
17 which an alliance of oil sands producers collaborate to
18 accelerate innovation and environmental performance
19 improvement, Teck has led work on mine reclamation,
20 bison research, fluid tailings treatment, and
21 technologies to reduce greenhouse gas emissions.

22 Teck has always strived to innovate, and the
23 technologies technical development implemented
24 throughout the life of the Frontier Project will, no
25 doubt, have lasting impacts to innovation in the
26 industry as a whole.

1 Teck has more than a hundred years of experience
2 operating mines in a safe and environmentally
3 responsible manner. Most importantly, on the rare
4 occasions where operations do not meet its high
5 standards of performance, Teck has consistently shown
6 that it is committed to doing the right thing by being
7 open, transparent, and remaining responsible. Teck does
8 not walk away from issues or challenges and is
9 committed for the long term.

10 Mr. Chair, I think it's important to also put the
11 application and its environmental impact assessment, or
12 "EIA", into proper context before I review the issues,
13 including public consultation.

14 The Wood Buffalo region is one of the most
15 intensely studied and monitored regions in Canada. The
16 environment in the region and the potential impacts of
17 oil sands development are well-understood. The
18 environmental assessment process for this project was
19 rigorous, comprehensive, transparent, and complete, and
20 is a culmination of over ten years of work. This
21 includes: one, in accordance with the Canada Alberta
22 agreement on environmental assessment, the draft terms
23 of reference were provided for stakeholder and
24 Regulator input, including input from Environment
25 Canada, Health Canada, and Fisheries and Oceans Canada;
26 two, the EIA was developed with input from stakeholders

1 and Indigenous communities through an intensive
2 consultation process, including extensive consideration
3 of traditional knowledge; three, supplementary
4 information addressed more than five rounds of
5 information requests and over 1,200 separate inquiries
6 prior to provincial completeness; four, responses to
7 12 packages of information requests from this Joint
8 Review Panel and an updated OUV assessment were
9 provided to this Panel for its consideration; and five,
10 extensive reviews of Teck's assessment were conducted
11 by various stakeholders with especially robust and
12 collaborative reviews undertaken by Indigenous
13 communities, again, resulting in 14 agreements
14 addressing Indigenous concerns.

15 The stated purpose of the EIA was, among other
16 things, to assess the project-specific and cumulative
17 effects of the project; fulfill regulatory requirements
18 of both the provincial and federal governments; and
19 assist regulators, public stakeholders, and potentially
20 affected Indigenous communities in understanding the
21 environmental consequences of the project's
22 construction, operation, decommissioning, and
23 reclamation.

24 On May 31, 2018, the JRP determined that Teck's
25 application record, including its EIA, was complete.
26 In particular, you have heard that the EIA is

1 conservative. That means the approach taken by Teck in
2 their EIA was both comprehensive and appropriate to
3 fully assess potential effects of the project. This
4 approach reduces uncertainty and increases confidence
5 in the predictions.

6 I would also like to reiterate Mr. Speller's
7 comments explaining how important it is to properly
8 characterize the findings of the EIA, and I quote:
9 (as read)

10 Not every predicted change causes a
11 significant effect or an adverse risk. So in
12 many cases, we predict a change, but that
13 change is small and may not actually be
14 perceptible. We have tried to put our
15 predictions in proper assessment context so
16 reviewers can understand our perspective on
17 which predicted changes matter and which ones
18 are considered negligible [closed quote].

19 The importance of contextualizing the predicted changes
20 was also highlighted by Mr. Speller, who further
21 stated, and, again, I quote: (as read)

22 Without situating these findings and relevant
23 thresholds or guidelines or ecological
24 context, it inflates the effects of the
25 project, in our view, exaggerates in the
26 layperson's minds what the project's actual

1 effects will be [closed quote].

2 Teck's view is that it is important to look at the
3 changes predicted to occur due to the project and from
4 cumulative development. This is reflected in Teck's
5 EIA methodology. However, it is important to reiterate
6 Mr. Speller's comments that a predicted change does not
7 necessarily mean a predicted adverse effect. Context
8 is key. Teck is committed to verifying the predictions
9 in the EIA and monitoring for and adaptively managing
10 any unforeseen effects of its project.

11 The Panel has heard evidence that Frontier has
12 detailed mitigation, monitoring, and adaptive
13 management plans and programs for the socio, water,
14 air, and terrestrial components of the project. Teck
15 takes its commitment to monitoring the adaptive
16 management very seriously and has demonstrated this
17 commitment throughout its operations.

18 Teck also has bilateral commitments with
19 Indigenous partners to support these robust actions and
20 is supportive of the federal government's proposal for
21 a joint oversight committee which will support best
22 practices in this regard.

23 Mr. Chairman, before turning to Indigenous
24 consultation, I'd like to address Park [sic] Canada's
25 strategic environmental assessment, or "SEA", conducted
26 for the Wood Buffalo National Park. And I'll call that

1 "SEA", given we have another CEAA at play.

2 Teck fully respects the important ecological and
3 cultural significance of the park. Teck is of the view
4 that the SEA recommendations are generally sound and
5 reflect the concerted and collaborative efforts of Park
6 Canada, industry representatives, and other Indigenous
7 communities. The SEA is undoubtedly important. It is
8 a valuable tool to be used by Parks Canada for
9 advancing its discussion with stakeholders and
10 Indigenous communities in the development of a park
11 action plan.

12 However, the Panel should recognize that the SEA
13 is a document that is designed to collect each and
14 every concern of a number of Indigenous communities.
15 Where there were alternate views on topics, the SEA
16 presents both views. And that's stated right in the
17 SEA. The SEA states, quote: (as read)

18 SEA is a separate type of environmental
19 assessment, different from the environmental
20 impact assessments that examine the effects
21 of a single proposed project. Project-level
22 assessments are more common and have an
23 established methodology, while SEA practice
24 has been more flexible. The focus of a
25 project assessment is outward from the
26 proposed activities that may impact the

1 environment, i.e., looking downstream to the
2 environment, but the focus of this SEA is
3 outward from the environment, based on
4 observed changes in environmental conditions,
5 including looking upstream and to broader
6 influencers of change [closed quote].

7 Mr. Chair, there are a number of fundamental
8 differences between the work that Teck completed for
9 the Frontier EIA and the work that has been conducted
10 for the SEA of the park. First, the SEA represents a
11 synthesis of information from a number of different
12 sources, which is appropriate and typical for an SEA.
13 Second, the SEA did not rely on any new analysis
14 completed by the authors. Third, Mr. Chair, the Parks
15 Canada SEA did not use any information provided by Teck
16 in the project EIA aside from minor use of the Peace
17 River flow data.

18 Mr. Chairman, Parks Canada provides specific
19 rationale for why they did not rely on Teck's
20 project-specific EIA information and explains the
21 difference between SEA and project-specific EIA. Teck
22 wishes to further highlight that the SEA examined
23 trends, and these trends, Mr. Chairman, do not equate
24 to project-specific effects.

25 Teck's EIA examined the changes and trends
26 identified by Parks Canada based on the information

1 available to Teck through the lens of a
2 project-specific effects analysis or project-specific
3 risk assessment appropriate for an environmental impact
4 assessment. Teck submits that this gives a better
5 level of detail as to whether there's a project-related
6 effect.

7 Finally, Mr. Chair, one of the recommendations of
8 the SEA was, and I quote: (as read)

9 Refer projects under the Canadian
10 Environmental Assessment Act, 2012 or
11 subsequent legislation and Mackenzie Valley
12 Resource Management Act for environmental
13 assessment when they might have significant
14 adverse environmental effects on the world
15 heritage values of Wood Buffalo National Park
16 world heritage site and evaluate those
17 potential impacts as part of the assessment
18 [quote].

19 Sir, Teck conducted this recommended assessment. Teck
20 was the first proposed oil sands development to do so.
21 And Teck's assessment concluded that the potential
22 effects of Frontier on the outstanding universal value
23 of the park would be negligible and would not impact
24 the integrity of the park.

25 I'd now like to briefly discuss the preliminary
26 assessment on the potential impact of the project on

1 Aboriginal and treaty rights that was filed by the
2 Government of Canada.

3 Mr. Chairman, the rights impact assessment is
4 novel, useful, and demonstrates a need for
5 accommodation and further government action. Teck has
6 done its part in addressing potential effects on
7 Indigenous rights and in support of further action from
8 the Crown.

9 Mr. Chair, the rights impact assessment focused on
10 potential impacts on rights, but it was not an
11 assessment of specific environmental effects. Teck is
12 of the view that this rights impact assessment should
13 not be substituted for project-specific environmental
14 assessment. Rather, Mr. Chair, Teck is of the view
15 that, as stated within the rights impact assessment,
16 and I quote: (as read)

17 This methodology will be used by the MCFN and
18 the federal government when considering
19 project impacts on the exercise of the rights
20 of the MCFN and in considering whether
21 consultation on the project was adequate
22 [closed quote].

23 Mr. Chairman, it's important that I take some time to
24 speak to Wood Buffalo National Park and its outstanding
25 universal value as this relates to the Frontier
26 Project. As a result of the UNESCO monitoring mission

1 in relation to Wood Buffalo National Park, the
2 project's potential effects on the OUV of the park and
3 the pad was a specific information request of the Panel
4 and an issue in this hearing.

5 Again, Teck fully respects the ecological and
6 cultural significance of the park and has stated so
7 many times in this proceeding. In fact, Teck's
8 environmental assessment included a comprehensive
9 review specifically of potential impacts to the park.

10 Mr. Chair, as I mentioned, Teck is the first
11 company to have ever done this.

12 It's worth restating that Teck's assessment
13 concluded that the potential effects of Frontier on the
14 OUV of the park would be negligible and would not
15 impact the integrity of the park.

16 Mr. Chair, it is important to provide context. In
17 addition to Teck's findings, Parks Canada has
18 previously expressed that the park is neither
19 endangered, and its ecological integrity is not
20 threatened. Sir, in a letter to UNESCO dated
21 December 11, 2014, Parks Canada states, and again I
22 quote: (as read)

23 Canada's perspective on the current state of
24 conservation of Wood Buffalo is echoed by a
25 recent report on the park released by the
26 International Union for the Conservation of

1 Nature in November 2014. As part of its
2 independent assessment of the conservation
3 outlook of all natural world heritage sites
4 around the world, IUCN examined the
5 conservation outlook for Wood Buffalo and
6 concluded [quote] "in general, the site's
7 conservation values are sound and, in fact,
8 improving with respect to overall boreal
9 forest ecology and bison and whooping crane
10 populations." It further concluded that Wood
11 Buffalo's overall conservation outlook is
12 good with some concerns.

13 The concerns raised in IUCN's assessment
14 relate to impacts on the Peace River --
15 [sorry] the Peace-Athabasca Delta from
16 dam-caused hydrological alteration, upstream
17 industrial development, and climate change,
18 effectively the same issues raised by the
19 petitioners. That being said, IUCN did not
20 conclude that Wood Buffalo is facing a
21 critical situation [closed quote].

22 Mr. Chair, in addition to Parks Canada's previous
23 views, according to their document titled "Ecological
24 Integrity of National Parks" and Parks Canada's most
25 recent assessment, Wood Buffalo National Park has
26 exhibited ecosystem ratings that are good and stable to

1 fair and stable. In addition, no declining trends were
2 identified for Wood Buffalo National Park, although
3 declining trends were identified for other national
4 parks that are also world heritage sites.

5 In addition and consistent with this, Ms. Cummings
6 of Parks Canada confirmed that it remains Parks
7 Canada's position that Wood Buffalo National Park
8 should not be put on the list of sites endangered.

9 Sir, as previously mentioned, Teck is fully
10 supportive of the MCFN-led initiative to create a
11 biodiversity stewardship area, sometimes referred to by
12 MCFN as a "conservation stewardship area", at the
13 park's southern boundary ensuring a buffer is
14 established.

15 Teck does not take its responsibilities lightly,
16 and this includes its joint responsibilities with
17 community partners. Teck remains committed to
18 promoting the protection and preservation of the OUV of
19 the Wood Buffalo National Park and looks forward to
20 continuing this work going forward.

21 It is also worth noting that Teck is committed to
22 supporting the establishment of a biodiversity
23 stewardship area, or "BSA". This is reflected in the
24 work Teck has done with MCFN and Teck's voluntary
25 relinquishment of their Twin Lakes leases. If
26 realized, the BSA would offer further protection to

1 Wood Buffalo National Park by restricting development
2 immediately south of the park boundary.

3 To be clear, the BSA is not viewed by Teck as
4 necessary to mitigate project-specific effects over and
5 above what Teck has already included in their
6 assessment. However, if the BSA were in place, it
7 would benefit wildlife such as bison and caribou and
8 migratory birds.

9 Mr. Chair, I'd like to now speak to the extensive
10 consultation that Teck has undertaken with those
11 Indigenous communities closely connected to the
12 project.

13 This engagement is crucial for Teck in keeping
14 with its values and building upon its commitment to
15 forging strong relationships in the area where Teck
16 works. Teck has set out its global commitments in its
17 Indigenous people's policy, which, in addition to
18 meeting the consultation requirements of Alberta and
19 Canada, commits Teck to the following: building
20 respectful relationships; engaging in early, meaningful
21 dialogue; integrating Indigenous people's perspectives
22 and traditional knowledge into decision-making;
23 identifying ways to support Indigenous groups in
24 achieving self-defined community goals; and working to
25 achieve the free, prior, and informed consent of
26 Indigenous communities.

1 Mr. Chair, we submit that throughout this hearing
2 Teck has shown how it has sought to achieve these
3 goals. This is best evidenced by the 14 out of 14
4 agreements Teck has reached with Indigenous communities
5 most affected by the project. In addition, it is
6 evidenced specifically by the well over 350 meetings
7 with Indigenous community representatives,
8 40 mitigation planning workshops, 20 project site tours
9 and flyovers, and 35 detailed written technical reviews
10 and submissions with those communities closely
11 connected to the project. To help facilitate this
12 work, Teck has provided about \$10 million in capacity
13 funding to Indigenous communities.

14 Through rigorous consultation, Teck and its
15 community partners have had extensive and meaningful
16 dialogue that has provided valuable feedback to Teck
17 and resulted in a number of important changes to the
18 project to address community concerns. These include:
19 identifying fish offsetting options beyond enlargement
20 of the fish habitat compensation lake; clarifying and
21 strengthening our commitment to not place tailings in
22 pit lakes or over areas prior to being mined;
23 emphasizing wetlands and bison habitat in the closure
24 landscape; placing the reclamation material stockpiles
25 east of external Tailings Area 1 and over backfilled
26 in-pit locations to reduce the size of the project

1 disturbance area; and changing Teck's Water Act
2 application to not include the potential use of water
3 from tributaries of the Athabasca River.

4 In addition, Teck is committed to contracting and
5 hiring practices that focus on qualified local
6 Indigenous businesses, and Teck requires its
7 contractors to do the same. As mentioned previously,
8 Mr. Chair, to date, Teck has spent about \$24 million in
9 contracted goods and services with Indigenous
10 companies.

11 Indeed, Teck is committed to meaningful
12 consultation and engagement for the life of the
13 project. Through its engagement, Teck has been
14 fortunate in coming to formalized agreements with a
15 number of communities. These agreements create the
16 framework for ongoing cooperation and collaboration,
17 for environmental stewardship, economic benefits, and
18 dispute resolution.

19 Mr. Chair, Teck identified 14 Indigenous
20 communities, First Nations, and Metis that are most
21 affected by the project through proximity to
22 traditional territory, land use areas, or other
23 potential effects. As was indicated at the beginning
24 of this hearing, Teck is proud to now have agreements
25 with all 14 of these Indigenous communities. This is
26 evidenced by Teck's efforts to do everything within its

1 control to address Indigenous communities' concerns,
2 and, indeed, if this project is approved and proceeds,
3 Indigenous communities will receive substantial
4 benefits.

5 Teck acknowledges that some communities have
6 appeared at this hearing with whom Teck does not have a
7 formalized agreement. These communities are
8 Katl'odeeche First Nation, Deninu Kue First Nation,
9 Fond du Lac First Nation, the Northwest Territory Metis
10 Nation, and Smith's Landing First Nation. These
11 communities have expressed concerns about the project's
12 potential effects on the OUV of Wood Buffalo National
13 Park and the pad.

14 Teck recognizes that these areas are very
15 important to these communities; however, Mr. Chairman,
16 as Mr. Speller explained in direct examination at the
17 start of these proceedings, the Frontier Project will
18 have a negligible or imperceptible effect on the park,
19 including the pad. These communities' traditional use
20 of the park and the pad will not in any way be affected
21 by the Frontier Project. Put another way, many of the
22 concerns expressed regarding the pad exist whether or
23 not Frontier proceeds.

24 Mr. Chairman, Teck wishes to reiterate that all
25 five of these communities were provided with notice of
26 the project approximately ten years ago, and none of

1 them raised any substantive concerns regarding the
2 project until recently, after they were notified by the
3 Government of Canada that a strategic environmental
4 assessment of the park was being carried out.

5 Our understanding is that Canada has consulted
6 with these five communities separately and outside the
7 Frontier regulatory review process with respect to the
8 initiatives being undertaken in connection with the
9 Wood Buffalo National Park and the pad.

10 In addition, Mr. Chair, it is important to note
11 that the Alberta Aboriginal Consultation Office, or the
12 "ACO", determined that consultation was either not
13 required with Katl'odeeche First Nation, Deninu Kue
14 First Nation, and Smith Landing First Nation; or, if it
15 was, it was adequate.

16 Therefore, because these communities will not be
17 affected by the project, Teck is not proposing to enter
18 into agreements with them. Teck is, however, committed
19 to sharing information regarding the project, including
20 potential employment and contracting opportunities.

21 Mr. Chairman, I'm in your hands as to when you --
22 I'm not -- we didn't discuss prior to starting when you
23 thought breaks would be appropriate. I can go for
24 another 15 minutes or so, or -- I'm in your hands, sir.

25 THE CHAIR: Okay. Sure. Yeah. Let's
26 carry on for a few more minutes. I'll leave it to you,

1 though, Mr. Ignasiak. When you feel the need for a
2 break, we can take a break.

3 MR. IGNASIAK: Thank you.

4 Mr. Chairman, I'd like to deal with a number of
5 general issues first. These are issues about which
6 there appeared to be some confusion, and I want the
7 Panel to be absolutely clear on Teck's view.

8 Teck would like to clarify the value of its draft
9 mitigation, monitoring, and management plans and their
10 intents and purposes. Teck would like to highlight
11 that a number of the draft plans and details contained
12 within them that Teck submitted as part of its
13 application is unprecedented.

14 Additionally, Mr. Chair, the final versions of
15 these plans will rely on the JRP report, the decision
16 statement, future stages of project planning and
17 feedback from Indigenous communities and stakeholders,
18 who have already provided invaluable feedback in
19 shaping the draft plans. Moreover, Teck has agreed to
20 conditions as part of its approvals that identify
21 finalization of those plans in advance of construction
22 of the project.

23 The level of commitment to these draft plans at
24 this stage of the process should be viewed as very
25 meaningful and as a testament to Teck's commitment to
26 being open, transparent, and not only a good neighbour,

1 but a good partner.

2 Teck would also like to clarify its position with
3 regards to the Original Fort McMurray First Nation
4 direct evidence. Prior to OFMFN's witness panel giving
5 its evidence, counsel for OFMFN provided lengthy
6 submissions, the majority of which was evidentiary in
7 nature. It is Teck's position that it was improper for
8 Ms. Gladieu-Quinn to provide evidence in this manner,
9 due to the fact that she was counsel and that the
10 evidence she put forth was not subject to test through
11 cross-examination. Therefore, this information should
12 be given no weight by the Panel.

13 The following matters relate to the trappers'
14 direct evidence. During the trappers' submissions,
15 Mr. McCargar read into the record two emails written by
16 Mr. Pete Hoffman, who was not present at the hearing.
17 As Teck was unable to test this evidence, we submit
18 these two emails should be weighted accordingly.

19 Additionally, we note that Mr. McCargar's stated
20 recommendations at the close of the trappers' direct
21 evidence did not constitute evidence provided by the
22 witness panel and should therefore similarly be
23 afforded little or no weight.

24 And lastly on the trappers, Teck submits that the
25 trappers' evidence should be given less weight for a
26 few reasons. First, the evidence shows that the

1 trappers were aware of the Frontier Project and Teck's
2 activities for a long time and yet had not expressed
3 any concerns to Teck directly until the first day of
4 the hearing.

5 Second, they confirmed that neither RFMA 2346 or
6 2932 actually overlap with the project disturbance
7 area. In fact, the RFMA trap line 2346 is
8 7.6 kilometres away from the project site, and
9 RFMA 2932 is 9.1 kilometres away.

10 Finally, Mr. Chair, with respect to any trap lines
11 that do overlap with the project disturbance area, Teck
12 has committed to providing appropriate compensation at
13 the appropriate time. Nonetheless, we will
14 specifically address some of the points that the
15 trappers have made in the course of this argument.

16 Finally, in the Council of Canadian submissions,
17 Ms. Bronwen Tucker stated that there was, quote:

18 (as read)

19 A reluctance on the part of Teck to go to

20 Fort Chipewyan and speak to a wider range of

21 members of these communities [closed quote].

22 This is an entirely false statement and should be

23 rectified for the Panel since, in fact, Mr. Chair, Teck

24 representatives are in Fort Chipewyan on a regular

25 basis, as evidenced by our extensive consultation

26 record with communities.

1 In support of her statement, Ms. Tucker references
2 a letter filed by Teck on June 29, 2018, which is CEAA
3 Document 438. Contrary to her assertion that Teck was
4 reluctant to go to Fort Chipewyan, Teck stated
5 explicitly that it did not object to a portion of the
6 hearing being held in Fort Chip. The fact is that Teck
7 has always been supportive of a portion of the hearing
8 being held in Fort Chip, provided that certain
9 logistical issues could be successfully addressed.
10 Teck is pleased that the logistical issues were
11 successfully dealt with and that, in fact, we were able
12 to assist so that a portion of the hearing was
13 successfully held in Fort Chipewyan for the first time
14 in Canadian oil sands history.

15 Mr. Chairman, changing topics, one issue that has
16 received a significant deal of attention is Teck's
17 socioeconomic impact assessment, or "SEIA", of the
18 project. This issue was raised in various forms by the
19 Oil Sands Environmental Coalition, or "OSEC",
20 Stand.Earth, and Keepers of the Athabasca.

21 It's important to note that Teck completed a
22 robust socioeconomic impact assessment consistent with
23 the methodology employed in the evaluation of all
24 previous oil sands applications in Alberta.

25 As stated by Mr. Shewchuk, the socioeconomic
26 impact assessment involved a comprehensive examination

1 of the social and economic impacts of the project on
2 affected local communities, the province, and Canada.

3 First, I will address the points raised by OSEC
4 then Stand.Earth and, finally, Keepers of the
5 Athabasca.

6 OSEC raised five points regarding project
7 economics: the effect of discount rates between WCS
8 and WTI; future predictions regarding the price of oil,
9 economic implications for the project relating to the
10 current state of pipeline development in Canada, the
11 application of a cost-benefit analysis, and Teck's
12 ability to comply with the carbon competitiveness
13 incentive regulations.

14 With regards to the concerns with the
15 competitiveness of WCS when compared to WTI on the
16 international market, the price of oil and the status
17 of pipeline proposals, our view, are these are not
18 issues that are relevant to this Panel's deliberations.
19 However, it is, in any event, worth noting there are
20 currently several proposed pipelines being pursued and
21 that oil demand under most scenarios is expected to
22 increase in the foreseeable future.

23 Of course, these are issues that Teck's board of
24 directors will need to assess as part of Teck's
25 long-term view before determining whether to sanction
26 the Frontier Project. Again, these are not issues

1 relevant to the Panel's deliberations on this project.

2 Mr. Chairman, Dr. Joseph submitted that, quote:

3 (as read)

4 Teck's assessment of the project's economic
5 benefits is inaccurate and misrepresentative
6 [quote].

7 And he expressed the opinion that, quote: (as read)

8 The project would be a bad choice both for
9 society and private investors [quote].

10 Dr. Joseph based his submission on his review and
11 critique of Teck's SEIA and the results of his
12 cost-benefit analysis.

13 Mr. Chairman, in responding to Dr. Joseph's
14 critique of Teck's SEIA, we remind you that the
15 assessment conducted by Teck is consistent with the
16 assessment methodology employed in the evaluation of
17 all previous oil sands applications. The SEIA employed
18 by Teck is a comprehensive examination of the social
19 and economic impacts of the project on affected local
20 communities and the province overall. It also contains
21 the detail necessary to understand the magnitude of
22 project effects and how these effects will manifest
23 over time.

24 Mr. Chairman, as demonstrated under
25 cross-examination, the cost-benefit analysis, or "CBA",
26 submitted by OSEC is extremely sensitive to the

1 underlying assumptions of the author. The sensitivity
2 of Dr. Joseph's CBA is evident in the changed outcome
3 seen with his revised report.

4 Dr. Joseph adjusted the exchange rate used from
5 0.837 to 0.86. This 0.023 difference resulted in
6 Dr. Joseph's model increasing the net present value of
7 the project by \$0.6 billion and increased the internal
8 rate of return by 0.3 percent.

9 Mr. Chair, this change is not immaterial; it is
10 significant. And I ask the Panel to take a moment of
11 pause to reflect upon the significance that 0.023 can
12 make upon this kind of analysis.

13 With regards to the cost-benefit analysis
14 conducted by Dr. Joseph, Teck invites the Panel to
15 conclude that CBA is not an appropriate tool to assess
16 the impacts and benefits of this project. As was
17 stated by Mr. Shewchuk, Teck's witness, and I quote:
18 (as read)

19 The cost-benefit submitted by OSEC is
20 extremely sensitive to the underlying
21 assumptions of the author. We are of the
22 view that the study does not adhere to best
23 practices for cost-benefit analysis and note
24 that a minor adjustment to a single key
25 assumption can completely reverse the outcome
26 of the analysis. For example, a reduction of

1 approximately 2.5 percent in the discount
2 raised rate used for project benefits results
3 in a positive net present value [closed
4 quote].

5 Therefore, a CBA cannot be relied upon, and the Panel
6 should instead rely, as Teck has done, on industry best
7 practices to conduct an economic impact assessment in
8 conjunction with an environmental impact assessment in
9 order to determine the project's merits.

10 Mr. Chairman, it is quite simple really. Teck's
11 economic impact assessment approach is that which is
12 accepted by Regulators. In addition and as noted by
13 Dr. Kits of Keepers of the Athabasca, and I quote: (as
14 read)

15 One of the limitations of cost-benefit
16 analysis is that it cannot include costs that
17 are subject to uncertainty. We need to know
18 the probability of a negative event occurring
19 in order to include it in a cost-benefit
20 analysis [quote].

21 Teck submits, and as was acknowledged by Dr. Joseph,
22 that choosing a discount rate has been one of the most
23 contentious and controversial aspects of the
24 cost-benefit analysis of regulatory policies.

25 Mr. Chairman, not only is Dr. Joseph's CBA
26 extremely sensitive, it has not adequately accounted

1 for certain market impacts. For example, Dr. Joseph
2 indicated in his direct evidence that he, quote: (as
3 read)

4 Would expect Aboriginal groups to fair poorly
5 with this project unless an impact benefit
6 agreement is signed. I haven't been
7 following the details of impact benefit
8 agreements, but I do believe I saw something
9 may have been signed [quote].

10 And again later, he said, quote: (as read)

11 Yeah. I read an article which suggested
12 something had been signed with one of the
13 groups [quote].

14 Dr. Joseph had originally provided his expert report on
15 August 22, 2018. It was then revised on October 20,
16 2018. Teck notes that it had a large number of
17 participation agreements in place even before
18 August 22, 2018, that were noted on the record. In
19 addition, between August 22 and October 20, agreements
20 were reached with ACFN and MCFN, a fact that was
21 well-publicized in the media and discussed during these
22 proceedings.

23 When asked if his revised report included this
24 updated information, Dr. Joseph stated, and I quote:
25 (as read)

26 I mean, that's fair to point out that I

1 could've adjusted the section where I discuss
2 potential impacts on Aboriginal groups, so
3 thank you [quote].

4 Mr. Chairman, Dr. Joseph did not account for these
5 agreements. Teck submits that Dr. Joseph's
6 characterization and knowledge of the potential
7 benefits to Indigenous communities in these proceedings
8 is perfunctory at best.

9 Mr. Chairman, in addition, Teck submits that
10 Dr. Joseph adjusted the discount rates in his CBA to
11 come to the conclusion that this project would not
12 provide a net benefit. His use of a dual or
13 differential discount is not only out of line with
14 standard practice and national and international
15 guidance, it is also out of line with how he has
16 historically conducted his CBAs for other major
17 resource projects, including the Kearl Oil Sands Mine
18 and the Trans Mountain Expansion Project.

19 Dr. Joseph indicated in his evidence that the
20 Treasury Board of Canada's Secretariat Guidelines on
21 CBA is outdated and the practice evolves. However, he
22 later admitted that a policy statement issued by the
23 Treasury Board of Canada Secretariat dated September 1,
24 2018, and which was intended to support the Treasury
25 Board Guidelines, would suggest the Guidelines are
26 still relevant to be followed and that no updates had

1 been made.

2 In addition, Dr. Joseph strayed from guidelines in
3 standard practice further by applying a 10 percent
4 discount to market impacts rather than the 8 percent
5 uniformly applied as recommended in the TBCS
6 guidelines.

7 Mr. Chairman, Dr. Joseph acknowledged that if he
8 had not used this dual-discount approach, the Frontier
9 Project would have a net present value. Teck submits
10 that as evidenced by Teck's EIA and the uniform
11 discount rate sensitivity analysis of Dr. Joseph's
12 report, that the Frontier Project will have a positive
13 net present value.

14 Now, turning to Stand.Earth's submissions where we
15 were blessed by the presence of Mr. Sanzillo.
16 Stand.Earth raised concerns regarding Teck's ability to
17 financially support Frontier, especially in light of
18 certain risk to the price of oil in future years. In
19 support of its submissions, Stand.Earth adduced a
20 report and provided evidence through Mr. Sanzillo of
21 the Institute for Energy Economics and Financial
22 Analysis.

23 We submit that his report should be completely
24 disregarded for two reasons. First, the evidence
25 provided by Mr. Sanzillo is biased and not objective;
26 and, second, he cannot be relied upon as an expert to

1 speak to the matters on which he purported to opine.

2 First, Mr. Sanzillo and his report cannot be
3 relied upon as they present a biased view of Frontier
4 and Teck. Mr. Sanzillo's evidence intends to push the
5 advocacy agenda of the IEEFA and Oil Change
6 International.

7 It was established in Teck's examination of
8 Mr. Sanzillos' evidence that the stated mandate of the
9 IEFA, the group which Mr. Sanzillo cofounded and
10 through which the report was published, is, quote:

11 (as read)

12 To curtail the use of fossil fuels in the
13 energy sector [quote].

14 Additionally, the 2015 model upon which Mr. Sanzillo
15 relied was lifted from the Oil Change International
16 report, whose stated mandate is, quote: (as read)

17 To be advocacy organization focused on
18 exposing the true cost of fossil fuels and
19 facilitating the coming transition towards
20 clean energy [quote].

21 Finally, the author of the Oil Change International
22 report has been involved with organizations such as
23 Greenpeace UK. All these factors together illuminate a
24 picture of bias upon bias upon bias being presented to
25 the Panel as independent and objective facts. This is
26 simply not true.

1 Second, and more importantly, Mr. Sanzillo's
2 assertion that he is an expert qualified to speak on
3 the matters in his report is patently false. First,
4 while in his direct evidence he stated that he had run
5 an updated 2018 model in August, he conceded in
6 cross-examination that he did not in actually -- he did
7 not actually run a new 2018 model, indicating that the
8 evidence he currently presents to the Panel is
9 out-of-date.

10 Second, Mr. Sanzillo cited the International
11 Maritime Organization's establishment of new sulphur
12 standards as a source of significant risk to the cost
13 of oil on the international market. However, when
14 pressed on the issue, it was clear that Mr. Sanzillo
15 was entirely unaware of the actual workings of the IMO
16 regulations.

17 For instance, when asked whether the only way to
18 comply with the IMO regulations is for ships to switch
19 to low-sulphur fuel, Mr. Sanzillo responded that he
20 had, quote, "no idea", quote, and that, quote: (as
21 read)

22 [He] was not an expert in the micro workings
23 of the regulatory implementation of this
24 intervention [quote].

25 Ultimately, he conceded that there, quote, "are an
26 abundant number of ways", quote, to comply with the new

1 IMO regulations, which did not involve changing the
2 consumption of the types of oils currently used.

3 It is shocking he is giving such unreliable
4 evidence, given that he could've spent ten minutes on
5 the IMO website, like we did, and educated himself
6 further about these matters.

7 Finally, while Mr. Sanzillo bases his opinion on
8 Teck's market capitalization, when asked for basic
9 information regarding Teck's stock price, market cap,
10 and shares outstanding, Mr. Sanzillo was unable to
11 provide an accurate estimate of Teck's market
12 capitalization and was entirely unable to provide the
13 Panel with any information regarding Teck's shares.

14 Additionally, while Mr. Sanzillo had predicted
15 similar economic weaknesses in Teck's contribution to
16 Fort Hills, he conceded that, contrary to his opinion
17 provided in a 2015 report, Teck not only met the
18 outlays required of him on Fort Hills, but increased
19 its ownership, all while managing to increase Teck's
20 share value significantly.

21 Therefore, the biased and completely uninformed
22 position put forth by Mr. Sanzillo and Stand.Earth
23 should not be given any weight by this Panel, and
24 Stand.Earth's submissions should be disregarded in
25 their entirety. To call Mr. Sanzillo an expert is to
26 render the word "expert" completely meaningless.

1 Finally, I turn to the submissions made by
2 Mr. Regan Boychuk on behalf of Keepers of the
3 Athabasca. Mr. Boychuk's report and testimony focused
4 on Teck's environmental liability accounting practices.
5 His evidence should not be considered persuasive by the
6 Panel because of his significant lack of authority to
7 qualify as an expert on the matter and because his
8 assessment of Teck's accounting practices is both
9 irrelevant and incorrect.

10 It should be noted that Mr. Boychuk's report and
11 testimony opines on topics ranging from accounting
12 practices; to legal analysis of both Canadian and
13 American jurisprudence; and, domestic, American, and
14 international financial regimes.

15 Mr. Boychuk, however, has no qualifications to
16 lead the Panel to conclude he has expertise in any one
17 of these fields, let alone all of them. If we look at
18 Mr. Boychuk's CV filed as CEEA Document 496, we see
19 that he has no accounting designation, no law degree,
20 and no financial background. His formal education
21 consists only on matters relating to political science,
22 and he has had no work experience to supplement the
23 significant dearth of formal education he has on any of
24 these matters.

25 Moreover, when asked whether his paper entitled
26 "Alberta Over a Barrel Environmental Liabilities and

1 Royalties in the Oil Sands" was peer-reviewed,
2 Mr. Boychuk confirmed that it was not peer-reviewed,
3 nor was it submitted to an academic journal; and,
4 rather, he relied on the fact that a number of his
5 expert friends had reviewed it. Mr. Boychuk is not an
6 expert, and his lack of qualifications mean that his
7 report should be given no weight.

8 Mr. Chairman, Mr. Boychuk submitted that Teck,
9 quote: (as read)

10 Manipulates accounting estimates to suit the
11 financial needs of the moment [quote].

12 Respectfully, Mr. Chairman, Mr. Boychuk is an
13 independent researcher with a background in social
14 sciences, and that is all. He is not a certified
15 professional accountant; he has never been employed by
16 a third-party financial statement auditing firm, nor
17 has he ever been retained by a publicly traded company
18 to conduct financial analysis or auditing. His report
19 is largely a critique of national and international
20 reporting standards for environmental liabilities. It
21 is broad in scope and fails to substantively address
22 the Frontier Project in a meaningful way, relying
23 largely on speculation and fear mongering over
24 contingent liabilities.

25 Mr. Chairman, Teck is required to comply with the
26 international financial reporting standards, or "IFRS".

1 Teck's financial statements undergo internal review,
2 reviewed by its board of directors and reviewed by
3 independent third-party auditors
4 PricewaterhouseCoopers. Teck submits that this is
5 perfectly sufficient evidence to show that Teck does
6 not manipulate accounting estimates to suit the
7 financial needs of the time.

8 Mr. Chairman, Teck has shown that it operates with
9 integrity and honesty in all operations, and I'm here
10 spending time on this part of the argument, sir,
11 because those kinds of allegations in a regulatory form
12 are completely uncalled for and unprofessional.

13 As evidenced by the economic impact analysis, the
14 uniform discounted CBAs we've seen, and Teck's
15 reporting requirements, this project will provide a
16 significant net benefit to the region, the province,
17 and the country and will do so in a transparent
18 matter -- manner.

19 Simply put, Mr. Chairman, Mr. Boychuk's criticisms
20 of Teck's accounting practices are irrelevant.

21 As was stated by Mr. McFadyen in Teck's direct
22 examination, quote: (as read)

23 As a public company, Teck is required to
24 follow international financial reporting
25 standards for financial reporting purposes.

26 As with all public companies, Teck's

1 financial statements are audited by
2 independent auditors -- and in Teck's case,
3 PricewaterhouseCoopers -- and the estimates
4 or judgment made by Teck as part of its
5 financial statements is audited, and it is
6 confirmed that these are reasonable and
7 applied on a consistent basis. Any new
8 estimates or judgment or change in
9 methodology are assessed and scrutinized by
10 Teck's management, Teck's audit committee,
11 and PwC. This applies to reporting and
12 disclosure around reclamation liabilities,
13 including discount rates and other inputs
14 [closed quote].

15 In short and respectfully, Mr. Chair, it is not the
16 place of this Panel to assess Teck's accounting
17 practices; and even if it were, Teck's accounting
18 practices are audited annually and in compliance with
19 best accounting practice as determined by third-party
20 registered and chartered accountants, in contrast to
21 Mr. Boychuk's layperson's view.

22 Mr. Chair, also raised by OSEC was a point that --
23 Teck's ability to comply with the Carbon
24 Competitiveness Incentive Regulation. Teck does not
25 agree with the analysis conducted by OSEC and doesn't
26 view the assumptions used in their analysis as

1 realistic. Teck's design GHG emissions and estimate
2 for the project was calculated on a conservative basis,
3 which is appropriate for the environmental impact
4 assessment of the project.

5 However, OSEC uses conservative design estimate of
6 the GHG emissions and for its cost of carbon analysis
7 for the project. OSEC assumes that there wouldn't be
8 any emission improvements or reductions whatsoever
9 during the 41-year operating life of the project.

10 Sir, this is not a realistic assumption based on
11 the well-documented actions being taken within COSIA to
12 accelerate environmental performance improvements,
13 including reductions in GHG emissions.

14 Mr. Chairman, we also note that OSEC assumed that
15 the output-based allocation will continue to become
16 more stringent every year for the next 50 years.
17 However, it is important to recognize that other
18 oil-producing jurisdictions have been slow to implement
19 carbon legislation. Canada and Alberta recognize
20 that -- the practical need to maintain the
21 competitiveness of Canada's trade-exposed sectors to
22 prevent carbon leakage to less-progressive
23 jurisdictions.

24 It's critical for three reasons. First, industry
25 has to be able to afford to invest in the development
26 and deployment of less carbon intensive technology.

1 Second, if industry is not competitive, there will be
2 less carbon tax revenue generated to support research
3 and development of low carbon technology. Third, to
4 survive, companies may be driven to move production of
5 trade-exposed commodities to less-progressive
6 jurisdictions. Therefore, we don't agree with OSEC's
7 assumption. We are confident that Teck's estimated
8 cost of carbon is reasonable.

9 To conclude my submissions regarding project
10 viability and economics, I will reiterate what was said
11 by Mr. McFadyen in his opening statement. Quote: (as
12 read)

13 Frontier is a long-life, high-quality asset.
14 It's in a stable and progressive jurisdiction
15 with access to a world-class supply chain and
16 workforce. Frontier is a project that will
17 help responsibly meet energy demand whilst
18 generating significant value for the region,
19 for the province, and for Canada [closed
20 quote].

21 Mr. Chair, I'm about to turn to environmental issues.
22 This might be an ideal time for a break.

23 THE CHAIR: Thank you, Mr. Ignasiak. Yes.

24 We'll take our morning break now. It's about
25 10:30, so we'll resume about 10 to 11. Thank you.

26 (ADJOURNMENT)

1 Ruling

2 THE CHAIR: Thank you. Please be seated.

3 Mr. Ignasiak, before we get started, we'll deal
4 with the preliminary matters first.

5 So with respect to the first matter, which was the
6 request by OSEC to include a figure as part of its
7 final oral argument, just to be clear, the Panel has
8 not seen the actual figure, but based on what we
9 understand, there does seem to be a fairness issue
10 involved here. Even if the -- all of the data is on
11 the record, as Mr. Robinson suggests, then the
12 repackaging and the reanalysis of the data could be a
13 slippery slope, as Mr. Ignasiak points out. Depending
14 on how it's done and what that reanalysis looks like,
15 it could essentially be creating new evidence which, of
16 course, hasn't been subject to a -- to testing or
17 cross-examination. Therefore, the Panel is not
18 inclined to allow the figure.

19 So, Mr. Robinson, we'll suggest that you'll have
20 to walk us through the data that you think is relevant
21 for the Panel's consideration.

22 So that was the first item. The second item was
23 Regan Boychuk appearing -- sorry -- providing oral and
24 final argument. You know, the Panel recognizes that
25 sometimes when argument is given by representatives,
26 occasionally those representative have provided some

1 evidence during the proceeding, but experts are put
2 forward as being neutral and objective, and that allows
3 them to provide opinion evidence. If that expert then
4 moves to provide final oral argument, they move into
5 more of an advocacy role, and that jeopardizes their
6 status as an independent expert.

7 So the Panel considers it inappropriate for
8 Mr. Boychuk to provide oral final argument and suggests
9 the Keepers will have to have one of their other
10 representatives read Mr. Boychuk's information or their
11 oral argument on behalf of the group.

12 So any issues arising from those two items?

13 Seeing none, Mr. Ignasiak, you can continue.

14 Final Submissions by Mr. Ignasiak

15 MR. IGNASIAK: Thank you, Mr. Chairman.

16 It's been brought to my attention that I utterly
17 failed and missed a word during that previous 70-some
18 pages of argument. I earlier had said that Dr. Joseph
19 acknowledged that if he did not use the dual discount
20 approach, the Frontier Project would have had a net
21 present value. I meant to say he acknowledged that had
22 he not used the dual discount approach, the Frontier
23 Project would have had a positive net present value. I
24 left the word "positive" out. I apologize for that
25 oversight.

26 Turning now to environmental issues that arose

1 throughout the proceedings. Mr. Chair, I'll first
2 address greenhouse gases and climate change; second,
3 acid deposition; third, mercury and methylmercury; and
4 I'll then turn to issues regarding wildlife. Finally,
5 I'll address water quantity and quality, as well as
6 human health and tailings management before turning to
7 other issues.

8 Before I proceed, however, I think it's important
9 to clarify Teck's position regarding the submissions of
10 three parties, SierraClub BC, Council of Canadians, and
11 The Wilderness Committee. We'll refer to these groups
12 together as the "ENGOS". These three groups raise
13 several concerns regarding environmental impacts,
14 climate change, and project economics and viability.
15 Teck notes, however, that many of the ENGOS' concerns
16 are not specifically related to the Frontier Project.
17 These groups all appear to oppose any type of fossil
18 fuel whatsoever with little regard for recognizing the
19 complexities of producing a much-needed resource that
20 is in high demand around the world. They fail to
21 identify specific project-related issues, and their
22 concerns should be given little, if any, weight as a
23 result.

24 Moreover, concerns raised by the ENGOS expose
25 unfamiliarity with Teck's project proposal and
26 application. Much of the concerns raised by these

1 groups, including concerns regarding greenhouse gases,
2 tailings issues, consultation with Indigenous
3 communities are extensively dealt with and considered
4 in Teck's project application, project update, and
5 several rounds of SIRs, or supplemental information
6 request responses. As such, Teck will rely on its
7 record already in front of the Panel to respond to the
8 ENGO concerns.

9 Just a couple of further points regarding
10 SierraClub BC specifically. First, SierraClub BC read
11 into the record several letters from individuals who
12 are not present at the hearing and, consequently, whose
13 evidence could not be tested on cross-examination.
14 This is similarly the case with various reports and
15 articles that were not presented to Teck prior to the
16 hearing and whose authors were not present for
17 cross-examination. These letters, articles, and
18 reports should, therefore, be given no weight.

19 Finally, we note SierraClub BC brought up certain
20 incidents related to legacy issues at other project
21 sites. Teck acknowledges that, unfortunately,
22 incidents do happen from time to time because of the
23 complexities involved with recovering resources that
24 the world needs. However, what is most important to
25 take away from these incidents is that Teck has dealt
26 with these issues and is continuing to do so in a

1 responsible, transparent, committed matter -- manner.
2 As Mr. McFadyen stated in his opening statement, quote:
3 (as read)

4 When things don't -- don't go to plan, we
5 consistently have shown that we've committed
6 to do the right thing by being open, by being
7 transparent, and remaining responsible. We
8 don't walk away [quote].

9 Mr. Chair, turning to greenhouse gases and climate
10 change. Several parties raises concerns regarding GHG
11 emissions and the impact of the project on climate
12 change. Teck, too, shares concerns about climate
13 change and believes human activities can affect the
14 system. Therefore, Teck is taking significant and real
15 action to reduce greenhouse gas emissions from the
16 project and contribute to ever-improving technology to
17 bring emissions down throughout the life of the
18 project.

19 Climate change is a long-term issue requiring
20 long-term solutions. With realistic targets and
21 investment in technology, Teck is well-positioned to
22 meet the climate-change challenge on a global scale.
23 Teck's commitment to reducing its carbon footprint as
24 much as possible is evident in the project design.
25 This includes the use of cogeneration for heat and
26 power needs and use of the paraffinic froth treatment

1 that drastically reduces emissions per barrel of oil.
2 Once in production, Frontier will be amongst the lowest
3 GHG intensity of all Canadian oil sands producers and
4 will have a lower greenhouse intensity than half of all
5 the oil currently refined in the United States.

6 Teck is also confident that Frontier will be
7 aligned with Alberta and Canada's carbon emission
8 goals. Teck is confident that it'll fit under
9 Alberta's 100 megaton limit and that Frontier's
10 relatively low greenhouse intensity oil will displace
11 reliance on higher intensity oil in the Canadian and
12 international market.

13 Mr. Chiasson put it succinctly when OSEC asked
14 Teck how Frontier's consistent with Alberta and
15 Canada's emission goals. In response, Mr. Chaseson
16 stated, and I quote: (as read)

17 Teck feels that the Frontier Project is
18 consistent with Alberta's and Canada's
19 climate-action goals because it offers a
20 lower intensity GHG production compared to
21 other sources of oil production from the oil
22 sands. In fact, it's in the top 25 percent --
23 [or] it would be in the top 25 percent of all
24 oil sands production sources on an
25 apples-to-apples, wheels-to-wheels basis.
26 The world needs oil. Oil forecasts have

1 suggested that the demand is going to
2 increase. And how Teck feels it's
3 contributing to climate action and moving
4 towards a low-carbon economy is that the
5 production from Frontier is going to be a
6 lower emissions intensity than other oil
7 sands sources [close quote].

8 Moreover, Teck, through COSIA and its own
9 initiatives, is committed to continue to look for ways
10 to continuously improve and adapt as technologies
11 emerge to reduce emissions intensity. As discussed by
12 Mr. Chiasson during OSEC's cross-examination, Teck has
13 already filed and seen Document 268 in its answer to
14 JRP Package 3, Table 3.15(b) (1), information regarding
15 the technologies that Teck will be keeping a close eye
16 on to see if there's an opportunity to improve the
17 project and the project's emissions intensity. While
18 committing to these technologies is currently
19 premature, as they are still emerging, through Teck's
20 commitment to adaptive management, Teck will be able to
21 implement them if an opportunity arises.

22 And this is a critical point, Mr. Chair. To
23 impose conditions respecting the project's emissions
24 intensity, and the adoption of set timelines respecting
25 implementing new technology could very well handcuff
26 Teck in the future. Adaptive management ensures these

1 new technologies are adopted when most effective and
2 efficient. Teck submits that its adaptive management
3 process can ensure the Panel that Teck will adopt the
4 best available technology economically achievable, or
5 "BATEA", as further progress is made and that a
6 condition in respect of specific technologies is
7 neither necessary nor most efficient.

8 To conclude our points on greenhouse gas
9 emissions, Mr. Chair, a number of intervenor
10 submissions are regarding achieving Canada's target and
11 how this project is consistent with Alberta's 100
12 megaton cap. It's not the role of this Panel to manage
13 Canada's commitment to global targets nor to administer
14 Alberta's 100 megaton cap on oil sands emissions.
15 Achieving our international targets is a complex
16 challenge that must be addressed by the provincial and
17 federal governments through initiatives and policy
18 guidelines put forth by the respective governments. To
19 reject this project on the basis of aspirational goals
20 that have not yet been fully developed by government
21 would be to deny this project on an arbitrary basis.

22 Finally, Mr. Chair, prior to releasing Teck's
23 Panel, you asked a very important question related to
24 different perception associated with the GHG intensity
25 of oil sands development. Specifically, you asked, and
26 I quote: (as read)

1 Teck claims it will have one of the lowest
2 GHG intensities of any of the Canadian oil
3 sands projects and be a top quartile
4 best-in-class performer. But other hearing
5 participants seem to have a very different
6 view of the project. I'm just wondering if
7 you have any comments on why the disparity of
8 views [close quote]?

9 Mr. Chair, it is true that a number of interveners
10 are of the view that oil sands production is
11 inconsistent with the lower-carbon-intensity world?
12 But this view is erroneous. The evidence is clear in
13 this proceeding that oil sands production from mines
14 using a paraffinic froth treatment process is globally
15 competitive on a GHG-intensity basis. As Mr. Chiasson
16 said in response to your question, and, again, I quote:
17 (as read)

18 Teck is of the view the world has a demand
19 for that oil and by putting forward a
20 low-GHG-intensity option, that -- overall
21 that's better for Alberta, that's better for
22 Canada, that's better for the global move
23 towards a low-intensity economy because those
24 barrels would be produced or replaced by
25 larger intensity than what Teck can do [close
26 quote].

1 Mr. Chair, turn now to acid deposition. Teck
2 completed a detailed assessment of acid deposition that
3 concluded there would be negligible risk of
4 acidification of water bodies as well as negligible
5 risk of terrestrial exceedance in the regional study
6 area under both the application and planned development
7 cases. That assessment followed established procedures
8 and frameworks.

9 Despite there virtually -- sorry. Despite there
10 being virtually no questions from any parties through
11 five rounds of SIRs and two rounds of AIRs regarding
12 acid deposition, three weeks prior to the hearing, ECCC
13 submitted an assessment claiming that a large
14 geographical region was at risk of acidification.
15 Specifically, in Dr. Makar's rebuttal report and direct
16 evidence, Dr. Makar concluded that five lakes were
17 found to be acidifying over the full RAMP data set
18 years and ten lakes were becoming more acidic between
19 2010 to 2015. At the hearing, ECCC further claimed
20 that the large physical region that was at risk was,
21 quote: (as read)

22 Approximately half the size of the province
23 of Alberta [quote].

24 Teck is of the view that the ECCC submissions and
25 submissions by Dr. Makar are incomplete, inaccurate,
26 and are the cause for potential confusion. Therefore,

1 they should not be given any weight by the Panel.

2 With regards to the incompleteness of the
3 assessment done by ECCC, there are several issues.
4 First, the ECCC submission was based on a study
5 published by Makar et al. in 2018 which failed to
6 include any project-specific information or any future
7 development scenarios. The study was wholly unrelated
8 to the Frontier Project.

9 Second, while the Makar et al. 2018 study cited
10 the oil sands regional aquatic monitoring program, or
11 "RAMP", data, it did not specify how the data was used,
12 nor did it comment on RAMP's analytical or statistical
13 techniques. Third, ECCC failed to cite lake
14 acidification in their submission and appeared to only
15 have looked at air-quality modelling.

16 Fourth, based on RAMP data, the lakes referred to
17 in Makar et al. as showing recent acidification have
18 since increased in pH and, therefore, have actually
19 been showing a decrease in acidity. The actual facts
20 show the incomplete -- show the complete opposite of
21 the predictions of the model used in Makar et al. which
22 the ECCC submission failed to address.

23 Fifth, the ECCC submission failed to address the
24 fact that the 50 RAMP-monitored lakes have
25 predominantly been increasing in pH over the last
26 15 years. As stated by RAMP in 2016, quote: (as read)

1 An increase in pH such as this is the
2 opposite effect expected under an
3 acidification scenario [close quote].

4 All lakes were found to be either increasing or not
5 significantly changing in pH over this time period.

6 In addition to incompleteness, Teck's experts also
7 identified several significant errors in the ECCC acid
8 deposition analysis. Mr. Chair, Teck further submits
9 that not only are Dr. Makar's submissions incomplete
10 and include significant errors, they also introduce
11 significant confusion for the Panel.

12 First, conclusions relied upon by Makar et al. to
13 show recent acidification were based on a study with a
14 vastly different temporal reference time frame; that
15 being the 1940s to the 1970s, a time frame prior to the
16 majority of oil sands development and before current
17 emissions controls. In fact, both of the lakes
18 referred to as showing recent acidification have since
19 increased in pH and, as stated earlier, showed the
20 opposite of what Dr. Makar's model predicted based on
21 contemporary data.

22 Second, Dr. Makar's reanalysis of RAMP data was
23 rife with data cherry-picking and confirmation bias.
24 In essence, Dr. Makar made his findings of increasing
25 regional acidity by deliberately excluding the lack of
26 significance of any decreasing trends and by

1 reanalyzing a shorter subset of the data to skew his
2 findings in favour of acidification. To justify
3 ignoring the statistical significance, Dr. Makar quoted
4 the American Statistical Association as stating, quote:
5 (as read)

6 Scientific conclusions and business or policy
7 decisions should not be based on whether a
8 p-value passes a specific threshold [quote].

9 This, however, was a clear mischaracterization of
10 the academic literature. It was established during
11 cross-examination that not only did Dr. Makar's own
12 published work itself rely on the p-value for
13 statistical significance, but it was further shown that
14 Dr. Makar had misquoted the paper he had relied upon to
15 dismiss the applicability of the p-value. When shown
16 that his reproduction of the quote omitted the key term
17 "only" where the quote should have said, quote:

18 (as read)

19 Scientific conclusions and business or policy
20 decisions should not be based only on whether
21 a p-value passes a specific threshold
22 [quote].

23 Dr. Makar conceded that, "I should have the 'only' in
24 there". And when asked to identify where in the ASA
25 paper the ASA had concluded the use of the p-value was
26 invalid, Dr. Makar conceded that he had

1 mischaracterized the ASA's conclusions.

2 As described by Dr. Parrott on behalf of the
3 Government of Canada, the p-value is a valid test of
4 significance provided that it is not the sole line of
5 evidence. This interpretation is in line with the
6 actual ASA recommendation and in line with both how
7 RAMP 2016 and Teck's response had treated the
8 statistical significance.

9 Finally and related to significance assessment,
10 the ECCC evidence misleads the Panel because it limited
11 its analysis only to lakes that are predicted to
12 decrease in pH, even though those decreases were very
13 small and not statistically significant, while ignoring
14 all other data showing the contrary. As stated in the
15 ASA's guidance on p-values and acknowledged by
16 Dr. Makar, the ASA wrote that, and I quote: (as read)

17 Cherry-picking promising findings, also known
18 by such terms as "data dredging",
19 "significance chasing", "significance
20 questing", "selective inference", and
21 "p-hacking", leads to asperous excess of
22 statistically significant results in the
23 published literature and should be vigorously
24 avoided [close quote].

25 Mr. Chair, this p-hacking or cherry-picking is
26 exactly what was done. As we had alluded to earlier,

1 Dr. Makar's reanalysis was done by assessing only a
2 subset of RAMP data in order to find more lakes with
3 decreasing pH. It is well-known and obvious from the
4 RAMP data that there is considerable variability in the
5 lake pH data. Therefore, the shorter the time frame,
6 the more likely it is that random variability will lead
7 to short-term declines in pH if statistical
8 significance is ignored, which it was. In other words,
9 Dr. Makar's assessment only looked for and took into
10 account confirming evidence.

11 For the foregoing reasons, Teck suggests that the
12 Panel should give no weight to the Government of
13 Canada's Submission Topic 5.2 or Dr. Makar's testimony.
14 Teck's conservative analysis of acidification that
15 concluded there would be negligible risk of
16 acidification of water bodies and terrestrial areas in
17 the regional study area under the application and
18 planned development cases should be preferred. This
19 remains unchallenged and should be relied upon by the
20 Panel.

21 Mr. Chairman, it is extremely concerning that a
22 public servant would unduly alarm the public with
23 claims that an area "as large as Germany" are being
24 acidified when all monitoring shows this is not the
25 case. The Energy Resources Conservation Board, as it
26 then was, in a case involving the Sturgeon upgrader

1 made clear that purported experts appearing before the
2 Panel should be cautious not to create needless alarm,
3 in particular, when it is not backed by evidence.

4 Specifically, the Board stated, and I quote: (as read)

5 The Board is seriously concerned that
6 Dr. Du's assertions may have inappropriately
7 and needlessly alarmed the residents. The
8 Board expects experts at an ERCB hearing to
9 have a better understanding of the material
10 before making definitively -- definitive and
11 potentially alarming statements [close
12 quote].

13 Mr. Chair, I'll now turn to discuss mercury and
14 methylmercury. ECCC has provided recommendations with
15 regards to monitoring and modelling the potential for
16 inorganic mercury and methylmercury to release to the
17 Peace Athabasca Delta as a result of the project. Teck
18 does not agree with Recommendation 7.2 and 7.3
19 regarding mercury and mercury methylation. With
20 respect to mercury and methylmercury levels in aquatic
21 environments, Dr. Steffen for ECCC stated, and I quote:
22 (as read)

23 If you flood an area and create a reservoir,
24 you have a lot of contributing factors that
25 will impact how mercury can be methylated
26 within that new reservoir system. What has

1 happened in many reservoirs that have been
2 built over time is that mercury spikes. It
3 can spike within a week or two of it being
4 flooded, depending on the ecosystem that is
5 there [close quote].

6 When asked whether Dr. Steffen was referring to
7 reservoirs that had been excavated, Dr. Steffen
8 indicated that she was referring to Lake Melville in
9 Labrador, an unexcavated hydro dam reservoir.

10 Mr. Chairman, Teck submits that this is not relevant or
11 analogous for fish habitat compensation lakes in the
12 oil sands region, particularly that proposed by Teck.

13 Teck proposes to fully excavate the fish habitat
14 compensation lake and the OSSP below grade and remove
15 all organic topsoils. Therefore, the most important
16 contributing factor that Dr. Steffen describes will be
17 absent. When asked whether Horizon Lake was fully
18 excavated, Ms. Martens of DFO confirmed that Horizon
19 Lake was only partially excavated. Again, Mr. Chair,
20 this is not analogous to Teck's proposed fish habitat
21 compensation lake, as Teck will fully excavate and
22 remove all organic topsoil.

23 Teck has voluntarily proposed to undertake this
24 removal at significant costs to itself. Teck submits
25 that there is little incentive to undertake this
26 removal recognized as a leading and effective

1 mitigation if Teck will simply be required to conduct
2 unprecedented modelling and monitoring being put
3 forward by ECCC in Recommendation 7.2 and 7.3 for an
4 oil sands compensation lake.

5 Dr. Steffen also provided clarification to her
6 prior statements about increasing mercury and
7 methylmercury levels. Specifically, she confirmed that
8 there was a slight increase in the maximum
9 concentration of Horizon Lake which is partly
10 unstripped and contains the organic matter that drives
11 the mercury methylation process, but that other lakes,
12 such as Muskeg Lake, have actually shown a decrease in
13 mercury and methylmercury concentrations. Teck agrees
14 with Dr. Steffen's clarification.

15 In addition, Teck submits that Ms. Martens'
16 evidence is more accurate. In response to whether
17 constructed compensation lakes are showing elevated
18 levels of mercury and methylmercury that exceed
19 background levels, Ms. Martens stated, and I quote:
20 (as read)

21 With each lake, we've received a number of
22 monitoring reports, and with each lake, we
23 have seen an increase in mercury both in the
24 water and in the fish with a consequent
25 decline afterwards.

26 Mr. Chairman, all fully excavated compensation

1 lakes considered in Teck's assessment show no measured
2 level of mercury or methylmercury that exceeded
3 background levels. These lakes are the most
4 representative analogues for Teck's proposed
5 compensation lake.

6 Also, Mr. Chairman, the draft detailed fisheries
7 offsetting plan in response to JRP IR 2.1 at
8 Appendix 2.1 includes mitigation, monitoring, and
9 adaptive management that will verify that the primary
10 mitigation of organic soil removal will be successful
11 in a manner consistent with existing compensation lakes
12 in the oil sands region. When asked whether other
13 producers have been required to conduct the monitoring
14 and modelling detailed in Recommendation 7.2 and 7.3,
15 Ms. Martens said: (as read)

16 Maybe not as what we're requesting of Teck.

17 When asked about -- when asked by the secretariat
18 about the mitigation measures to reduce adverse effects
19 of methylmercury accumulation, Ms. Martens stated,
20 quote: (as read)

21 To date, we have used removal of the
22 vegetation before putting water in the lake
23 as a mitigation. We still see a spike in
24 mercury initially, and then it comes down, as
25 we've previously discussed [quote].

26 Sir, not only does Teck propose to remove the

1 vegetation before putting water in, Teck proposes to go
2 further than the DFO requirements by removing the
3 organic soil horizon as well. Mr. Chairman,
4 Recommendation 7.3 proposes modelling of the downstream
5 environment and investigation of potential mitigation
6 measures for potential downstream loadings. ECCC
7 indicated that there are ten monitoring stations along
8 the Athabasca River. When asked whether they have
9 identified an increase in mercury or methylmercury
10 levels, Dr. Parrott for ECCC stated that, quote:

11 (as read)

12 My recollection is there were no trends in
13 mercury [quote].

14 And added that she would have to review the report if
15 certainty was required.

16 Teck has provided data showing 130 samples
17 collected by industry, government, and other sources in
18 the Athabasca River upstream and downstream of oil
19 sands development. This data shows that mercury is the
20 same as or even lower downstream of oil sands
21 developments.

22 Given that four compensation lakes currently
23 exist, there is credible evidence to show that mercury
24 generation and compensation lakes and potential
25 downstream transport in the Athabasca River is not an
26 issue.

1 Mr. Chairman, Teck submits that the downstream
2 monitoring and modelling requested within ECCC
3 Recommendation 7.3 is more appropriately addressed by
4 ongoing regional initiatives, such as the joint
5 Canada-Alberta implementation plan for oil sands
6 monitoring, or "JOSM", and that the responsibility for
7 monitoring regional impacts should not be placed on
8 Teck alone.

9 Teck has provided alternate language to ECCC
10 Recommendations 7.2 and 7.3 that it would agree to
11 with -- as a recommendation for mercury and mercury
12 methylation in -- and this is found in Teck's reply
13 submission dated September 12, 2018.

14 Mr. Chairman, Teck respectfully requests that
15 Teck's proposed language be included as a condition of
16 any approval and that the Panel not adopt ECCC proposed
17 Recommendations 7.2 and 7.3.

18 DFO also made recommendations with respect to
19 mercury and mercury methylation. DFO stated that its
20 intention in making Recommendation 5 was to support the
21 recommendations made by ECCC in their submission and
22 acknowledged their expertise and the concerns raised by
23 Indigenous communities.

24 Mr. Chairman, as you're well aware, Teck has
25 concluded agreements with all 14 Indigenous communities
26 it identified as being potentially affected by the

1 project. This means that Teck has sufficiently
2 addressed all outstanding concerns of these communities
3 that are within Teck's control.

4 In addition, Teck conducted a number of fisheries
5 offsetting workshops with government and Indigenous
6 communities. When asked whether these workshops
7 represented a collaborative process, Ms. Martens, who
8 attended most of the workshops on behalf of DFO,
9 agreed. DFO further stated, quote: (as read)

10 Should this project be approved and the
11 issuance of a Fisheries Act authorization be
12 sought by the proponent, any authorization
13 issued by DFO shall contain conditions and
14 ensure mitigation measures are implemented to
15 protect fish and fish habitat, monitoring and
16 follow-up programs to validate and verify
17 predictions are undertaken and that impacts
18 to fish and fish habitat are adequately
19 offset [close quote].

20 Mr. Chairman, Teck is in support of DFO's
21 Recommendation 5 for the project. In addition, Teck
22 submits that any subsequent conditions placed on Teck
23 via DFO approval should align with conditions attached
24 to other approved fish habitat compensation lakes in
25 the region that are on a positive trajectory to
26 becoming self-sustaining aquatic ecosystems.

1 Mr. Chairman, Health Canada has also recommended
2 the monitoring of methylmercury concentrations in fish
3 throughout the lifetime of the project in any water
4 body that could be potentially impacted by the project
5 and from which people are harvesting or consuming fish.

6 As indicated in Teck's reply submission, Teck
7 partially agrees with this recommendation, but believes
8 that appropriateness calls for limiting Teck's
9 monitoring efforts to the Frontier fish habitat
10 compensation lake. Mr. Chairman, monitoring any water
11 body that could be potentially impacted by the project
12 is simply not possible. Teck would have no way of
13 determining whether the impacts are arising from the
14 project -- from the Frontier Project or other
15 development.

16 Instead, if monitoring shows that Teck is directly
17 affecting watercourses or water bodies beyond the
18 compensation lake, Teck would address this through
19 their mitigation monitoring and adaptive management
20 plan. As such, Teck submits that monitoring of water
21 bodies other than Teck's fish habitat compensation lake
22 is most suitably and efficiently addressed by ongoing
23 regional initiatives such as JOSM.

24 Turning now to wildlife issues. Mr. Chairman,
25 Teck has outlined extensive measures to mitigate
26 potential environmental effects specific to wildlife as

1 is evidenced in our comprehensive and robust
2 environmental impact assessment. There are four
3 species or species groups that have been clearly
4 identified during this hearing process as being of
5 particular concern. These include, one, the Ronald
6 Lake bison herd; two, caribou; three, whooping crane;
7 and, four, migratory waterfowl. I'd like to now take a
8 moment to speak to each of these in turn.

9 As Mr. McFadyen indicated in his opening
10 statement, Teck fully recognizes and respects the
11 importance of the Ronald Lake bison herd to Indigenous
12 communities. As such, Teck has engaged an extensive
13 consultation with stakeholder groups and Indigenous
14 communities alike in this regard, listening and
15 carefully considering the concerns of these groups.

16 Teck understands that the concerns surrounding the
17 Ronald Lake bison herd relate to its long-term
18 viability as a disease-free population, Indigenous
19 communities' ability to hunt the herd sustainably, and
20 the importance of hunting to cultural maintenance.

21 Mr. Chairman, Panel, I'll remind you that Teck has
22 worked alongside Indigenous communities and government
23 agencies for many years. Teck has gone above and
24 beyond just mitigating potential project impacts on the
25 herd. Teck has taken tangible action and demonstrated
26 real results, showing what can happen when there's

1 thoughtful collaboration between industry stakeholders
2 and Indigenous communities. Not only has Teck
3 developed a project-specific mitigation monitoring and
4 adaptive management plan specifically for the herd,
5 but, as highlighted by Mr. McFadyen in his opening
6 statement, Teck has been a leader in the following
7 additional initiatives: One, funding and support for
8 additional studies of the Ronald Lake bison herd; two,
9 support to the Province towards a development of a Wood
10 bison management plan; three, advocating alongside
11 First Nations for the listing of the herd under the
12 Wildlife Act which has resulted in the prohibition of
13 non-Indigenous hunting; and, four, supporting efforts
14 led by Mikisew Cree First Nation to establish a
15 conservation stewardship area south of Wood Buffalo
16 National Park. Teck has already contributed
17 approximately \$2.5 million in support of these efforts.

18 Mr. Chairman, Teck's efforts will not stop here.
19 Teck is also committed to continuing its participation
20 in and funding of the Ronald Lake bison herd technical
21 team. This multi-stakeholder group is well poised to
22 support the sound management of the herd and its range
23 and, therefore, contribute to its long-term viability
24 as a disease-free population capable of sustainably
25 supporting Indigenous hunting. Teck's herd-specific
26 mitigation, monitoring, and adaptive management plan

1 includes measures Teck is committed to undertaking to
2 limit the size of disturbance, implementing ongoing
3 reclamation to create high-quality bison habitat, and
4 ensuring safe wildlife movement corridors.

5 Mr. Chairman, we submit that taking into account these
6 mitigation measures, the Frontier Project is unlikely
7 to have a significant adverse effect on the Ronald Lake
8 bison herd.

9 Panel, the most significant risk to the herd is
10 disease transmission from the bison in Wood Buffalo
11 National Park. This risk has existed since the
12 diseased bison were introduced into the park nearly a
13 century ago. This risk exists today, and it will exist
14 whether or not the Frontier Project proceeds. The
15 Frontier Project will not increase the risk of disease
16 transmission, and Teck looks forward to continuing to
17 play its part in promoting the viability and
18 sustainability of the herd.

19 I would now like to speak briefly to the evidence
20 that supports this conclusion. Mr. Chair, Teck
21 acknowledges and respects Indigenous concerns
22 respecting the herd; however, Teck submits that laying
23 responsibility for the herd solely on Teck would allow
24 the responsible party, namely government, to set aside
25 their obligations. Sir, this is both improper and
26 jeopardizes the viability of the herd.

1 Teck agrees that more work needs to be done with
2 respect to the herd. Teck also agrees that evidence
3 shows that the herd will be displaced. However, Teck
4 is of the view that the evidence clearly shows that:
5 One, the herd will continue to have sufficient forage
6 or carrying capacity; and, two, that the evidence put
7 forth by certain experts, such as Mr. Wiacek,
8 Dr. Komers, and Dr. Kopach is unreliable. As such,
9 Teck submits that when considering mitigation measures
10 for the Ronald Lake bison herd, this Panel ought to
11 focus on the joint recommendations and submissions put
12 forth by ACFN, MCFN, and Teck.

13 Mr. Chair, the point must be borne out of the
14 evidence and must be shown rigorously through
15 traditional knowledge and/or western science.

16 To take bold assertions of significant impact or
17 current harm at face value would undermine the
18 legitimacy of the decision-making process. Teck does
19 not dispute the traditional knowledge it has relied
20 upon or advanced by others in this proceeding; however,
21 Teck submits that its evidence and its rigor therein is
22 the most reliable for this Panel when determining
23 project-specific effects.

24 Teck's analysis were developed and vetted by a
25 highly competent team, including in-house experts on
26 habitat suitability, connectivity, and population

1 viability analysis model, bison researchers from the
2 University of Alberta, as well as third-party
3 biologists like John Nishi, a recognized expert on Wood
4 bison who recently updated the Alberta Government's
5 bison status report for Alberta in 2017. As such, Teck
6 commits that the most reliable evidence that ought to
7 be relied upon by the Board or by the Panel is that
8 provided by Teck.

9 As stated by DeMars et al. 2016 and shown in
10 Information Package 10, the Ronald Lake bison herd has
11 not changed its range since radiotelemetry monitoring
12 began in 2013 prior to the 2014 winter drilling
13 program. In addition, Teck's winter forage carrying
14 capacity assessment clearly demonstrates that the herd
15 is not forage-limited in winter under existing
16 conditions. However, based on current knowledge of the
17 distribution of diseased bison in Wood Buffalo National
18 Park, relative to the range of the Ronald Lake herd,
19 the risk of the transmission of bovine Tuberculosis and
20 Brucellosis from park bison to the Ronald Lake bison
21 herd under existing conditions is high. ECCC and Parks
22 Canada, in their August 31 filings, both agreed that
23 the current risk of disease transmission is high.

24 If the project is approved as proposed, Ronald
25 Lake bison will be displaced from the project
26 disturbance area as Teck stated in JRP IR 7.5(c) and

1 7.5(e); however, Teck's winter forage carrying capacity
2 assessment clearly demonstrates that Ronald Lake bison
3 herd is not forage-limited in winter within its range
4 with the project at full buildout because the herd is
5 not forage-limited within the range; and given that the
6 herd's range has not changed since radiotelemetry
7 monitoring began in 2013, the project is unlikely to
8 increase the risk of disease transmission, a risk that
9 under existing conditions has been agreed by all
10 parties to already be high.

11 Teck filed a rebuttal to Parks Canada and ECCC's
12 August 31, 2018, filings. That report clearly refutes
13 ECCC's and Parks Canada's findings regarding the
14 effects of the project on the Ronald Lake bison herd.
15 First, when new information regarding forage production
16 collected by the University of Alberta is applied to
17 the carrying capacity assessment and conservative but
18 reasonable reductions in forageability or availability
19 as a result of winter conditions are applied, the
20 winter carrying capacity estimate of the herd's range
21 continues to demonstrate that the herd is not
22 forage-limited in winter and, indeed, can support
23 growth of the -- growth of the herd.

24 In addition, Panel, there will be no increase in
25 linear disturbances within the herd's range north of
26 the project, and, therefore, arguments put forward by

1 Parks Canada regarding potential changes to
2 predator/prey relationships as a result of increases to
3 linear disturbance are not applicable.

4 ECCC's arguments regarding potential changes to
5 predator/prey relationships between bison and wolves
6 using research results pertaining to moose/wolf
7 relationships in the oil sands region was also clearly
8 refuted by Teck.

9 The March 2018 aerial survey of the Ronald Lake
10 bison herd by Alberta Environment and Parks provided an
11 estimate of 174 bison at a 95 percent confidence
12 interval. AEP stated that based on the wide confidence
13 intervals and the confidence interval of herd estimate
14 in 2015, there is no evidence to suggest that the herd
15 has declined.

16 In their direct evidence, Parks Canada stated that
17 it disagreed with Teck's position that the herd may be
18 increasing. This was not Teck's perspective going into
19 the hearing. Teck reported census numbers for the herd
20 in their response to JRP IR 7.3(a). In their
21 September 12 submission to the JRP, Teck provided AEP's
22 updated census 2018 results of 174 and their
23 statement -- meaning Alberta Environment's statement --
24 that there was no evidence of the herd declining.

25 However, under cross-examination regarding the
26 size of the herd, Ms. Cumming of Parks Canada appeared

1 to suggest that the herd was declining when she stated,
2 quote: (as read)

3 The numbers speak for themselves. There were
4 210 bison in 2015 and 133 in 2018. And so we
5 questioned the increasing trend as a result
6 of that [quote].

7 As such, Mr. Chair, Parks Canada's knowledge of the
8 herd appears to be incomplete. The population
9 viability analysis, or "PVA", for the herd submitted by
10 Teck in their September 12, 2018, filing demonstrated
11 that the herd could tolerate a small amount of annual
12 harvest, about five to ten, but the sex ratio
13 composition of the harvest had a large effect on the
14 likelihood of population survival. Additional
15 mortality as a result of harvest rather than habitat
16 loss because of the project appeared largely
17 responsible for projected population declines.

18 The rigorous quantitative connectivity analysis
19 submitted by Teck in their September twenty -- 12, 2018
20 filing demonstrated that although there are areas of
21 high and low connectivity within the herd's range,
22 there are no barriers to movement.

23 Dr. Komers presented the results of his Ronald
24 Lake bison herd population viability analysis, or
25 "PVA". He stated, and I quote: (as read)

26 Because of the poor data on the Ronald Lake

1 bison herd, I created a default population
2 that behaves approximately like an average
3 population, bison population in Canada
4 [closed quote].

5 He agreed that by running a hundred iterations, he
6 obtained a relatively crude picture of the Ronald Lake
7 bison herd based on his estimated input data and that a
8 more rigorous description of the simulated population's
9 behaviour would be obtained if more iterations were
10 run.

11 Given that Dr. Komers' own report states that the
12 herd is relatively stable, the fact that his default
13 model suggests that the herd has only a 73 percent
14 chance of persisting over the next hundred years
15 suggests that his input data are problematic and
16 unreliable, as Teck described in their September 12,
17 2018, submissions.

18 In addition, given that most introduced Wood bison
19 herds tend to grow even with predation, for instance
20 the MacKenzie and Hay Zama herds, this again suggests
21 that Komers' input data do not represent those of an
22 average bison population in Canada.

23 When questioned regarding the effect of running
24 1,000 or more versus 100 iterations for his PVA,
25 Dr. Komers said that running more iterations would
26 reduce the spread around the average, quote, "but they

1 still have an average", quote.

2 This response is misleading because it suggests
3 that the average itself is not affected by the choice
4 of 100 iterations. This is incorrect. Each time a
5 hundred iterations are run, the average will likely
6 fluctuate greatly between zero and 100 percent
7 survival. Dr. Komers provided the Panel with one run
8 of a hundred iterations, which provides little
9 information regarding the likelihood of the herd's
10 survival over one hundred years. Increasing the number
11 of iterations increases our confidence in the average,
12 as well as reducing the variation around the average.

13 For these reasons and many others outlined in
14 Teck's September 12th, 2018, submission, Dr. Komers'
15 PVA cannot be relied upon for final conclusions on the
16 future of the herd.

17 Dr. Kopach presented the results of his habitat
18 availability and connectivity modelling. As described
19 in September's -- in Teck's September 12, 2018,
20 submission to the JRP, Dr. Kopach violated standard
21 resource selection function, or "RSF", model-building
22 protocols in his habitat availability modelling making
23 the model's outputs unreliable.

24 His connectivity modelling is equally unreliable.
25 For example, he applied a resistance value of 10,000 to
26 water, reflecting the observation that bison rarely

1 cross rivers or spend times on lakes even in winter.
2 According to the same report, resistance values of
3 1 through 1,000 were applied to reflect low-to-high
4 resistance to bison movement. Under cross-examination,
5 he stated that a value of 10,000 did not mean that
6 water was a complete barrier. There's just a lower
7 likelihood of it being crossed. Although technically
8 correct, Dr. Kopach's response is misleading. With
9 most resistance values on the landscape between 1 and
10 1,000, assigning a value of 10,000 to water makes a
11 likelihood of crossing water features virtually
12 impossible in Dr. Kopach's modelling framework.

13 When questioned of that number may be lower if
14 there are more examples of bison crossing water
15 features, he stated, quote: (as read)

16 I guess I would go by what the data showed us
17 [quote].

18 Teck's connectivity analysis clearly showed that Ronald
19 Lake bison cross water features regularly, and as
20 stated by Dr. Kopach, IK suggests that the herd has
21 crossed the Athabasca River in the vicinity of the
22 Firebag River in the past. For these reasons and many
23 others outlined in Teck's September 12 submission,
24 Kopach's habitat availability and connectivity
25 modelling cannot be relied upon for decision-making.

26 Before we turn to additional unreliable evidence

1 regarding the Ronald Lake bison herd, we want to
2 address the reliable evidence. Several witnesses,
3 including Dr. Shury with Parks Canada, and
4 Mr. Beauchamp, a Wood bison outfitter that has hunted
5 the Ronald Lake bison herd, both indicated that bison
6 can swim. This further substantiates the peer-reviewed
7 literature on the subject.

8 Mr. Peter Hoffman, Daryl Shevolup, and Chuck Shevolup,
9 all trappers whose trap lines overlap the Ronald Lake
10 bison herd range, and the outfitter Mr. Beauchamp spoke
11 about their own harvest of bison from the Ronald Lake
12 herd, as well as harvests of others.

13 Mr. Peter Hoffman indicated that Mr. Beauchamp
14 harvested as many as eight bison in one day, and
15 Mr. Daryl Shevolup described a harvest as a, quote,
16 "free for all", quote, that has been going on for a,
17 quote, "long, long time", quote.

18 Based on those discussions at the hearing and
19 Teck's PVA results that suggest a harvest greater than
20 five to ten bison annually could result in a decline,
21 it is entirely plausible that the herd has not grown in
22 the past decade because of human harvest. The
23 cessation of non-Indigenous hunting since 2016 is
24 likely to improve the potential for the Ronald Lake
25 herd to grow, and their population size will continue
26 to be monitored by Alberta Environment and Parks.

1 Dr. Shury confirmed in his paper and his testimony
2 that disease transmission from the diseased Wood bison
3 in Wood Buffalo National Park to neighbouring
4 disease-free herds has been an issue for a long time.
5 He also agreed that disease transmission can be managed
6 but that getting policy decision-makers to make the
7 hard decisions that might be unpopular in terms of the
8 best way of managing that disease would be very
9 challenging.

10 Ms. Cumming testified that a multi-stakeholder
11 committee chaired by Parks Canada would be looking at
12 disease risk for the Wood Buffalo National Park,
13 including the transmission of disease to the Ronald
14 Lake bison herd, whether the project goes ahead or not.

15 According to Ms. Cumming's testimony, although
16 Parks Canada was starting to become aware around 2014
17 to 2015 that the Ronald Lake bison herd was
18 disease-free, Parks Canada's only now beginning a
19 process to address this issue. It is only an issue
20 with the Ronald Lake herd now because of the work
21 initiated by AEP in 2012 and supported by Teck and MCFN
22 that concluded that the herd is disease-free.

23 Although Parks Canada committed to developing a
24 disease containment strategy by 2012 in their 2010 Wood
25 Buffalo National Park management plan, a strategy has
26 yet to be produced. Notwithstanding the recognition by

1 Parks Canada that since 2013 to 2014, there has been
2 and continues to be a high risk of disease transmission
3 from diseased Wood Buffalo National Park bison to the
4 disease-free Ronald Lake herd.

5 Even though containment of disease has been a key
6 issue for Wood Buffalo National Park for a long time,
7 Ms. Cumming did not provide a timeline for the
8 completion of this work.

9 I will turn now to the only other technical
10 evidence on bison submitted by the Government of Canada
11 through Mr. Wiacek, ECCC's witness on bison.

12 Sir, Mr. Wiacek's evidence was both overstated and
13 inaccurate on several occasions, which I will
14 summarize. First, in his direct evidence, he stated
15 that Teck relied on recent telemetry data to describe
16 the core range in reference to the population level
17 95 percent UD and the female winter 80 percent UD used
18 by Teck.

19 An 80 percent UD is considered a core range.
20 However, the 95 percent UD is not a core range of the
21 herd and should not be referred to as such. As Teck
22 outlined in their September 2012-2018 [sic] submission,
23 a commonly recognized definition of an animal's home
24 range is the smallest area associated with a 95 percent
25 probability of finding that animal. As such, the
26 choice of the 95 percent UD based on the composite of

1 males and females from 2013 to 2017 to describe the
2 herd's range is reasonable.

3 Second, in his written submission, Mr. Wiacek
4 referenced Belanger et al. 2017 as his support for the
5 use of the 99.9 percent utilization distribution to
6 determine the range of the herd; he stated that, and I
7 quote: (as read)

8 Although Teck did not evaluate total range,
9 recent work by Belanger et al. on Ronald Lake
10 bison is focused on a 99 percent UD [closed
11 quote].

12 However, in his testimony, he agreed that the only
13 place the 99.9 percent was used in that report was in
14 an appendix that discussed an analysis of forage
15 production by land cover type and that all discussion
16 of home ranges in Belanger et al. used the 80 and
17 95 percent.

18 Mr. Chair, Belanger's report did not focus on the
19 99 percent UD, and Mr. Wiacek misrepresented this to
20 the Panel.

21 Third, Mr. Wiacek misled the Panel when discussing
22 carrying capacity in the calculations he used to
23 determine carrying capacity of the Ronald Lake herd.
24 In his direct evidence, he stated that his approach was
25 supported by other literature including Hamilton 2005
26 and, again, that other studies, including Teck's, used

1 both adjustments to calculate carrying capacity.

2 In cross-examination, he was asked if Hamilton did
3 one adjustment for snow and ice cover, and that
4 adjustment was a reduction of 66 percent. He responded
5 by saying that, quote: (as read)

6 Hamilton also did a different amount of
7 clipping of vegetation to account for
8 difference in the grazing intensity of bison.
9 So he incorporated a grazing amount
10 adjustment using a different method by
11 clipping the height of vegetation much higher
12 than you are typically doing in other studies
13 for forage biomass [closed quote].

14 Further, he stated that the Hamilton et al. 2005 study
15 was different from Hamilton's 2005 thesis and that the
16 latter provided additional detail that was not provided
17 in Hamilton et al. 2005.

18 First, there is no difference in the description
19 of methods regarding clipping provided by both reports.
20 Both of those are on the record.

21 Second, the clipping height used by Hamilton, 7 to
22 8 centimetres, although greater than what is typically
23 used when determining forage production, does not
24 approach the two-thirds value of the height of
25 preferred forage species, 45 to 81 centimetres, like
26 *Carex atherodes* Mr. Wiacek used in his calculations.

1 To arrive at ECCC's conclusion that the herd was
2 possibly limited -- or, sorry, that the herd was
3 possibly forage limited if the project was approved,
4 Mr. Wiacek reduced forage production by almost
5 92 percent in the application case by including
6 2 reductions of 67 percent and an additional 25 percent
7 reduction to account for the potential of weeds across
8 the entire bison range. Mr. Wiacek could not point to
9 any other literature to support his approach.

10 Third, Mr. Wiacek stated in his testimony that he
11 did not rely on the MSES 2017 report and that it did
12 not influence ECCC's conclusions in any way. However,
13 in ECCC's August 31 submission, he referred to the MSES
14 report explicitly several times to support key ECCC
15 conclusions.

16 Specifically, Mr. Wiacek referred to Figure 2 in
17 MSES 2017 as evidence that the Ronald Lake bison herd
18 did not range as far into Wood Buffalo National Park as
19 they do now. Based on this figure and Parks Canada
20 aerial survey data, he concludes that the most
21 plausible hypotheses for long-term separation and
22 isolation of the herds is limited historical incursion
23 of Ronald Lake bison into Wood Buffalo National Park.

24 This information was used to support a key ECCC
25 conclusion, that it is unlikely that the current risk
26 is representative of historical conditions and may

1 reflect a recent shift in the range of the Ronald Lake
2 herd. He also referred to results of the PVA conducted
3 by MSES to support his arguments that the herd's
4 viability is at risk without any critical evaluation of
5 the PVA.

6 In his testimony, Dr. Komers stated that ECCC did
7 not discuss his work with him before they used it to
8 support their positions.

9 Overall, Teck submits that the submission and
10 testimony of Mr. Wiacek are both misleading and
11 incorrect in terms of the Ronald Lake bison herd and
12 should not be given any weight by this Panel.

13 Mr. Chair, during the course of this hearing, we
14 have heard concerns regarding caribou --

15 Mr. Chair, I see we're at five after noon. I'm in
16 your hands. This might be an opportune time if you're
17 looking for a noon-type lunch break.

18 THE CHAIR: Sure. Let's do that. Let's
19 take our lunch break now. We'll take one hour, and
20 we'll be back at five after 1. Thank you.

21

22 PROCEEDINGS ADJOURNED UNTIL 1:05 PM

23

24

25

26

1 Proceedings taken at Govier Hall, Calgary, Alberta

2

3 December 11, 2018 Afternoon Session

4

5 A. Bolton The Chair

6 R. McManus Hearing Commissioner

7 W. Klassen Hearing Commissioner

8

9 M. LaCasse AER Counsel

10 A. Doebele AER Counsel

11 T. Wheaton AER Staff

12 D. Campbell AER Staff

13 A. Shukulkina AER Staff

14

15 C. Birchall Canadian Environmental

16 Assessment Agency

17 D. Haddon Canadian Environmental

18 Assessment Agency

19

20 M. Ignasiak For Teck Resources Limited

21 J. Fontaine For Teck Resources Limited

22 D. Chu For Teck Resources Limited

23

24 D. Yewchuk For Canadian Parks and

25 Wilderness Society Northern

26 Alberta

1 B. Robinson For Oil Sands Environmental
 2 Coalition
 3 K. Stillwell For Oil Sands Environmental
 4 Coalition
 5
 6 J. Malcolm Original Fort McMurray First
 7 Nation and Clearwater First
 8 Nation
 9
 10 M. Gustafson Mikisew Cree First Nation
 11 K. Brooks Mikisew Cree First Nation
 12
 13 R. Drummond Government of Canada
 14 J. Elford Government of Canada
 15
 16 J. Asterick Keepers of the Athabasca
 17
 18 C. Longacre, RPR, CSR(A) Official Court Reporter
 19 A. Porco, CSR(A) Official Court Reporter
 20
 21 _____
 21 (PROCEEDINGS COMMENCED AT 1:04 PM)
 22 THE CHAIR: Thank you. Please be seated.
 23 Whenever you're ready, Mr. Ignasiak.
 24 Final Submissions by Mr. Ignasiak
 25 MR. IGNASIAK: Thank you, Mr. Chair.
 26 I was about to turn to caribou before we took the

1 lunch break.

2 So we've heard concerns about caribou during the
3 course of the hearing, specifically, the SierraClub
4 indicated in its direct evidence that the proposed mine
5 would disrupt critical habitat for endangered caribou
6 and that the, quote: (as read)

7 Project is completely contradictory to the
8 well-being of the SARA woodland caribou in
9 the region [closed quote].

10 In addition, ECCC has made submissions regarding
11 caribou.

12 Mr. Chair, we must reiterate that the project does
13 not fall within the currently designated woodland
14 caribou ranges as defined by the Government of Canada
15 and the Government of Alberta. Considering this, the
16 project will not remove any habitat or displace any
17 caribou from the Red Earth or Richardson herd ranges;
18 however, recent GPS collar data has shown that caribou
19 from the Red Earth range may move through the PDA. The
20 GPS collar data does not indicate any movement between
21 the Red Earth and Richardson herds.

22 As caribou from the Red Earth herd were recorded
23 in the Frontier Project PDA, potential project effects
24 were assessed within two study areas, a regional study
25 area and a caribou range study area. The intent of the
26 caribou range study area was to examine direct project

1 and cumulative effects on the caribou ranges. Based on
2 our assessment, consequence ratings for the vegetation
3 and wildlife RSA were high; and for the caribou range
4 study area, consequence ratings were moderate, as
5 project-related effects on caribou in the ranges are
6 negligible.

7 Finally, as we indicated in our direct
8 examination, the range plans for the Red Earth,
9 Richardson, and west side of the Athabasca River ranges
10 have not yet been released by Alberta Environment and
11 Parks. When these plans become available, Teck, in
12 collaboration with regulators and Indigenous
13 communities, will assess the recommendations and
14 determine whether or to what extent they are
15 appropriate to include in the project's mitigation and
16 monitoring plans and as part of Teck's adaptive
17 management process.

18 In addition, Mr. Chair, Teck reminds the Panel
19 that the ACFN/Teck joint recommendations contain
20 mitigation and management commitments with respect to
21 caribou.

22 Teck submits that imposing conditions with respect
23 to caribou in the range would result in an inefficient
24 duplication of processes; therefore, Teck submits that
25 no conditions ought to be imposed on the Frontier
26 Project regarding caribou habitat or range.

1 I'd like to now spend some time on whooping crane.
2 A number of intervenors raised points regarding
3 potential project effects on whooping crane;
4 specifically, the loss of stopover habitat and the
5 potential to be exposed to contaminants during
6 migration were identified.

7 Teck submits that the mortality risk due to the
8 project and cumulative oil sands development is not
9 expected to result in a change in the abundance of
10 whooping crane population. Teck acknowledges that the
11 project may result in changes to stopover habitat
12 distribution during migration; however, Teck is of the
13 view that, overall, the sustainability of the regional
14 whooping crane population and the breeding population
15 of Wood Buffalo National Park will not be impacted.

16 Parks Canada agency submitted that the effects to
17 certain desired outcomes of the whooping crane are
18 likely to be significant because: (a) the small
19 population size and standing is the only
20 self-sustaining and remaining wild population
21 correspond to whooping cranes vulnerability to a single
22 mortality, however the low likelihood of that
23 occurrence; (b) reclamation efforts to return stopover
24 habitat to whooping crane will take a substantial
25 amount of time; and (c) the effects are taking place to
26 a population that is at risk and reside in a national

1 park and world heritage site. I'd like to discuss each
2 of these points in turn.

3 Parks Canada submits that one factor leading to
4 likely significant adverse effects is a vulnerability
5 to a single mortality, however low the likelihood of
6 that occurrence. Parks Canada has essentially said,
7 Even one is too many.

8 First, as was demonstrated during the hearing,
9 Teck is of the view that the mortality risk due to the
10 project and cumulative oil sands development is not
11 expected to result in a change in the abundance of the
12 whooping crane population. This has not been
13 challenged by any party.

14 In addition, Parks Canada's strategic
15 environmental assessment for the park concluded a
16 positive future trend and potential future down listing
17 of the whooping crane from their current endangered
18 status.

19 Teck would also like to remind the Panel that it
20 is committed to implementing best-available
21 bird-deterrent technology for the project as outlined
22 in its waterfowl protection plan. And Teck is
23 committed to investigating and implementing, if
24 possible, additional systems for deterring whooping
25 cranes.

26 Mr. Chairman, simply put, the risk posed to

1 whooping crane abundance due to this project and
2 cumulative oil sands development has been overstated.
3 This is perhaps most evident by the fact that from the
4 very first oil sands development until now, the
5 whooping crane population has been increasing.

6 Second, Parks Canada has submitted that
7 significant adverse effects are likely due to the
8 timeline for reclamation and loss of stopover habitat.

9 Mr. Chairman, Teck acknowledges that some stopover
10 habitat will be temporarily lost as a result of the
11 project. However, the ECCC information on whooping
12 crane from 2016 that was presented to the UNESCO
13 reactive mission concludes that although all cranes
14 migrate over the oil sands region, few use the region
15 as stopover, and most stopovers are short in duration.
16 In addition, of those recorded landings and stopovers,
17 there have only been several instances of birds near or
18 adjacent to process-affected water bodies, with no
19 reported mortalities in the history of oil sands
20 operations. Teck's footprint represents a small
21 portion of the overall oil sands development footprint.

22 In addition, the reclamation timeline can hardly
23 be characterized as substantial. Rather, Teck's
24 progressive reclamation will ensure that this minor
25 loss of stopover habitat is restored as quickly as
26 possible.

1 Finally, Mr. Chairman, this minor loss of stopover
2 habitat pales in comparison to the loss of critical
3 habitat for SARA-listed species that Parks Canada has
4 historically allowed in national parks and world
5 heritage sites for projects.

6 As we have demonstrated with whooping crane, the
7 objectives for the species are unlikely to be affected
8 if the Frontier Project is approved. During the
9 hearing, the Canadian Parks and Wilderness Society, or
10 "CPAWS", reference a Shell Jackpine expansion Joint
11 Review Panel report wherein the JRP stated, and I
12 quote: (as read)

13 Although the Panel notes that the number of
14 bird landings tends to be low and the birds
15 tend not to be species at risk, the Panels
16 believe that any effect on species at risk
17 would be significant [closed quote].

18 CPAWS submits that the JRP for this hearing ought to
19 adopt the same approach.

20 With respect, Teck disagrees. Teck submits that
21 in addition to the argument advanced by Teck earlier
22 with respect to determinations of significance, the
23 circumstances surrounding whooping crane are now
24 materially different than what was before the JRP in
25 the Shell Jackpine Mine expansion hearing.

26 During the Shell JME hearing, the Panel was

1 presented with evidence that there were then
2 66 breeding pairs and that 40 breeding pairs were
3 required to maintain the whooping crane population;
4 therefore, due to the small size of the whooping crane
5 population, any mortality could have significant
6 negative population level consequences.

7 In contrast, the whooping crane population
8 currently exhibits a positive future trend, and this
9 occurred alongside oil sands development.

10 In addition, Dr. St. Clair has estimated the
11 population size to be about 430 birds with 100 breeding
12 pairs. Mr. Wiacek estimated the population size of
13 breeding pairs to be in the 180s. This has
14 significantly improved from the 66 breeding pairs just
15 six years ago. As such, Teck is in agreement that
16 whooping crane management is one of the greatest
17 success stories in wildlife conservation.

18 Therefore, Teck is of the view that because the
19 whooping crane population is no longer fragile, an
20 effect to an individual ought not to be used as the bar
21 for significance as potential project effects are not
22 expected to threaten the sustainability of the Aransas
23 Wood Buffalo whooping crane population, nor affect the
24 population from reaching its recovery strategy goal and
25 future down listing from its current endangered status.

26 Mr. Chair, I'd like to now address the concerns

1 regarding migratory waterfowl. Parks Canada identified
2 a concern regarding migratory waterfowl and the
3 potential for contact with tailings ponds resulting in
4 mortality. Teck's assessment acknowledges the risk of
5 mortality for birds from tailings ponds; however, Teck
6 notes that regional monitoring programs contributed to
7 by oil sands producers, including Teck, such as the oil
8 sands birds monitoring plan, show that the number of
9 birds killed per year due to interactions with tailing
10 ponds is small compared to other sources of mortality.

11 Therefore, while the potential for bird fatalities
12 is, regrettably, greater than zero, they are not
13 predicted to have a measurable effect on the
14 sustainability of bird populations, including waterfowl
15 and other water birds. Rather, in stark contrast to
16 the small number of bird fatalities reported annually
17 as a result of oil sands development, tens of millions
18 of waterfowl are harvested annually as a means of
19 conservation; and millions of shore birds, waterfowl,
20 and other water birds are killed annually due to cats
21 and collisions with transmission lines.

22 In addition, Teck is committed to implementing
23 best-available bird-deterrent technology. Further,
24 Teck has agreed with Parks Canada's recommendation
25 that, if approved, Teck should participate with the oil
26 sands birds technical committee.

1 Mr. Chairman, ECCC expressed concerns with the
2 level of conservatism of Teck's avian risk assessment,
3 which is Attachment 11 to Teck's September 12, 2018,
4 submission. Mr. Chairman, let me begin by noting that
5 Teck's assessment, which included a 30-day exposure
6 scenario, was, indeed, deemed conservative and an
7 unlikely situation to occur to by ECCC. Where ECCC
8 believes there is a lack of conservatism, however, is
9 with respect -- is with respect to Teck's use of
10 12 constituents of oil sands processed water and not
11 certain other constituents that may be present in oil
12 sands processed water. ECCC submitted that other
13 notable toxic constituents present in oil sands
14 processed water include Naphthenic acids, polycyclic
15 aromatic compounds, and salt and ions. As such, ECCC
16 stated, and I quote: (as read)

17 To base ingestion exposure on only 12 metals
18 and omitting other well-documented
19 contaminants of potential concern that are
20 toxic to wildlife and that are present in oil
21 sands processed water is not deemed a
22 conservative approach [closed quote].

23 When asked whether assessing these other constituents
24 that could be present in oil sands processed water
25 would've resulted in a more conservative assessment,
26 Mr. Mundy of ECCC stated, and I quote: (as read)

1 I think it was necessary to take those
2 constituents into consideration. They make a
3 bigger piece of the effluent puzzle,
4 basically [closed quote].

5 When asked if Mr. Mundy was aware of any toxicological
6 reference value for waterfowl for the constituents
7 referenced, Mr. Mundy of ECCC stated -- and again I
8 quote: (as read)

9 It's my understanding that there aren't any
10 toxic reference values in the literature
11 specific to those compounds [closed quote].

12 Mr. Chairman, Teck submits that not including an
13 assessment of constituents for which toxicological
14 reference values are unknown is not sufficient evidence
15 to draw the conclusion that Teck was not conservative.
16 Indeed, as acknowledged by ECCC Teck's assessment was
17 conservative in other regards.

18 Teck submits that it used the best-available
19 information in conducting its assessment and that
20 monitoring of the potential effects of other
21 constituents of oil sands processed water is best
22 addressed through ongoing collaborative work under the
23 lower Athabasca region tailings management framework
24 for mineable Athabasca oil sands and regional
25 initiatives such as JOSM.

26 Overall, Mr. Chair, Teck is confident that

1 employing the best-available bird-deterrent technology
2 will effectively mitigate and minimize potential bird
3 fatalities so that, comparatively, these numbers in the
4 oil sands region remain small.

5 Now, on to water -- water quality. Specifically,
6 several parties expressed concerns regarding the
7 quality of water in the Peace Athabasca Delta and the
8 Athabasca River. This included the Government of
9 Canada, MCFN, ACFN, Keepers of the Athabasca, and the
10 trappers.

11 Several such parties suggested that water quality
12 in the pad and the Athabasca River was affected because
13 they are unable to drink untreated water directly from
14 the river; however, the Government of Canada confirmed
15 that Health Canada does not recommend drinking
16 untreated matter -- sorry -- untreated water no matter
17 where you are, even in places you might perceive to be
18 pristine.

19 To reiterate the unchallenged conclusion in Teck's
20 EIA, I quote: (as read)

21 The project, in combination with other oil
22 sands developments, is predicted to have
23 negligible effects on acute and chronic
24 toxicity and tainting potential
25 concentrations in all receiving waters in the
26 aquatics LSA and RSA. The project, in

1 combination with other oil sands
2 developments, is predicted to have negligible
3 effects on aquatic health in Ronald Lake, Red
4 Clay, and Big Creeks and the Athabasca River
5 [closed quote].

6 In terms of water quantity, several parties expressed
7 concerns regarding the rate of water drawn from the
8 Athabasca River. This included the Government of
9 Canada, MCFN, ACFN, Keepers of the Athabasca, and the
10 trappers.

11 In addition, several parties expressed concerns
12 regarding the cumulative effects of oil sands
13 development on the Athabasca River and the pad. Teck
14 acknowledges that for those who make use of the pad and
15 for those who navigate down the Athabasca River, there
16 are concerns regarding water quantity, and Teck takes
17 those concerns very seriously, as evidenced by Teck's
18 commitments regarding water intake and quantity
19 management.

20 We acknowledge that the Athabasca River and pad
21 waterways are critical to supporting Indigenous rights
22 and access. Teck's hydrology evidence, which was
23 summarized by Mr. Speller, is as follows, quote:

24 (as read)

25 The project is predicted to result in
26 negligible changes in the Athabasca River

1 flow and water level. We predict mean
2 seasonal flow changes in the Athabasca River
3 due to the project's maximum water
4 withdrawals will range from 0.3 percent in
5 summer to 1.56 percent in winter. We predict
6 the maximum flow depth change to be
7 1 centimetre at the most critical navigation
8 point on the Athabasca River. To put this
9 1 centimetre in context, we predict water
10 level in the Athabasca River can decrease by
11 90 centimetres or increase by 28 centimetres,
12 depending on predicted potential climate
13 change scenarios.

14 These negligible changes in the
15 Athabasca River flow are predicted to result
16 in negligible changes to the hydrologic and
17 water level conditions in the Peace Athabasca
18 Delta. We predict the change in Lake
19 Athabasca water level due to the project is
20 also approximately 1 centimetre.

21 It is important to note that our
22 predictions assume the project is taking
23 water at its maximum water withdrawal rate of
24 4.2 metres cubed per second all yearlong and
25 throughout the mine life. The actual project
26 water withdrawal rates will be required to be

1 less than this most of the time during the
2 mine life to comply with the surface water
3 quantity management framework [quote].

4 In addition, Mr. Chair, with respect to the cumulative
5 effects of oil sands development on the Athabasca River
6 and the pad, Teck submits that the project in
7 conjunction with other developments are not expected to
8 reduce water levels in Lake Athabasca, restrict
9 navigation, or effect flooding of the Peace Athabasca
10 Delta.

11 With respect to navigability in the river, it is
12 important to take into account that dredging of the
13 Athabasca River stopped in 1996. This is consistent
14 with traditional knowledge tendered during the hearing.
15 Therefore, there is no evidence that water withdrawals
16 from this project will impact navigability. In
17 addition, as discussed previously, Teck has worked with
18 Indigenous communities to establish its approach to
19 water quantity management as evidenced in its joint
20 recommendations and submissions.

21 Communities have expressed general concern
22 regarding water levels in the pad, which is fed by both
23 the Athabasca River and the Peace River. Impacts on
24 the Peace River from developments that have been
25 undertaken are not something that this Panel can
26 address, and they are not in any way connected to the

1 Frontier Project.

2 Teck will note, however, that as indicated by
3 Dr. Peters of ECCC with the Government of Canada, under
4 natural conditions, the natural flows from the Peace
5 River were about 18,000 cubic metres per second, which
6 is then reduced by about 3 or 4,000 cubic metres per
7 second as a result of hydropower development. In
8 addition, Dr. Peters confirmed that oil sands water
9 withdrawals from the Athabasca River are in the range
10 of 4 cubic metres per second.

11 Put another way, Mr. Chair, any perceptible
12 changes to water levels in the pad resulting from human
13 activity are largely related to activities on the Peace
14 River as opposed to the Athabasca River.

15 Teck believes that its evidence is best with
16 respect to potential project-related effects. However,
17 Teck would also like to remind the Panel the joint
18 recommendations and submission established between
19 ACFN, MCFN, and Teck that also provide critical
20 measures to respond to these concerns. In addition,
21 Mr. Chair, Teck's hydrology assessment has been
22 unchallenged.

23 I'd like to now speak to concerns expressed
24 regarding human health. We heard from Dr. O'Connor on
25 behalf of Keepers of the Athabasca that there are
26 concerns regarding an increased level of cancer risks

1 and cancer clusters in the region and that these
2 elevated rates of cancers may be attributable to the
3 oil sands.

4 Mr. Bart Koppe addressed these concerns in his
5 direct evidence. He stated that, and I quote:

6 (as read)

7 Teck completed a comprehensive human health
8 risk assessment of its Frontier Project. The
9 HHRA followed an approach that's consistent
10 with guidance provided by regulatory agencies
11 like Health Canada and the United States
12 Environmental Protection Agency. The HHRA
13 included a detailed assessment of cancer
14 risks in the region, including the community
15 of Fort Chipewyan. The findings of the HHRA
16 indicate that the cancer risks associated
17 with the project are negligible [closed
18 quote].

19 Mr. Koppe also further confirmed that the updated
20 Alberta Health Services report on cancer incidents in
21 Fort Chipewyan was completed as scheduled, which
22 includes data for the period between 1997 to 2016.
23 This report is currently being shared with the
24 community, and Alberta Health Services will be leaving
25 it up to the community to decide whether the report
26 will be shared more broadly.

1 We also heard from Ms. Olsgard on behalf of MCFN.
2 Ms. Olsgard conducted an assessment of the risk of
3 increased cancer rates from inhalation and ingestion of
4 carcinogenic PAHs and arsenic in air, water, soil,
5 traditional plants, and fish wildlife tissues.
6 Ms. Olsgard's report concluded that all age classes,
7 toddlers, children, youth, adults, and elders, are at
8 risk of increased cancer rates.

9 Mr. Chair, as was evidenced in cross-examination
10 of Ms. Olsgard, her report contains significant
11 calculation errors. Ms. Olsgard completely failed to
12 validate the AERMOD model and explain how an
13 extraordinarily high hazard quotient was achieved,
14 despite there being no exceedances of any guidelines.
15 In addition, Ms. Olsgard relied upon the AERMOD model
16 for distances of 50 kilometres to beyond
17 200 kilometres, all distances that greatly exceed the
18 limitations of the model.

19 Ms. Olsgard not only failed to point to any
20 authority for its use beyond 50 kilometres, Ms. Olsgard
21 actually agreed that there is no regulatory authority
22 in North America that says to use the AERMOD model at
23 distances beyond 50 kilometres.

24 Mr. Chairman, Teck submits that it is clearly
25 obvious Ms. Olsgard's report should be given no weight
26 whatsoever in this proceeding.

1 I'd like to now spend a few minutes on lead.
2 Health Canada's Recommendation 4.4-2 seeks to have
3 Teck, and I quote: (as read)

4 Monitor for changes in lead concentrations in
5 environmental media for the duration of the
6 project. Environmental media include but are
7 not limited to: air, surface soils, water,
8 and sediment. If lead concentrations and
9 environmental media are increasing, country
10 foods should also be analyzed to reassess the
11 potential risk to human health [closed
12 quote].

13 When asked whether Health Canada agrees that the
14 estimated incremental changes to dietary lead exposure
15 in blood levels due to project activities are unlikely
16 to pose an acceptable risk to human health,
17 Mr. Pelletier, on behalf of Health Canada, agreed.

18 When asked whether Health Canada was of the view that
19 blood lead levels based on existing -- meaning
20 background -- dietary lead exposure estimates and based
21 on dietary exposure estimates, including
22 project-related activities, were expected to be within
23 the range of those reported for the general population.
24 Mr. Pelletier, on behalf of Health Canada said, quote,
25 "yes, we do", quote.

26 When asked whether Health Canada was of the view

1 that the population in the Athabasca region or oil
2 sands region generally has higher blood levels for
3 children or adults than elsewhere, Mr. Pelletier, on
4 behalf of Health Canada said, quote, "no, we didn't
5 indicate that", quote.

6 Finally, Mr. Chairman, when asked whether it would
7 be appropriate for Teck to take ownership of
8 environmental media monitoring with respect to blood
9 lead levels or whether it should be incorporated into
10 current regional monitoring efforts, Mr. Pelletier,
11 again on behalf of Health Canada, stated, quote:
12 (as read)

13 As long as what we are recommended is covered
14 at some point, we are satisfied with what
15 would be happening [quote].

16 To which Ms. Laforest added, quote: (as read)

17 Our concern is that the monitoring be done
18 and not necessarily -- we are not privy -- we
19 don't necessarily know who is the best
20 position to do that, but just a concern for
21 human health is that it be done [quote].

22 Mr. Chair, Teck submits that it has serious concerns
23 regarding any responsibility as a private corporation
24 for the collection of health information of the
25 region's residents, as it would invariably raise
26 significant privacy concerns.

1 Sir, Teck provided independent lines of evidence
2 from researchers at the ultra-trace metal laboratory at
3 the University of Alberta that show that lead
4 concentrations are low in the Athabasca oil sands
5 region, and in particular, quote, "extremely low",
6 quote, in the Athabasca River. These studies apply to
7 several media, such as water, snow, dust, and moss.

8 To summarize with respect to lead, Health Canada
9 agreed that the Frontier Project is not expected to
10 pose an unacceptable risk to human health and that
11 blood lead levels in the Athabasca region are expected
12 to remain within the range of those reported for the
13 general Canadian population. Therefore, Teck does not
14 agree with Health Canada's Recommendation 4.4-2 that
15 Teck be required to monitor for changes in lead
16 concentrations in environmental media for the duration
17 of the project. If deemed necessary, such monitoring
18 activities are better addressed through regional
19 initiatives like JOSM.

20 I'll now turn to another area that has been raised
21 during the course of the hearing, and that is
22 reclamation and biodiversity. In terms of Teck's
23 reclamation plan, it has been discussed at some length
24 at this hearing. I think what is most important to
25 note is that Teck is currently following reclamation
26 best practices as recommended by Alberta Environment

1 and Parks. Teck is also taking many other steps
2 regarding biodiversity, including implementing its own
3 voluntary vision of net positive impact, or "NPI".

4 Mr. Simon Dyer, on behalf of OSEC, proposed an
5 offset ratio of 4 to 1 directly into the project
6 approval. This value, however, is arbitrary and has no
7 basis in actual mitigation efficacy. Sir, it is
8 premature to begin the design of any offset. However,
9 Teck recognizes that the Panel may decide that
10 additional mitigation measures are required, including
11 biodiversity offsets. Teck is willing to pursue
12 biodiversity offsets for residual environmental
13 effects; however, it is important to recognize that
14 Teck is examining this voluntarily in the absence of
15 clear, regulatory guidance, process, and precedent.

16 At this time, Teck is able to commit to the
17 following: One, completing the biodiversity management
18 planning process to identify biodiversity elements to
19 be considered for offsetting residual project effects,
20 understanding that the biodiversity management plan can
21 only provide context for negotiation of a conservation
22 agreement because there are real and practical
23 limitations to realizing meaningful biodiversity
24 offsets in Alberta; two, engaging with regulators,
25 Indigenous communities, and stakeholders during the
26 biodiversity management planning process and during

1 ongoing work being completed to understand and define
2 how biodiversity offsets might be realized in Alberta;
3 three, negotiating a conservation agreement with ECCC
4 that includes input from the AER and AEP and that
5 allows Teck to draw upon the BSA for biodiversity
6 offsets, should the Panel determine these to be
7 required for the project; four, provide routine reports
8 to ECCC, AER, and AEP after the project is operating
9 that summarizes progress made on the ability to realize
10 meaningful biodiversity offsets in Alberta and Teck's
11 progress towards achieving its voluntary vision of
12 having an NPI on biodiversity.

13 I'd like to now discuss the mine financial
14 security program. During the proceeding, a number of
15 intervenors expressed concerns regarding environmental
16 liability issues. Specifically, OSEC questioned how
17 Teck intended to meet its obligations under the mine
18 financial security program, or "MFSP", when security
19 against project resource or other Alberta resource is
20 not a form of security permitted under the conservation
21 and reclamation regulation.

22 Mr. Chairman, Panel, Teck submits that this is
23 incorrect, and security can be posted against Frontier
24 resource. In addition, the Government of Canada has
25 established a regulatory regime for reclamation under
26 the MFSP, and Teck is fully committed to complying with

1 the MFSP.

2 Ms. McNeill, on behalf of OSEC, stated that the
3 MFSP does not adequately secure mines closure and
4 reclamation clause due to, among other things, the
5 program's asset-to-liability approach. OSEC
6 consequently requested that the Panel require Teck to
7 post full security as a binding condition of any
8 forthcoming approval for the Frontier Project. As
9 indicated in the direct evidence of Ms. McNeill and
10 Ms. Lothian and is confirmed upon cross-examination,
11 Ms. McNeill and Ms. Lothian represent the Pembina
12 Institute on a number of multi-stakeholder working
13 groups that are hosted by the Government of Alberta.
14 When asked whether it would be fair to say the
15 Government of Alberta is informed of Ms. McNeill and
16 Ms. Lothian's concerns regarding the MFSP, Ms. McNeill
17 responded, quote, "Indeed they are [quote]".

18 Mr. Chairman, Teck demonstrated through
19 cross-examination that it intends to comply with the
20 MFSP. The content of MFSP and its efficacy is not
21 properly the subject of this proceeding. The
22 Government of Alberta's informed of the Pembina
23 Institute's concerns regarding the efficacy of the
24 MFSP, and should they choose to revise the MFSP, Teck
25 intends on upholding its commitment to comply. As
26 such, Teck submits that requiring Teck to post full

1 security would be discriminatory, would trench on the
2 authority of the Government of Alberta, and ought not
3 to be required of Teck.

4 Teck unequivocally stated that, quote: (as read)
5 Should the project be approved and built and
6 operated, in the very unlikely event that the
7 cash flow from Frontier wasn't sufficient to
8 be able to fund the reclamation activities,
9 the larger Teck, all of its operations, all
10 of its cash flow would be an extra measure of
11 security [quote].

12 When asked whether Teck would follow the MFSP
13 standard and guide through all phases of the project,
14 including construction, even before its eligible for a
15 deemed netback, Teck was clear in stating, quote:
16 (as read)

17 Absolutely. Teck will comply with the mine
18 financial security program. Absolutely
19 [quote].

20 Mr. Chairman, counsel for the secretariat noted
21 that Teck has been very clear and forthright that they
22 will comply with that security program. Therefore,
23 Mr. Chairman, Panel, you, our stakeholders, Indigenous
24 communities, Albertans, and Canadians can all rest
25 assured that Teck will fulfill its reclamation
26 responsibilities and leave the landscape with a net

1 positive impact. Teck is a responsible developer with
2 a hundred-year history and over 70 awards for his
3 reclamation efforts. Teck will do the right thing.

4 Turning now to the tailings management plan.
5 While Teck was not explicitly challenged on its plan,
6 Teck would like to highlight some of the key points for
7 the Panel's consideration. Teck's updated tailings
8 management plan for the project aligns with the
9 recently updated tailings management framework, or
10 "TMF", and AER Directive 85. Teck's tailing plan is
11 robust and draws from industry experience to ensure
12 best practices are in place for Frontier. Teck's
13 tailing management plan is necessarily tailored to
14 site-specific conditions which include a higher fines
15 ore content and limited construction material.

16 Teck's tailing management plan is operationally
17 robust because the fluid tailings treatment process is
18 decoupled from bitumen-recovery process to reduce the
19 risk of off-spec tailings performance. Teck's tailings
20 management plan is technically robust because it aligns
21 with COSIA and Syncrude learnings for implementation of
22 centrifuges, and it is environmentally sound because
23 soft-treated tailings are deposited in-pit below grade
24 without any active tailings dams in the closure
25 landscape.

26 Teck's fluid tailings volume profile is the key

1 regulatory instrument required by Directive 85. The
2 project's projected fluid tailings inventories are
3 significantly below Directive 85's requirements at all
4 relevant stages, including early production, operation,
5 and post end-of-mine life.

6 Mr. Chairman, Panel, Teck's plan to manage
7 tailings involves using the process of centrifuging
8 fine fluid tailings in order to create in-pit
9 centrifuge cake deposits. Centrifuging fine fluid
10 tailings has been widely used in the mining and oil
11 sands industry for decades and has been commercially
12 proven where, for example, Syncrude, in 2015, and
13 CNRL's Jackpine mine have implemented centrifuge
14 technology in their own operations.

15 A key advantage of the centrifuge technology is
16 that it allows proportional response to any observed
17 performance issues. Mitigations include adjusting
18 flocculation and/or coagulant dosage, adding more
19 centrifuges, adjusting sand cap thickness, and several
20 other measures.

21 Moreover, through its membership and participation
22 in COSIA, Teck will have access to further studies and
23 learnings regarding the use of centrifuges for treating
24 fluid tailings for roughly 20 years prior to when Teck
25 will begin implementing this technology in 2038 at
26 Frontier. Teck will also have nine years of experience

1 operating the project's centrifuge system on a small
2 scale before transitioning to large-scale operations.

3 Now, Teck is confident that its current tailings
4 management plans meets industry-best practices and
5 complies with Directive 85, and Teck will ensure that
6 any new developments, either through COSIA or Teck's
7 own operations, are diligently assessed as Teck strives
8 for continuous improvement.

9 Mr. Chair, before I conclude, I'd like to address
10 the ACFN and MCFN joint recommendations and submission.
11 As discussed throughout these proceedings and as I've
12 mentioned several times already today, Teck concluded
13 14 out of 14 agreements with affected Indigenous
14 communities. These agreements are incredibly
15 meaningful to Teck and the communities involved, and
16 Teck is very proud of having been able to achieve such
17 a level of collaboration with so many communities.

18 In terms of what these agreements mean to both
19 Teck and the Indigenous communities, these agreements
20 commit the parties to collaborative partnerships and
21 planning on critical environmental, Aboriginal rights,
22 and socioeconomic matters. They ensure that we are
23 accountable to each other and reinforce all parties'
24 commitments to mutual respect, cooperation, and
25 transparency for the life of the project and beyond.
26 The cooperation and level of respect between Teck and

1 the communities is made plenty evident by statements
2 made by, for example, Elder Terry Marten, who said, and
3 I quote: (as read)

4 If Canada or Alberta need crash courses on
5 how to work with people, they can ask Teck to
6 do it [quote].

7 In terms of what they mean to the community
8 specifically, they constitute significant funding of
9 community initiatives to support activities within the
10 community, commitments to ensure all project-specific
11 effects have been satisfactorily concluded by Teck, and
12 ensure the communities that Teck, true to its word,
13 will continue to come back to the table and continue to
14 work with the communities for the life of the project
15 and beyond.

16 In terms of what these agreements mean to Teck,
17 they represent Teck's commitment to seeking free prior
18 and informed consent. The parties should see from
19 these agreements that Teck has, in good faith, done
20 everything it can to address the project-specific
21 concerns that communities have and, more importantly,
22 that all concerns within Teck's control have been
23 resolved to the communities' satisfaction.

24 I'd like to speak about two agreements in
25 particular; the agreements between MCFN and ACFN. As
26 part of these agreements, joint submissions and

1 recommendations by the MCFN, ACFN, and Teck were
2 submitted. For a reference, the Teck/MCFN joint
3 submission is CEAA Document 497, Appendix 2; and the
4 Teck/ACFN joint recommendations are CEAA Document 571.
5 I will address some clarifications regarding the joint
6 recommendations and submissions from ACFN and MCFN
7 respectively.

8 But, first, Mr. Chair, Teck wishes to be clear
9 that should the Panel impose a condition on water
10 withdrawal, Teck believes the Panel should rely solely
11 on the language provided in the ACFN/Teck joint
12 recommendations and MCFN/Teck joint submission.
13 Notwithstanding Teck's water conservation and
14 management commitments, as well as its substantive
15 commitments made to ACFN and MCFN, the Frontier Project
16 would not be feasible if the river or water intake was
17 shut off every time Aboriginal extreme flow, or "AXF",
18 was reached.

19 Mr. Chair, I'd like to begin by speaking to Teck's
20 joint recommendations with ACFN. One of the major
21 concerns for Teck and ACFN was water quantity
22 associated with the Peace Athabasca River and the
23 project. Section 3 of the Teck ACFN joint
24 recommendations address this issue. These are
25 important recommendations, so it is important that we
26 take the time now to ensure we interpret them right.

1 Teck acknowledges ACFN continues to advocate for
2 full adoption of the Aboriginal extreme flow into the
3 surface water quantity management framework, or
4 "SWQMF". However, discussions of technical feasibility
5 and tradeoffs with respect to the size of the
6 off-storage water facilities ultimately resulted in
7 ACFN different agreement between ACFN and Teck. In
8 Section 3.2.d.i of the Teck/ACFN joint
9 recommendation --

10 (UNREPORTABLE SOUND)

11 MR. IGNASIAK: That was Siri, sir. Sorry. I
12 don't know ...

13 In 3.2.d.i of the Teck/ACFN joint recommendation,
14 mitigation measures in relation to the AXF are
15 addressed. In this section, Teck has agreed that
16 should the Aboriginal extreme flow be reached, which is
17 ACFN rate of flow of 500 cubic metres per second, that
18 Teck would do the following: One, plan water
19 withdrawals to avoid or minimize water intake,
20 including, where feasible, stopping or reducing river
21 water intake when Aboriginal extreme flow conditions
22 exist; two, use the offstream storage pond during
23 low-flow periods; three, fill up the offstream storage
24 pond during high-flow periods; four, demonstrate
25 continual improved performance on water intake by
26 decreasing water consumption over the life of the

1 project; and, five, advise the ACFN and relevant
2 authorities regarding Teck water-withdrawal management
3 actions.

4 Therefore, should the Joint Review Panel deem ACFN
5 specific condition necessary related to Aboriginal
6 extreme flow, Teck submits that the language provided
7 in the Teck/ACFN joint recommendations ought to be
8 relied upon.

9 Mr. Chair, on another matter and as per Joint
10 Recommendations 1.3 and 5.3, Teck supports Government
11 action to establish the BSA, as it will benefit
12 wildlife and migratory birds. However, Teck does not
13 believe that it is necessary to mitigate
14 project-specific effects over and above what Teck has
15 already included in its assessment.

16 Overall, Teck has worked tirelessly to ensure that
17 all of ACFN's concerns have been heard and addressed.
18 Teck satisfied the ACFN that their concerns will be
19 properly addressed. This is evidenced not only by the
20 agreement but Teck's reputation with the community as
21 stated by Chief Adam. Quote: (as read)

22 I want to be clear about one thing, we have a
23 positive relationship with Teck. They were
24 respectful, and we chose to negotiate
25 directly with them. We are not
26 antidevelopment, but development needs to be

1 done right, and we felt that Teck listened to
2 us [close quote].

3 Turning now to the MCFN/Teck joint submissions,
4 which, again, is CEAA Document 497, at Appendix 2, I'd
5 like to draw out some points of importance for the
6 Panel. First, similar to the point raised with the
7 ACFN/Teck joint recommendations regarding Aboriginal
8 extreme flow, what was agreed upon between Teck and
9 MCFN was that Teck would develop, and I quote:

10 (as read)

11 An operational plan for managing water
12 withdrawals to minimize water intake during
13 periods of low flow in the Athabasca River
14 informed by the objective of avoiding or
15 minimizing water withdrawals when water
16 levels are below Indigenous base flow and
17 including measures to achieve that objective
18 [close quote].

19 As recognized by Mr. Stuckless of MCFN on Panel
20 Number 2, there are other options other than shutting
21 off the water intake during low flows in order to deal
22 with water quality and quantity mitigation. To
23 reiterate, Teck is not committed to halting the water
24 intake in circumstances of Aboriginal extreme flow, but
25 has committed to many other measures to ensure water
26 quantity in the Athabasca is preserved.

1 Second, related also to water, AER counsel asked
2 MCFN about Condition Number 5 regarding annual review
3 of monitoring data in order to regularly update the
4 hydrology and water quality mitigation monitoring plan.
5 The Teck -- the text of this condition reads, and I
6 quote: (as read)

7 The proponent shall annually review
8 monitoring data from and update regularly the
9 hydrology and water quality mitigation
10 monitoring and adaptive management plans in
11 consultation with Indigenous groups to
12 incorporate any changes required or
13 technically economically feasible to decrease
14 water intensity and project effects on
15 Indigenous -- Indigenous navigability over
16 time [close quote].

17 Teck's commitment to annual review of the monitoring
18 data is intended to facilitate Teck's commitment to
19 adaptive management.

20 Third, there were some recommendations made by
21 consultants for MCFN that were never agreed to by Teck.
22 For example, Ms. Davidson's comments regarding reducing
23 existing water-quality thresholds to 75 percent of the
24 Canadian drinking water standards, you will note, is
25 entirely missing from the MCFN/Teck joint
26 recommendations. In addition, Panel, Teck is of the

1 view that this recommendation is outside the scope of
2 this process and is properly directed at Government in
3 its ongoing review of LARP. This recommendation should
4 be given no weight, as Ms. Davidson was not present at
5 the negotiations and her statements completely fail to
6 reflect the reality of MCFN and Teck's agreement.
7 Simply put, sir, anything not found within the
8 MCFN/Teck joint recommendations is not agreed to.

9 Fourth, MCFN identified government actions related
10 to the BSA to address their concerns that can be found
11 in CEAA Registry Document 497, Section E, and
12 Appendix 3. To be clear, Mr. Chair, Teck is not of the
13 view that the BSA is required to mitigate
14 project-specific effects. However, Teck recognizes
15 that establishing a stewardship area would offer
16 additional protection to the park and assist with
17 maximizing community confidence in the PAD.

18 Finally, it appears that some clarification
19 regarding discussions around ACFN potential oversight
20 committee would be helpful. Teck understands that MCFN
21 is seeking the government to develop the oversight
22 committee, and Teck's understanding is in line with
23 Ms. Lepine's statements where she said, and I quote:

24 (as read)

25 These would be things that they would be
26 dealing with: Aboriginal and treaty rights,

1 good-faith participation, dispute -- dispute
2 resolution, and it would be the
3 responsibility of each party to share their
4 expertise within the forum [quote].

5 Teck remains supportive of MCFN's efforts with
6 government to establish an oversight committee as a
7 vehicle for MCFN and other Indigenous communities to
8 become more involved in monitoring, contingent upon the
9 committees avoiding duplication and building on
10 efficiency instead. Teck's support is also contingent
11 on the oversight committee avoiding additional costs
12 that may be incurred that are above and beyond those
13 contemplated in its permit applications and agreements
14 with Indigenous communities.

15 Teck's support is also contingent on there being
16 clear lines drawn when it comes to accountability and
17 transparency that is required not only by Teck's
18 permits, but is -- but that is also required on Teck's
19 agreement -- agreements with Indigenous communities.

20 Finally, Mr. Chair, Teck's support is contingent
21 on Teck's inclusion in the formation and operation of
22 the oversight committee, as the results of its
23 monitoring could have material impacts on the
24 management of the project. As such, Teck supports
25 efficient committees, including the oversight
26 committee, that do not duplicate efforts and that

1 assure appropriate authority and accountability. This
2 is a highly competitive business, and in a time when
3 efficiencies are required. To implement inefficient
4 conditions would be a step back.

5 All that said, this agreement between Teck and
6 MCFN has allowed us to strengthen our relationship to
7 work together, and as Councillor Waquan said:

8 (as read)

9 To build a meaningful partnership and
10 relationship moving forward hand in hand and
11 not one in front of another.

12 Teck treats its partnership with MCFN seriously, and
13 our agreement reflects this commitment.

14 I'll now turn to discussing some of the issues
15 raised by the trappers. Before I begin, it should be
16 noted by the Panel that Teck remains of the view that
17 the trappers are a non-Indigenous community and are,
18 therefore, not required to be consulted with as such.
19 However, Teck acknowledges the concerns they raise and
20 would like to address them with that context in mind.

21 The trappers raised concerns regarding whether
22 there were spiritual or culturally significant sites
23 within the project disturbance area. Mr. D. Shevolup
24 stated that there are 15 to 30 burial sites located on
25 RFMA 2346.

26 Mr. Chair, Teck wishes to remind the Panel that

1 these potential burial sites under RFMA 2346 are not
2 located on the PDA, but are located approximately
3 7 kilometres outside the PDA. As well, in asserting
4 that there were two cemetery sites within the Frontier
5 PDA, Mr. D. Shevolup relied on a document published in
6 1996 that was specific to the Fort McKay First Nation.
7 However, the Fort McKay First Nation did a
8 project-specific traditional land-use study in 2011.
9 This TLU did identify cultural and spiritual sites and
10 was included in Teck's integrated applications. The
11 trappers confirmed that they were unaware of this
12 updated TLU study as well as the fact that this
13 information was already incorporated into the project
14 application.

15 The Fort McKay 2011 TLU study included a figure of
16 traditional land-use values, including cultural and
17 spiritual sites which includes burial sites. The
18 cultural and spiritual sites in the updated figure that
19 was included in the integrated application shows the
20 cultural and spiritual sites being located further west
21 than in the study that the trappers provided and,
22 importantly, outside the main mine footprint.

23 Additionally, Teck specifically assessed upon the
24 potential for the project to effect cultural sites,
25 including burial sites, in the traditional land-use
26 assessment. For example, Teck specifically responded

1 to Fort McKay First Nation burial sites in JRPIR
2 Package 4, Appendix 4.2. While this JRP response was
3 specific to the Fort McKay First Nation, Teck completed
4 a similar review and assessment for potential effects
5 for any reported cultural site for each of the
6 Indigenous communities included in Teck's assessment.
7 Teck continues to complete historic resource --
8 resource investigations for the project, and to date,
9 no burials have been confirmed in the project
10 disturbance area. Therefore, while Teck recognizes the
11 trappers' concerns regarding burial sites, Teck has
12 extensively considered the issue and has provided
13 updated information throughout these proceedings that
14 supersedes the information provided by the trappers.

15 Mr. Chuck Shevolup raised the concern that he had
16 not received notification from Teck regarding the
17 project as a junior partner of RFMA2346. However,
18 consistent with standard industry practice and as
19 advised by the Alberta Trappers Association, it is only
20 the RFMA holder or senior partner who is to be
21 notified. There is no direction that junior partners
22 be notified as well. Additionally, with regard to the
23 trappers' concerns regarding consultation,
24 Mr. D. Shevolup confirmed that he had spoken to a Cam
25 Bateman at UTS and Murray Hubscher from Boreal. He
26 further confirmed that he spoke with Cam Bateman at

1 least ten times over the years. Teck notes that
2 correspondence with representatives from the US -- UTS
3 or Boreal constitutes correspondence with Teck, as they
4 were acting on behalf of Teck. As such, it is clear
5 that Mr. D. Shevolup had regular contact with Teck and,
6 by extension, notification of the project throughout
7 exploration and application phases.

8 Mr. Chairman, I'd like to now conclude. Teck
9 submits that there is no credible evidence that this
10 project will have significant adverse environmental
11 impacts. The potential impacts of this project can and
12 will be addressed by a responsible and committed
13 corporation. The benefits of this project to local
14 Indigenous communities, Alberta, and Canada are
15 significant, and the negative effects, most of which
16 are regional and nonproject-specific issues, can all be
17 managed with the initiatives that are already in place
18 or that are underway and which Teck is committed to
19 supporting.

20 Teck is a large, mature, and responsible Canadian
21 corporation, and a sustainable developer that has the
22 wherewithal to carry out the project from construction
23 through to closure and reclamation in a manner that
24 meets or exceeds all regulatory requirements.

25 Mr. Chair, as stated by Mr. McFadyen in his
26 opening statement, Teck sees strong global demand for

1 bitumen, a product essential to everyday life.
2 Further, the benefits of the Frontier Project are very
3 material. The project will create 7,000 direct jobs
4 during the construction phase and a further 2,500 jobs
5 during mine life. The project will also spur economic
6 growth with the creation of new business development
7 opportunities through procurement, contracting, and
8 service provision. In addition, sir, the Frontier
9 Project will contribute directly to government revenues
10 at all levels in the amount of over \$70 billion over
11 mine life. This includes an estimated \$12 billion in
12 taxes to the federal government, some \$55 billion to
13 the Province through royalties and taxes, and a further
14 \$3.5 billion to the region through property taxes.

15 We ask that you approve this project as the AER.
16 And as the CEAA joint panel, we ask that you recommend
17 that this project is not likely to cause any
18 significant adverse environmental effects that cannot
19 be mitigated and that the responsible authority proceed
20 with processing the authorization.

21 Mr. Chairman, Panel, Teck has put significant
22 effort into developing a thoughtful application since
23 2008 that minimizes the environmental and social
24 impacts of this project and to engaging with all
25 stakeholders and Indigenous communities in an open and
26 honest manner. Teck has dealt honestly and

1 forthrightly with all parties. They have found
2 agreement and conciliation where possible and have
3 committed to work on those things that they could not
4 resolve.

5 In addition, Panel, Teck cannot stress enough that
6 its entered into agreements with 14 of 14 Indigenous
7 communities that are most affected by the project, and
8 they are not opposed to the project. Mr. Chairman, as
9 a result of the collaborative efforts by Teck and its
10 Indigenous partners, Teck has presented this Panel with
11 joint commission -- conditions and recommendations.
12 Teck believes that these joint conditions and
13 recommendations fully address the concern previously
14 held by some Indigenous communities and also provide
15 efficient and effective mitigation.

16 Mr. Chairman, as you are well aware, this is a
17 highly competitive industry, and Teck must remain in --
18 competitive in order to advance the Frontier Project.
19 With this in mind, Teck reminds the Panel that the
20 conditions imposed on the Frontier Project will have a
21 material impact on whether Teck is able to advance the
22 Frontier Project. Teck submits that imposing
23 extraneous conditions for conditions' sake is
24 inefficient and harms the competitiveness of the oil
25 sands industry and Canada at a time when increased
26 competitiveness is of critical importance.

1 Mr. Chairman, you and the other Panel Members can
2 be confident that Teck's Frontier Project is in the
3 public interest and that Teck will continue to be a
4 responsible Canadian developer, producer, and operator.

5 Thank you for your time and attention over the
6 last few months, and if there are any questions, I'll
7 be happy to respond to them.

8 In addition, Mr. Chairman, I should point out that
9 there are written submissions that have been filed on
10 the registry. We have not addressed those but will do
11 so in reply should we choose. Thank you.

12 THE CHAIR: Thank you. Just one minute.

13 Thank you, Mr. Ignasiak. The Panel has no
14 questions.

15 So next up will be Canadian Parks and Wilderness
16 Society, Drew Yewchuk. So we'll take a ten-minute
17 break just, kind of, while everybody gets reconfigured,
18 and we'll start up again about 2:20. Thank you.

19 (ADJOURNMENT)

20 MR. YEWCHUK: So I'm Mr. Yewchuk of the
21 public interest law clinic. I'm giving final argument
22 on the behalf of the Canadian Parks and Wilderness
23 Society.

24 The Canadian Parks and Wilderness Society, or
25 "CPAWS", is a national charity dedicated to the
26 protection of Canada's public lands and water and

1 ensuring that Canada's parks are managed to protect the
2 nature within them. CPAWS Northern Alberta is
3 participating in this environmental assessment process
4 out of concern for the impacts of the proposed project
5 on Wood Buffalo National Park.

6 CPAWS believes this hearing has shown that the
7 Teck Frontier Project would have significant adverse
8 environmental affects on Wood Buffalo National Park
9 that cannot be mitigated. CPAWS has provided evidence
10 in this hearing on the risk that -- that Teck
11 Frontier's tailings pits will create for migratory
12 waterfowl that pass over the project area when
13 migrating to and from Wood Buffalo National Park.

14 MS. LACLASSE: Mr. Yewchuk, I just can see
15 the court reporter is struggling a little bit. Maybe
16 you can get a little -- I know you're very tall, but if
17 you get a little closer to the mic, it'll assist her.
18 I know. It's not easy.

19 MR. YEWCHUK: Is that a little better? So I
20 might be jumping back a few words here.

21 In particular, the evidence provided by CPAWS has
22 focused on the risks to the whooping crane, a
23 critically endangered species reliant on Wood Buffalo
24 National Park for their long-term survival. CPAWS
25 submitted the following evidence on these points: The
26 written expert opinion of Dr. John Wilmshurst, the

1 written opinion and oral evidence of Dr. Colleen
2 Cassady St. Clair; the letter expressing concerns from
3 Dr. Beilfuss and Dr. Hartup at the International Crane
4 Foundation, the May 2018 strategic environmental
5 assessment of Wood Buffalo National Park conducted by
6 IEC.

7 Wood Buffalo National Park is governed by Canada's
8 National Parks Act, which requires that the parks shall
9 be maintained and made use of so as to leave them
10 unimpaired for the enjoyment of future generations and
11 establishes ecological integrity as the first priority
12 for all aspects of park management.

13 Wood Buffalo National Park is also a world
14 heritage site under the convention concerning the
15 protection of the world cultural and natural heritage.
16 Canada applied to have it listed, and the park was
17 accepted as a UNESCO world heritage site in 1983. The
18 recent strategic environmental assessment of the park
19 found four features with outstanding universal value
20 were in declining condition: The Peace Athabasca
21 Delta, the park's great concentration of migratory
22 wildlife, the park's significance as the last remaining
23 place on earth where wolves and bison interact in ACFN
24 natural predator-prey dynamic, and the last remaining
25 breeding habitat and nesting site of the endangered
26 whooping crane.

1 This project is particularly concerning with
2 respect to the whooping crane nesting site, as the
3 whooping crane's migratory route between the nesting
4 site and their wintering grounds passes over the
5 proposed locations of the project.

6 Due to the critically endangered status of this
7 species, any loss of individuals of this population of
8 whooping crane is a threat to the long-term survival of
9 the species and a significant loss of biodiversity, the
10 damages that feature of outstanding universal value of
11 the park regardless of where the whooping crane are
12 when they die.

13 The World Heritage Committee, which is the
14 decision-making body for the World Heritage Convention,
15 has long held that oil exploitation outside world
16 heritage sites should not, under any circumstances,
17 have negative impacts on the features of outstanding
18 universal value.

19 Since the 1980s, new world heritage sites have
20 been provided buffer zones sufficient to protect the
21 values of the site whenever necessary for their proper
22 conservation. A buffer zone surrounding the Wood
23 Buffalo National Park was not put in place when it was,
24 listed most likely because the location and size of the
25 park made that seem unnecessary at the time.
26 Given the current condition of the park and the

1 development approaching it, this decision showed a lack
2 of foresight about resource exploitation in northern
3 Alberta.

4 CPAWS submits that the key valued components for
5 the Panel's assessment of the environmental impacts of
6 the project must include Wood bison, the Peace
7 Athabasca Delta, the migratory birds that use the park,
8 and the world's last self-sustaining population of
9 whooping crane.

10 The park is not in great shape. It was
11 established in 1922, and the park's ecological values
12 have been eroded by continued hydroelectric
13 developments along the Peace River and by oil sands
14 activities along the Athabasca River. As this Panel
15 has heard, there is evidence that the delta is drying
16 causing changes in Wood bison behaviour negatively
17 impacting the aquatic and terrestrial environment in
18 the park and restricting the ability of Indigenous
19 communities to access their traditional territories.
20 The damage is serious enough to put Wood Buffalo
21 National Park status as a world heritage site at risk.
22 Tailings are already a significant problem in the
23 region. Oil sand mine operators have managed these
24 tailings by placing them into big open pits, which now
25 cover a little more than 88 square kilometres. There
26 are concerns about some existing tailings leaking into

1 groundwater entering the Athabasca River and flowing
2 into the Peace Athabasca Delta. These existing
3 problems form the background for the cumulative impacts
4 on the landscape.

5 The legal framework for the Panel's role and
6 decision is described in the submission Pacific Cell
7 submitted on CPAWS behalf, and I will not review them
8 now.

9 I'd like to turn to the evidence to provide an
10 overview of what was established during the hearing.
11 CPAWS believes that the evidence shows that the risk to
12 waterfowl created by Frontier's tailings pits has not
13 been quantified. Even the existing risks created by
14 the tailings already on the landscape remains largely
15 unknown.

16 Teck has a lot of confidence in the proposed
17 project. Although Teck accepts that cumulative effects
18 from all oil sands developments might have measurable
19 effects, Teck is confident that the Frontier Project
20 will have a negligible effect on the migratory birds of
21 Wood Buffalo National Park.

22 Teck is confident that the number of birds killed
23 per year by tailings pits is small, relative to
24 11 million, which they explained is the total number of
25 ducks harvested in North America per year. So they
26 assure the number of birds killed by tailings pits is a

1 small number, as long as you compare it to an extremely
2 large number.

3 I'm not confident it would be small if you
4 compared it to a relevant number. A more meaningful
5 number to compare it to might be the total number of
6 migratory birds that pass through the region. Teck
7 does not have that number.

8 Teck also has no estimate for how many birds they
9 expect to pull out of their tailings pits each year --
10 each year. They have relied on the number of recorded
11 fatalities from the combined existing oil sands
12 projects.

13 However, we heard from Dr. St. Clair several
14 reasons for questioning the reported mortality
15 estimates. The mortality searches were done
16 exclusively by industry personnel, there were
17 substantial variation in how the searches were done,
18 and the visibility oiled bird corpses that do float may
19 be restricted to just a few litres.

20 And birds do sink. In the 2008 mass landing
21 event, a good share of the 1,600 water birds were
22 dredged up from the bottom. Even worse, the on-site
23 bird mortality numbers do not reflect the total bird
24 mortalities and health impacts caused by tailings.
25 Teck relied on studies Dr. St. Clair had worked on to
26 conclude that the sublethal effects from tailings pits

1 were not significant.

2 Dr. St. Clair explained that this was an
3 unacceptable overgeneralization and misrepresentation
4 of results of that research which addressed particular
5 types of process treated water. He emphasized that
6 fresh tailings and bitumen were undoubtedly harmful to
7 birds. The impact on birds that contact tailings and
8 then fly away is still largely unknown.

9 Teck Frontier is also more than just one added oil
10 sand mine. Because of the proximity to the pad and the
11 size of the project, the risks created by Frontier's
12 tailings are likely to be greater than those of
13 previous projects. CPAWS believes the evidence shows
14 that the scale of impacts this project will have on
15 migratory bird populations is still unknown. Further,
16 the full impacts of existing oil sands projects on the
17 migratory bird population in the park is not
18 understood. This Panel heard traditional land users
19 describe how bird populations have dropped on the pad
20 and how toxins have been found in birds and their eggs
21 inside the Delta. In the absence of long-term research
22 on bird populations in this area, this traditional
23 knowledge is the most reliable evidence of [sic] the
24 cumulative impacts development has had on Wood Buffalo
25 National Park. The full impacts of the existing
26 tailings on migratory birds are not yet understood, and

1 Teck is unable to determine the added impacts their
2 proposed tailings will have.

3 Next I'd like to discuss mass bird landings into
4 tailings pits, the kind of huge event that brings news
5 headlines and regulatory prosecutions.

6 All of the past landing -- past mass landings of
7 birds into tailings pits have been associated with
8 adverse weather conditions, heavy fog, strong winds,
9 unseasonable storms, and so on. Deterrents appear to
10 be ineffective during weather that forces sudden
11 landings by flocks of birds.

12 Teck is not aware of any testing for deterrent
13 effectiveness during adverse weather, and Teck accepts
14 that it is unlikely that additional mitigation measures
15 could be undertaken to address extreme weather events.
16 No new technology or research has decreased the
17 likelihood of mass landings since 2014.

18 Now I'd like to turn to the -- now I'd like to
19 turn to the next page, not the page one back. There
20 has been a lack of rigorous testing for bird
21 deterrents. Newer studies show that habituation is
22 common and bird deterrents lose efficacy the longer
23 they are in use and the larger the spatial area the
24 deterrence cover. Recent research has shown that newer
25 acoustic deterrence, even those loud enough to
26 permanently deafen humans --

1 THE COURT REPORTER: Can you slow down, please.

2 MR. YEWCHUK: Sorry.

3 -- even those loud enough to permanently deafen
4 humans are ineffective for dispersing some species of
5 water birds.

6 Research hasn't been done on deterrence for
7 whooping cranes specifically, and given their
8 endangered status, it would be difficult for anyone to
9 get approval to run those tests. What we did learn
10 from Environment and Climate Change Canada's satellite
11 telemetry work on the cranes was that deterrents were
12 active and working when whooping cranes have landed and
13 stayed overnight in tailings areas.

14 The oil sands bird technical team found that
15 drones, a new technology that was hoped to improve the
16 current bird deterrents, has had poor results driving
17 many water birds into water rather than deterring them
18 from landing or staying in the area. The usefulness of
19 drones for whooping crane is totally unknown.

20 Teck has not identified the particular deterrent
21 systems they plan to use, but they have committed to
22 using the best-available technology. Unfortunately,
23 the evidence from this hearing shows that the best
24 available in this context is not very good.

25 So there are big holes in Teck's waterfowl
26 protection approach. Can they rely on their adaptive

1 management plan to patch those holes? Based on the
2 evidence, things don't look good on that front either.
3 Teck has not explained how an effectiveness
4 determination for their bird deterrents will be made.
5 Teck has not set a conceptual threshold for bird deaths
6 or landings that would trigger an adaptive management
7 process. Not even a suggested range or formula to
8 determine a conceptual threshold was provided.

9 Teck accepts that the Frontier Project will create
10 an additional risk of mass landings, but Teck considers
11 the risk low. The Teck project introduces more
12 tailings onto the landscape in an area closer to the
13 pad with denser bird migration. In addition, climate
14 change will cause unpredictable changes in
15 precipitation and temperature over the project area.
16 An increased frequency of weather atypical to the
17 region and season is likely. There is a possibility
18 that severe storms could become more frequent in the
19 region.

20 The evidence here shows an unpleasant reality.
21 The mass bird deaths that have attracted so much
22 attention to the oil sands have not been brought under
23 control. The combination of industrial activity,
24 artificial light, bad weather, and migratory bird
25 behaviour is insufficiently understood. All it would
26 take is some bad weather at the wrong time to cause

1 another mass bird death in a tailing pit. Teck and, it
2 seems, the existing oil sand operators have only one
3 solution for the mass landing risk created by storms:
4 Cross their fingers and hope no storms pass through the
5 oil sand region at the same time as a flock of
6 migratory birds.

7 And, now, backing up one step, do bird deterrents
8 perform well under normal weather conditions? Tailings
9 pits have some attractive features for birds. In
10 addition to their sheer size on the landscape, the
11 warmth of process water keeps the ponds ice-free longer
12 than safe water bodies, and the open water attracts
13 passing birds. Bird deterrents need to overcome these
14 attractants.

15 The research -- but the research into avian
16 protection program, RAPP, found that the efficacy of
17 bird deterrents was limited. Contrary to expectations,
18 tens of thousands of birds land in tailings areas each
19 year despite the heavy use of deterrents. Among these
20 tens of thousands of landings reported by the
21 monitoring program in 2013 were 1,200 individuals
22 belonging to species at risk.

23 There has been a lack of rigorous testing for bird
24 deterrents. Newer studies show that habituation is
25 common, the deterrents lose efficacy the longer they
26 are in use, and the larger the spatial area the

1 deterrents cover. Recent research shown that newer --
2 I think I've jumped around in my order here.

3 So I will turn to the adaptive management plan,
4 which I have skipped around on. I apologize.

5 Teck has not set a conceptual threshold, not even
6 a suggested range. The Panel specifically asked for
7 measurable thresholds that would trigger mitigation
8 measures under adaptive management in information
9 request. Teck confirmed to us that those thresholds
10 were never produced. Teck has not identified research
11 programs for adaptive management. Teck believes it is
12 too early for them to set those adaptive management
13 details.

14 What Teck has provided, in short, is not an
15 adaptive management plan at all. Every component of
16 the plan is missing. What has been provided shows that
17 Teck understands what genuine adaptive management would
18 require, but instead of providing that information,
19 Teck has left the actual planning to after the Panel's
20 review. This is totally deficient.

21 Teck has offered this Panel only vague assurances
22 that it would engage in adaptive management in order to
23 deal with the adverse impacts on water birds. The
24 Panel requested specific information on effectiveness
25 determinations and mitigation measures, and Teck
26 refused to provide that information, instead suggesting

1 it would be provided in the post-approval regulatory
2 stage.

3 However, as noted by the Federal Court in Taseko
4 Mines: (as read)

5 Acceptance of vague adaptive management
6 schemes would call into question the value of
7 the entire review panel process. If such
8 decisions are left to a later stage, then the
9 review panel process would simply be for the
10 sake of appearances.

11 Simply put, Teck has failed to provide sufficient
12 information for a review panel to take into account the
13 potential benefits of applying adaptive management, and
14 the Joint Review Panel should consequently disregard
15 its assurances in this respect. The Panel should be
16 clear that vague adaptive management schemes are
17 unacceptable in an environmental assessment process.

18 A related problem is that since the Research on
19 Avian Protection Project ended in 2014, the oil sands
20 bird monitoring program has been modified so that it
21 now lacks the rigor to provide the information that an
22 oil sand mine operator would need to conduct adaptive
23 management.

24 Teck acknowledges that adaptive management must
25 begin with standardized monitoring that allows for a
26 determination of the effectiveness of different

1 approaches across time and location.

2 The changed monitoring approach after RAPP ended
3 in 2014 -- and the data is no longer properly
4 comparable to data from earlier years. The monitoring
5 program has cut corners and reduced the frequency of
6 monitoring and the number of sites monitored while
7 targeting sites expected to have more birds.

8 These changes damage standardization and
9 compromise effective comparison across time and space,
10 as would be required. Comparing the new data directly
11 with the older -- the information has also become
12 difficult to access and not freely available to the
13 public. Adaptive management would require comparable
14 data on bird mortalities created by a rigorous and
15 transparent standardized monitoring program
16 representative of all kinds of tailings. This is
17 essential to understanding the impacts of tailings and
18 the effectiveness of bird deterrents. The current
19 monitoring program is insufficient to support credible
20 adaptive management.

21 Now I'd like to focus in on the impacts on the
22 endangered whooping crane. There are about
23 500 whooping crane in the last naturally occurring
24 breeding population which migrates between the Wood
25 Buffalo National Park and Aransas Wildlife Refuge in
26 Texas. The whooping cranes use of oil sands region as

1 stopover habitat is poorly understood. No spring or
2 fall water bird migration surveys were included in
3 Teck's baseline study, despite those being the
4 migration season when the whooping crane pass through
5 the region.

6 The new telemetry data from ECCC created during
7 the assessment process showed that Teck's initial
8 assumption about how limited a use whooping crane made
9 of the area were wrong. Teck is unable to generate
10 telemetry data on whooping crane.

11 In response to the new information, Teck had to
12 shift their estimated whooping crane mortality risk
13 from low to moderate. I'll return to the terms -- the
14 use of the terms "low" and "moderate".

15 Environment and Climate Change Canada, who
16 conducted the whooping crane satellite monitoring,
17 believes the Frontier Project could affect the
18 abundance of cranes in the Aransas-Wood Buffalo
19 population. Their satellite tracking suggests crane
20 make significantly greater use of the area around the
21 Teck Frontier Mine than the area around other oil sand
22 projects.

23 In contrast to Teck, Environment and Climate
24 Change Canada believes the project represents a high
25 mortality risk for whooping crane and that the proposed
26 mitigation measures are unlikely to substantially

1 reduce or eliminate the risk.

2 What about whooping crane that land in tailings
3 areas and fly away? Our understanding of the sublethal
4 impacts of tailings on most bird species is poor, but
5 is even poorer for the whooping crane. The crane is a
6 long-lived species that has more potential to
7 accumulate toxins. The toxicological studies in this
8 context have generally been based on short-lived
9 species that lack the same potential for contaminants
10 to accumulate.

11 Teck's materials contemplate crane -- whooping
12 crane landing in tailings areas and dying as a result.
13 But how many?

14 In our cross-examination, at great lengths, we
15 tried to figure out how many whooping crane Teck
16 expects the project would kill. What we found was that
17 Teck -- was that Teck tried -- doesn't have a numeric
18 threshold for mortality risk. Teck only considers it
19 low, moderate, or high. Mortality risk is something
20 that needed to be quantified. The terms "low",
21 "moderate", and "high", undefined and unrelated to any
22 number or calculation, does not quantify risk. It
23 glosses over it.

24 Teck never managed to measure the change in
25 estimated whooping crane mortality rate with numbers.
26 "Low", "medium", and "high" are terms that need context

1 and definition to be useful. What Teck confirmed to us
2 was that those definitions do not exist. Would Teck
3 consider 50 dead whooping crane per year to indicate a
4 low, medium, or high mortality risk? I still don't
5 know. And Teck confirmed nothing on the record would
6 answer that question.

7 Mass Sandhill crane landings, but not mass
8 mortalities, have occurred in tailings areas, and these
9 birds present an attractant to the whooping crane, a
10 similar species of flocking crane.

11 How detectible would whooping crane landings or
12 deaths in the oil sands be? Environment and Climate
13 Change Canada satellite tracking has shown five
14 whooping crane landing at oil sands mines, and none
15 were detected by oil sand workers.

16 A juvenile whooping crane stayed in a tailings
17 area for 14 hours. Inclement weather was not a factor
18 in this stopover. The juvenile whooping crane died
19 several weeks later while migrating through
20 Saskatchewan. Precisely what killed that bird is
21 unknown. In 2018, three unmarked juvenile whooping
22 crane disappeared during their migration from Wood
23 Buffalo National Park down into Saskatchewan.

24 We heard from Environment and Climate Change
25 Canada that their whooping crane researchers believe
26 cumulative mortality and climate change may reverse the

1 population recovery trend for whooping cranes.

2 The question we needed answered was how many
3 whooping crane would contact tailings and what would
4 become of them. The evidence has shown that the number
5 of cranes is not zero, as some migrating families of
6 whooping crane do land around tailings, and that there
7 are good reasons to think those crane may not survive
8 their migration.

9 Moving along to conclusions. While CPAWS'
10 participation in this hearing has focused on a few
11 select issues to avoid duplicating the submission of
12 other participants, CPAWS believes that the evidence
13 provided at this hearing shows that the Teck Frontier
14 Project would cause significant environmental impacts
15 to four features of the park that have recognized
16 outstanding universal value; the endangered population
17 of whooping crane, the Peace Athabasca Delta, migratory
18 birds, and the Wood bison.

19 The effects of the project on the hydrology of
20 Wood Buffalo National Park will be significant, and
21 previous environmental assessments have failed to
22 foresee and mitigate the impact of projects, which has
23 left the natural habitat of the park degraded and
24 polluted. The effects of the project on the park's
25 migratory bird population generally and on the park's
26 unique population of whooping crane remain

1 unquantified. The cumulative effects of tailings on
2 water birds is poorly understood, poorly researched,
3 and not reliably monitored. Current oil sand operators
4 are still discovering how many whooping crane land in
5 their tailings areas each year, and Teck could not even
6 estimate how many whooping crane will contact the
7 Frontier Project tailings. The recent information
8 about the migration of the whooping crane was produced
9 by the Government of Canada during this environmental
10 assessment process --

11 THE COURT REPORTER: Can you slow down, please.

12 MR. YEWCHUK: -- and it has shown the risk
13 to be much greater than Teck and other oil sands
14 operators had assumed. The project will create risks
15 of serious and irreversible damage that are
16 incompatible with the precautionary principle.

17 In 2013, the Panel for the Shell Jackpine project
18 found that: (as read)

19 Should a species at risk land in a tailings
20 pond, the Panel finds there to be a
21 significant effect.

22 The Panel noted that there had been, at that time, no
23 reported incidents of whooping cranes landing in
24 tailings ponds.

25 It is the position of CPAWS that the evidence
26 produced at this hearing show that the Teck Frontier

1 Mine will have significant adverse environmental
2 impacts that cannot be mitigated on the whooping crane
3 and the overall migratory bird population of Wood
4 Buffalo National Park. No feasible mitigation measures
5 are likely to be effective. As two of the features of
6 the park that have outstanding universal value, these
7 adverse impacts amount to a significant adverse impact
8 on Wood Buffalo National Park that will further
9 endanger the park's UNESCO world heritage site status.

10 CPAWS considers the following regulatory
11 provisions important in order to restrain and monitor
12 the scale of environmental damage on Wood Buffalo
13 National Park.

14 A buffer zone of sufficient size to protect all
15 features of outstanding universal value in the park
16 should be created, as ought to have been done when the
17 park was named a UNESCO world heritage site. CPAWS
18 submits that the proposed Ronald Lake biodiversity
19 stewardship area be designated as a protected area
20 under the Provincial Parks Act and the Government of
21 Alberta enter a comanagement agreement for that area
22 with the Mikisew Cree. Permanent legal protection is
23 also necessary for the remaining wetlands from the
24 mineable oil sands region up to Wood Buffalo National
25 Park.

26 Two, the Governments of Canada and Alberta must

1 establish permanent, impartial, and transparent
2 scientific monitoring for bird contacts and mortalities
3 on tailings pits, coupled with independent research on
4 the effectiveness of deterrent systems and the
5 development of new deterrent system standards.
6 Research that should've been completed decades ago has
7 still never been done. Canadians need a reliable
8 estimate about on-site and off-site mortality of water
9 birds requiring bird surveys conducted regularly
10 through the day and night, clear indicators of the
11 health and sustainability of migratory bird
12 populations, and monitoring of the remaining wetland
13 habitat areas in the oil sands region. Consistent and
14 ongoing GPS monitoring of the whooping cranes is
15 necessary to determine the extent of their extractions
16 with oil sand projects.

17 Three, should the project be approved, before
18 construction can commence, Teck should be required to
19 provide funding for independent research on the
20 efficacy of bird deterrent systems to repair the lack
21 of rigorous testing of deterrents. Teck should be
22 required to consult with experts on migratory birds and
23 incorporate the most up-to-date bird monitoring
24 protocol and the results of the Research on Avian
25 Protection Project.

26 Four, the declining flow volumes in the Athabasca

1 River and the drying of the Delta are concerns that
2 require a new approach more aligned with the
3 precautionary principle, as existing projects have
4 already endangered the world heritage status of the
5 park. Teck Frontier, and all future projects, should
6 be required to secure a water release offset equivalent
7 to their withdrawals from the Athabasca River.

8 Five, there is a serious need for improved
9 disease-prevention strategies to be put in place for
10 the Ronald Lake bison herd, far beyond what has been
11 suggested by Teck. A monitoring program for the Ronald
12 Lake herd, including data on birth and survival rates,
13 is needed. CPAWS recommends that the Government of
14 Canada enter into an agreement under the Species at
15 Risk Act Section 11 with the Mikisew Cree First Nation
16 to promote the recovery of Wood bison, in particular
17 with respect to the Ronald Lake herd.

18 And that concludes my final argument.

19 THE CHAIR: Thank you, Mr. Yewchuk.

20 Thank you, Mr. Yewchuk. The Panel has no
21 questions. Thank you.

22 Next will be Mr. Robinson for Oil Sands
23 Environmental Coalition. And we'll just take, again, a
24 short break to get everybody oriented.

25 (ADJOURNMENT)

26 THE CHAIR: Thank you. Please be seated.

1 My apologies. I didn't actually say how long the
2 break was, but we're back.

3 Okay. Mr. Robinson, whenever you're ready.

4 MS. LACASSE: Mr. Robinson, maybe I'll
5 interrupt you before we get started.

6 MR. ROBINSON: Go ahead.

7 MS. LACASSE: You've provided a written
8 version of your presentation this afternoon, and that
9 will be Document Number 697 on the registry.
10 Final Submissions by Mr. Robinson

11 MR. ROBINSON: Okay. Thank you, Ms. LaCasse.

12 Is that on? There. That's on. Very good.

13 For the record, I'm Barry Robinson, counsel for
14 Oil Sands Environmental Coalition, or we will refer to
15 it as "OSEC". Also with me is Kurt Stillwell,
16 cocounsel for OSEC.

17 I wanted to start by acknowledging that we are
18 on -- meeting on the traditional territories of the
19 Treaty 7 nations, which include the Blackfoot
20 Confederacy, comprised of the Siksika, Piikani, and
21 Kainai First Nations, in addition to the Tsuut'ina
22 First Nation, and the Stoney Nakoda, including the
23 Chiniki, Bearspaw, and Wesley First Nations. City of
24 Calgary is also home to the Metis Nation of Alberta
25 Region 3.

26 I feel that the simple acknowledgement of meeting

1 on these lands may be inadequate. I've been reading
2 some documents related to Treaty 7 recently, and I
3 acknowledge that my understanding of Treaty 7 and the
4 context of it is partial. But one thing that I did
5 come to understand was that prior to signing of the
6 Treaty 7 in 1877, the Blackfoot could and did grant or
7 withhold to traders and other groups the privilege of
8 travelling through their lands or sometimes settling
9 upon their lands.

10 As I respectfully and incompletely understand it,
11 the Blackfoot world view was that they had a right to
12 occupancy that had been granted to and by the Creator
13 and that they could grant occupancy, in part, to
14 others. But the concept of ownership of land and
15 exclusion of the Blackfoot from the lands on which they
16 granted occupancy would've been foreign to them.

17 In that sense, I wonder if an office tower on the
18 banks of the Bow River or an oil sands mine on the
19 banks of the Athabasca River fall within the concept of
20 occupancy that was considered at the time of the -- of
21 the numbered treaties, and that causes me some pause
22 and forms my acknowledgement today. And I will be
23 clear that those were my comments and not those of my
24 client.

25 I want to turn now to OSEC's argument. I have a
26 couple of preliminary matters. I will begin OSEC's

1 argument with some overarching comments. Mr. Stillwell
2 will then address another overarching theme and will
3 review the economic argument. I will then return to
4 discuss a number of substantive issues in OSEC's
5 argument.

6 As Ms. LaCasse indicated, we have this morning
7 filed an electronic version of the script, as well as a
8 written version, and the offending diagram has been
9 redacted from those versions. Those versions contained
10 footnote references to the evidence supporting OSEC's
11 argument, and we would encourage you to review those,
12 as it does contain the references.

13 We are aware of the Panel's direction that the
14 filed written script should be -- should match the oral
15 argument, and we will endeavour to follow that
16 direction; however, it appears that there will be a
17 number of places where we will need to vary from that
18 pre-prepared script in order to address some issues
19 that were raised by Mr. Ignasiak in his argument.

20 Also, in the words of my colleague Mr. Stillwell,
21 we want to speak with you and not read to you, and for
22 that reason, we may vary somewhat from the script.

23 I should talk a little bit about timing too. We,
24 you know, were allotted an hour and a half. That hour
25 and a half -- our estimate of an hour and a half was at
26 a time when we understood there would be an opportunity

1 for written submission prior to oral hearing. Also, as
2 I said, there's -- I'm going to require some additional
3 time as a result of your ruling this morning in order
4 to walk through some data. As I said, we -- there are
5 some of Mr. Ignasiak's comments that we hadn't
6 anticipated having to address, but now we will. And we
7 may find it necessary, because of the format of there
8 not being a written -- a prewritten submission, of
9 having to read some lengthy pieces of evidence and
10 authorities. We will endeavour to stay within our time
11 limit, but I believe that we may require somewhat
12 longer than what has been allotted.

13 OSEC submits to you that you must determine that
14 this project is not in the public interest. Pursuant
15 to Sections 10 and 11 of the Oil Sands Conservation
16 Act, you may grant an approval to an oil sands scheme
17 or operation or an oil sands processing plant if, in
18 your opinion, it is in the public interest to do so.
19 You may also, at your discretion, refuse to approve the
20 scheme or operation or processing plant.

21 In discussing the concept of public interest, the
22 Alberta Energy Utilities Board, which was a predecessor
23 to the Alberta Energy Regulator, stated the following,
24 quote: (as read)

25 Clearly, it is not just the interests of the
26 applicant and the intervenors that are at

1 stake. The Board has a duty to safeguard the
2 interest of all the citizens of Alberta.
3 Concepts as fluid as social, economic, and
4 environmental impact are not easily resolved
5 through the application of fixed principles.
6 The Board must identify the elements of each
7 applied-for energy development that would
8 provide benefit not exclusively to the
9 applicant and those directly connected to the
10 development, but to Albertans in general.
11 The Board must also weigh those benefits
12 against the risk factors that are present,
13 given the nature of the development, the
14 location proposed, and other factors
15 associated with the specific situation. If
16 the Board finds that risk, among other
17 potential negative consequences, cannot be
18 sufficiently mitigated thereby finding that
19 the risk exceeds the potential benefit, the
20 project could be said -- could not be said to
21 be in the public interest and would therefore
22 not be approved by the Board [end of quote].
23 Your decision with respect to the public interest must
24 also be informed by the purposes of the relevant
25 legislation. The purposes of the Oil Sands
26 Conservation Act include: to effect conservation and

1 prevent waste of the oil sands resources of Alberta; to
2 ensure orderly, efficient, and economical development
3 in the public interest of the oil sands resources of
4 Alberta; and to ensure the observance and the public
5 interest of safe and efficient practices in the
6 exploration for and the recovery, storing, and
7 processing and transporting of oil sands and oil sands
8 products.

9 With respect to similar provisions that are found
10 in the Oil and Gas Conservation Act, the Alberta Court
11 of Queen's Bench has stated, quote: (as read)

12 The public's interest in the development of
13 oil and gas is circumscribed by environmental
14 protection duties and responsibilities [end
15 of quote].

16 Pursuant to Section 15 of the Responsible Energy
17 Development Act and Section 3 of the regulation under
18 that act, the AER, in considering the application for
19 the project, must consider, first, the social and
20 economic effects of the energy resource activity; the
21 effects of the activity on the environment; and the
22 impacts on the landowner, in this case, primarily the
23 Crown.

24 The purposes of the Canadian Environmental
25 Assessment Act 2012 include: to protect the components
26 of the environment that are within the legislative

1 authority of parliament from significant adverse
2 environmental effects caused by the designated project,
3 to ensure that designated projects that require the
4 exercise of a power or performance of a duty or a
5 function by a federal authority under any act of
6 parliament other than CEAA 2012 are considered in a
7 careful and precautionary manner to avoid significant
8 adverse environmental effects, and to encourage the
9 study of the cumulative effects of physical activities
10 in a region and the consideration of those study
11 results in environmental assessments.

12 The CEAA 2012 also requires that you take into
13 account the following factors: the environmental
14 effects of malfunctions or accidents that may occur in
15 connection with the project, the cumulative
16 environmental effects that are likely to result from
17 the project in combination of other activities, and
18 mitigation measures that are technically and
19 economically feasible and that may mitigate any
20 significant environmental effects of the project.

21 Further, the Canadian Environmental Assessment
22 Agency in the administration of CEAA 2012, quote:
23 (as read)

24 Must exercise their powers in a manner that
25 protects the environment and human health and
26 applies the precautionary principle [end of

1 quote].

2 Summarizing, you must consider the following factors in
3 determining if the project is in the public interest:
4 the orderly, efficient, and economical development of
5 oil sands -- of the oil sands resource, as
6 circumscribed by environmental limits and
7 responsibilities; the environmental effects of
8 malfunctions or accidents that may occur in connection
9 with the project; the cumulative environmental effects
10 that are likely to result from the project in
11 combination with other physical activities that may be
12 carried out; mitigation measures that are technically
13 and economically feasible and that would mitigate any
14 significant environmental effects of the project; the
15 relative balance of the social, economic, and
16 environmental impacts of the project; whether the
17 potential negative consequences of the project exceed
18 the potential benefits, taking a careful and
19 precautionary approach; and, finally, the interests of
20 all Albertans.

21 OSEC submits that you must find that the project
22 is not in the public interest for the following
23 reasons. First, you cannot determine if the project is
24 in the public interest if costs are disregarded and
25 only benefits are considered. That is particularly the
26 case when the costs are borne by parties other than the

1 project proponent that stands to profit by the
2 extraction of the resource. Only a true public
3 cost-benefit analysis can arrive at a proper
4 determination of the net benefit. In this case, OSEC
5 submits that the societal costs of the project outweigh
6 the benefits.

7 Second, the Government of Canada has committed to
8 the Paris agreement goal of limiting the increase in
9 global average temperature to well below 2 degrees C.
10 This is in the interests of all Canadians.

11 In determining the economic benefits of the
12 project, Teck has relied on a world oil demand forecast
13 that is inconsistent with that commitment resulting in
14 an overestimate of the benefits of the project.

15 Third, Teck has overestimated the economic
16 benefits to Albertans by underestimating the costs of
17 complying with greenhouse gas reduction requirements,
18 including Alberta's 100 megaton limit, Alberta's carbon
19 competitiveness incentive regulation, and Canada's
20 mid-century long-term low greenhouse gas development
21 strategy.

22 Fourth, Teck has overestimated the economic
23 benefits to Albertans by underestimating the costs of
24 post-closure monitoring and mitigation of the project.

25 Fifth, the project will expose Albertans to
26 environmental and economic risks by failing to identify

1 current technically and economically feasible
2 technologies for the treatment and reclamation of fluid
3 tailings and end pit lakes.

4 Sixth, the project will leave elevated
5 contamination on the Alberta landscape for decades and,
6 in some cases, centuries post-closure.

7 Seventh, Teck failed to commit to providing full
8 security for post-closure liabilities leaving Albertans
9 at risk for these costs.

10 And, eighth, the Government of Canada has failed
11 to manage the cumulative effects of this project along
12 with other industrial activities in the public interest
13 by failing to produce a legally enforceable
14 biodiversity management framework under the lower
15 Athabasca regional plan and failing to produce a range
16 plan for the Red Earth caribou herd that would protect
17 critical habitat.

18 On the balancing of the social, environmental, and
19 economic impacts of the project, Teck has overestimated
20 the economic benefits to the Regional Municipality of
21 Wood Buffalo, the Government of Alberta, the Government
22 of Canada, and to all Albertans. At the same time, the
23 project will have significant adverse and long-lasting
24 negative effects on the Alberta landscape, air, water,
25 and wildlife, and will contribute to global climate
26 change in a manner that cannot be justified in the

1 circumstances.

2 In deciding if this project is in the public
3 interest, you're required to exercise your powers in a
4 manner that protects the environment and human health,
5 applies the precautionary principle. Previous
6 decision-makers have failed in this task resulting in
7 cumulative adverse impacts that have had serious
8 adverse effects on the land, air, water, and wildlife
9 and the Indigenous and non-Indigenous communities that
10 depend on those resources.

11 There comes a time when a decision-maker must say,
12 Enough. That time has come. OSEC submits that you
13 must determine that the project is not in the public
14 interest.

15 I will now turn our submissions over to
16 Mr. Stillwell.

17 Final Submissions by Mr. Stillwell

18 MR. STILLWELL: Good afternoon, Mr. Chairman
19 and Panel Members. Before I get into my argument on
20 the evidence and how that evidence relates to the
21 issues that you -- I say you are going to have to
22 decide, I wanted to open up with a discussion of some
23 principles.

24 The evidentiary record in this hearing is replete
25 with expert opinion testimony from qualified and
26 credible professionals. At many places, their opinions

1 disagree with the other, are contradictory to one
2 another, and they clash. And I want to discuss some
3 principles derived from Alberta jurisprudence that I
4 think will -- and I hope will -- assist you in
5 grappling with that conflict between credible expert
6 witnesses with a view to arriving at a high-quality
7 decision.

8 It engages a discussion how a panel must explain
9 why it prefers certain experts' evidence and provide
10 reasons for that determination and disclose its
11 analysis.

12 Participants in regulatory proceedings have
13 legitimate expectations of the decision-maker to
14 provide reasons which are adequate. Where conflicting
15 expert evidence is adduced, the reasons are to show why
16 and how the decision-maker preferred the evidence of
17 one expert over another where opinions differ. A quote
18 from Macaulay and Sprague in their text, *Hearings*
19 *Before Administrative Tribunals*, where it states,
20 quote: (as read)

21 Reasons are not decisions. Decisions are
22 what the agency has decided to do. Reasons
23 are why the decision-maker decided to do it.
24 They are simply the rationale underlying the
25 decision, the explanation. For every
26 decision, whether it is final or interim,

1 there are reasons. It is impossible not to
2 have some reasons for a decision. The reason
3 for a decision that is made on the flip of a
4 coin is that heads or tails came up. They
5 may be good reasons, or they may be bad
6 reasons, but there must be some reason why a
7 decision was made in a particular way. In a
8 broad sense, reasons refer not only to the
9 "why" a decision was reached, but also a
10 communication of that "why" to others. In
11 this sense, reasons -- that is to say, good
12 reasons -- are the means by which the
13 decision-maker communicates in an
14 understandable and adequate fashion why he or
15 she made a particular decision.

16 Participants in a regulatory process are
17 unlikely to accept decisions based only upon
18 the status or identity of the decision-maker.
19 Respect for and acceptance of results against
20 the interest of a party are gained by
21 adequate and clear reasons. A clear -- to
22 the conclusions, and a clear outline of how
23 conclusion are reached will earn trust.

24 These principles were aptly stated in part by the
25 Newfoundland and Labrador Supreme Court trial division
26 where it said -- and you'll see the case in my

1 citations in our written piece: (as read)

2 The requirement of administrative bodies to
3 provide written reasons appears to have been
4 justified on the basis that the parties, and
5 in particular an unsuccessful litigant, ought
6 to know why the case was decided the way it
7 was, and giving them written reasons will
8 improve both the parties' satisfaction with
9 the result and the public acceptance of the
10 process on the basis that reasons are likely
11 to assist a Court in performing a review or
12 appeal function and to enable a lawyer to
13 advise his or her client on the likelihood of
14 success on review or appeal and on the basis
15 that the process of writing reasons is
16 thought to assist the decision-maker in
17 arriving at the decisions.

18 The Alberta Energy Regulator derives benefit from a
19 great deal of curial deference in this province to its
20 expertise when appeals are taken from its decision.
21 Because of its expertise and provided it remains within
22 its jurisdiction, the Court of Appeal -- the Alberta
23 Court of Appeal will consistently defer to its
24 decisions. High deference is accorded to the AER's
25 decisions and its predecessors because it is built with
26 particular expertise to achieve the aims of its

1 constituting and governing statutes. It uses near
2 judicial proceedings -- quasi-judicial proceedings, but
3 I say "near judicial proceedings", and I'll say a bit
4 more on that in a minute -- and its specialized
5 knowledge.

6 However, curial deference paid by a Court to a
7 decision-maker will be diminished and perhaps lost if a
8 review in court cannot determine how or if the
9 expertise of the decision-maker in fact was applied.

10 In his book *Standards of Review Employed by*
11 *Appellate Courts*, the Honourable Mr. Justice Roger
12 Kerans, formerly of the Alberta Court of Appeal, on the
13 subject of deference paid by review in courts to the
14 expertise of administrative decision-makers says: (as
15 read)

16 Experts in our society --
17 And here he's talking about the decision-makers and not
18 the participants: (as read)

19 Experts in our society are called that
20 precisely because they can arrive at
21 well-informed and rational conclusions. If
22 that is so, they should be able to explain to
23 a fair-minded but less well-informed observer
24 the reasons for their conclusions. If they
25 cannot, they are not very expert. If
26 something is worth knowing and relying upon,

1 it is worth telling. Expertise commends
2 deference only when the expert is coherent.
3 Expertise loses a right to deference when it
4 is not defensible. That said, it seems
5 obvious that appellate Courts manifestly must
6 give great weight to cogent views thus
7 articulated.

8 To show an instance of a decision-maker, and in this
9 case a Court of Queen's Bench trial judge, handling
10 poorly complex and competing and contradictory expert
11 evidence, I'm going to make reference to *Nova v. Guelph*
12 *Engineering*, a decision of our Alberta Court of Appeal.

13 Now, I am acutely conscious that this is not a
14 civil trial in a superior court. It's quasi-judicial.
15 I say it's "near judicial". And I'll just mention some
16 of the attributes that a hearing like this has that I
17 say supports my contention that it is near judicial.

18 There is prehearing disclosure or a form of
19 discovery. Before we go to the hearing, we know the
20 cases of the other parties that we have to meet. It is
21 not a hearing by an ambush. Witnesses testify after
22 having taken an oath or affirmation. The right of
23 cross-examination, at least in the hearing we went
24 through, was untrammelled; it was full. And while the
25 formal judicial rules of evidence applied in judicial
26 proceedings are relaxed, they are not abandoned. And,

1 finally, there is the opportunity for full argument,
2 and reasons must be given.

3 The Nova -- Nova case arose out of the explosion
4 of a pipeline. It cost Nova many millions of dollars.
5 The trial was extremely lengthy. If memory serves,
6 they spent 133 days in trial. It involved highly
7 complex and technical testimony of -- certainly
8 prominent experts from throughout North America, if not
9 internationally, in such fields as engineering,
10 metallurgy and the properties of steel, valves, the
11 causes of the failure of a pipeline, and valve system.

12 It went to the Court of Appeal, and two of three
13 justices decided that they would not send the matter
14 back to the trial Court for a retrial once they found
15 egregious mistakes were made by the trial justice.
16 But, rather, they delved into the expert testimony
17 themselves and, in effect, retried the case with what
18 they considered proper treatment of the expert
19 evidence. The third justice differed only in his
20 conclusion, which was that he would have sent it back
21 for a new trial.

22 The Court of Appeal recounted in its decision how
23 the trial justice dealt with the complex expert
24 evidence as follows. The trial judge said this, and
25 this is just about all he said on the expert evidence:
26 (as read)

1 Upon consideration of all of the evidence
2 before me and having regard to the experience
3 and qualifications of the experts and their
4 respective approach to an analysis of all
5 matters relevant to this loss, it is my view
6 that the most likely and most reasonable
7 explanation as to the cause of the loss is
8 that contained in the theory and opinions
9 expressed on behalf of the defendants, and
10 such theory and opinions are therefore
11 accepted by me.

12 That's his conclusion. That's his decision. That is
13 what he did. Nowhere did it appear -- did the "why"
14 and "how" appear.

15 First of all, this insufficient and shallow level
16 of analysis earned a strong rebuke from the Alberta
17 Court of Appeal, but they turned to some principles
18 that the decision-makers should bear in mind when
19 considering complex and difficult and contradictory
20 expert opinion evidence.

21 They start by pointing out absence or brevity of
22 reasons for judgment is not in itself a ground of
23 appeal but, in context, either may suggest logically
24 that the trial Court overlooked an important issue,
25 important evidence, or the real significance of either.

26 One judge said, I agree with Justice Cote that if

1 the learned trial judge thought that the case required
2 a simple choice between two schools, he missed an
3 issue. Indeed, he missed many, and that was reviewable
4 error. The defence posture was far more complicated
5 than that and involved many and alternative arguments.

6 By reasoning, they meant a step-by-step movement
7 through issues with appropriate analysis and decisions.
8 And they say what was contained in Macaulay and
9 Sprague: (as read)

10 A decision-maker in our system cannot decide
11 a case by the toss of a coin.

12 I turn now to what the three justices described as
13 wholesale adoption and wholesale rejection. It is a
14 mistaken or suspect assumption that the preference of
15 the initial decision-maker of one expert's evidence
16 over another's is a ground to reject the latter
17 evidence only where they clash. The use of wholesale
18 adoption or, conversely, wholesale rejection of one
19 expert's evidence assumes that the experts totally
20 clash in their opinions.

21 This assumption is important in this case where,
22 for example, Teck's expert economic witness,
23 Mr. Shewchuk, did not refute the types and
24 characterizations of cost by Dr. Joseph. More will be
25 said about this point later.

26 The trial judge in -- in Nova must have assumed

1 that he must choose all of one side's explanation. The
2 decision-maker should consider whether the truth might
3 lie in between those two -- two competing views.
4 Wholesale adoption of one expert's opinion assumes that
5 the preferred evidence is all consistent and, thus,
6 might ignore important conflict in the evidence in
7 certain cases.

8 So on a point that experts may clash, and, after
9 analyzing it and reasoning your way through the two
10 experts' evidence, you say -- you decide to prefer to
11 the expert -- to one expert, that should not lead to a
12 wholesale rejection of the other expert. You have to
13 go on to the next issue and the next issue and the next
14 issue.

15 I think I can point you to a couple of instances
16 where regulatory tribunals have provided conclusions
17 and decisions but not reasons, or if there are reasons
18 contained in those conclusions and decisions, they, I
19 submit, are insufficient.

20 Let me start by saying it's my opinion that both
21 Mr. Shewchuk and Dr. Joseph were credible professionals
22 and credible expert witnesses. They don't agree on a
23 few points. In his expert report in reply to that of
24 Dr. Joseph, Mr. Shewchuk relies upon and sets out
25 portions from the Joint Review Panel decision regarding
26 the Kinder Morgan Trans Mountain pipeline and states --

1 Mr. Shewchuk states as follows: (as read)

2 The JRP reviewed both the proponents' IO
3 economic analysis, [I assume that's
4 "input/output"] as well as a CBA submitted by
5 an intervener in its decision report, the JRP
6 notes.

7 And I could read this entire passage to you, but I
8 wonder if, in the interest of time, I can request that
9 you -- you read that passage. And I say it is a set of
10 conclusions on what the experts said, but it is largely
11 devoid of reasons. They don't say why they made these
12 conclusions and how they arrived at them. Maybe I can
13 pick out a couple of examples.

14 (as read)

15 The Board finds the methodology used by
16 Trans Mountain to estimate the project's
17 potential economic benefits to be based on
18 generally accepted methodologies. The Board
19 is of the view that the use of input/output
20 models to estimate general economic effects
21 can -- can provide a general understanding of
22 the potential economic effects that can
23 result from the construction and operation of
24 large infrastructure projects.

25 And preceding -- preceding those conclusions and
26 decisions is a recount of the evidence provided by

1 other parties. Starts off with Trans Mountain
2 presenting an economic impact assessment just like --
3 it looks just like that presented by Teck in this
4 hearing. This is how much we'll be spending on capital
5 costs, operational expenditures. This is the amount of
6 money that we'll move to governments and the number of
7 jobs created. So theirs looked very much like the one
8 here.

9 Metro Vancouver raised concerns of the use of
10 input/output models and argued that those models did
11 not indicate the magnitude of the benefits and costs or
12 whether the project was desirable from -- desirable
13 from a public or social viewpoint. It referred to the
14 Treasury Board guidelines, which are in front of the
15 Panel here, which recommended cost-benefit analysis as
16 the appropriate method of evaluation and that
17 maximizing net benefits to Canadian society as a whole
18 should be the metric used.

19 Other interveners submitted a study on the
20 economic costs and benefits of the project for British
21 Columbia and metro Vancouver. They concluded that the
22 benefits of the project were very small and
23 significantly overstated by Trans Mountain. That's all
24 the decision-maker said about the case, and then, I
25 say, they leapt directly to its inclusions without an
26 analysis of the merits of those positions.

1 I have what I respectfully submit is even a
2 shallower treatment of the same types of issues in the
3 Northern Gateway project. And there is in that -- in
4 its report, there is, if memory serves, short
5 recitations of the parties about input/output, economic
6 impact assessment like that used by Teck, and others
7 were proposing a cost-benefit analysis approach. And
8 all they had to say on this is as follows, and it's
9 about three or four lines: (as read)

10 The concept of ecological goods and services
11 was described during the public hearing. The
12 Panel is of the view that there is a
13 temporary economic burden associated with
14 ecological goods and services affected by the
15 pipeline construction. Based on the hearing
16 record, the Panel finds that the estimated
17 costs for damages to ecosystem goods and
18 services are not well-quantified and are
19 based on a methodology that is not currently
20 broadly accepted.

21 That's all they say.

22 Sometimes -- some -- some types of costs for
23 ecosystem goods and services cannot be quantified, but
24 they're, nonetheless, costs. Dr. Joseph said that.
25 Teck didn't take exception to that. Based on the
26 methodology that is not currently broadly accepted,

1 Dr. Joseph told you about numerous places out in the
2 world where it is used. The Treasury Board of Canada
3 appears to be in favour of the use of cost-benefit
4 analysis in certain circumstances, hence their guide;
5 the United Kingdom -- the United Kingdom guide that was
6 put to Dr. Joseph; the EPA guide.

7 I say that a methodology -- that a methodology is
8 not widely accepted is an insufficient basis to reject
9 it. Unless there are -- sufficient reasons for this
10 finding are provided, the reader is without an ability
11 to understand the conclusions. I don't think you
12 should decide the merit of methodologies in different
13 approaches on these issues by counting heads of those
14 who use them.

15 Economics in the public interest. The expert
16 report of Dr. Joseph dated August 22, 2018, and
17 updated -- updated October 20, 2018, sets out the costs
18 that he states will be externalized and borne by the
19 public. In its evidence, Teck does not attempt to
20 refute that the costs are real with the result that the
21 evidence adduced on those costs should be accepted by
22 the Panel. This is true even for those costs for which
23 a monetary figure cannot be arrived at. When these
24 proven costs are weighed against the economic benefit
25 to be derived from the Frontier mine, the statement
26 that the project is economically viable becomes

1 suspect.

2 Understandably, in arriving at a conclusion on the
3 economic viability of the project, Teck relies upon
4 advantageous forecasts that are available. It used an
5 oil price of \$95 US for West Texas Intermediate based
6 upon the forecasting by the International Energy
7 Agency, the IEA. The IEA's new policies price forecast
8 was tested in the analysis by Dr. Joseph. It is not as
9 favourable as the forecast relied upon by Teck.

10 He concludes, similarly, in a sensitivity
11 analysis: (as read)

12 I found that the project would be a
13 relatively poor private investment in all
14 scenarios other than possibly 4 of the 17 I
15 tested. If 10 percent of labour would
16 otherwise be unemployed, if the project's
17 operational costs ended up being 25 percent
18 less than what Teck predicted in 2015, if
19 Teck's 2015 capital cost estimate ends up
20 being correct, or the IEA -- IEA's new
21 policies oil price scenario is realized, only
22 the high-oil-price scenario achieves an
23 internal rate of return greater than
24 10 percent.

25 Regardless, the evidence suggests that
26 none of these scenarios are likely, and so,

1 overall, my findings support the conclusions
2 of both of the National Energy Board and the
3 International Energy Agency that no new
4 bitumen mines are likely to be built due to
5 the poor financial outlook.

6 I see that last word "likely". I had it reading
7 "unlikely", but that is wrong. It should -- it
8 reads -- should read "unlikely".

9 For two different regulatory regimes, Teck made
10 two contradictory statements. For the purpose of the
11 evaluation of the project by this Panel, it states,
12 quote: (as read)

13 As indicated by the updated socioeconomic
14 results provided in Tables 5.1A-1 to 5.1A-3,
15 the project will be economically robust,
16 financially viable, and a strong contributor
17 to the Albertan and Canadian economies under
18 all scenarios.

19 And I asked Teck if they agreed with me that that
20 statement connoted a high degree of confidence in the
21 economic viability of the project, particularly --
22 particularly because of the use of the word "robust",
23 which has as one of its meanings: (as read)

24 Able to withstand or overcome adverse
25 conditions.

26 In his testimony, Mr. Chiasson, frankly, started

1 off by saying: (as read)

2 So I'm not exactly sure I agree with the way
3 it was characterized by -- [and he stops,
4 pauses, says] that's Teck's view apparently.

5 However, for the consumption of shareholders
6 and investors and in conformity with National
7 Instrument 51-101, a securities regulation instrument,
8 in a passage which, after discussing unrisks
9 contingent bitumen resources, and the project designed
10 contemplating production of 260,000 dollar -- barrel a
11 day of bitumen, Teck states: (as read)

12 There is uncertainty that it will be
13 commercially viable to produce any portion of
14 the resources.

15 These two statements are stark in contrast.
16 Perhaps one justification for -- which might allow the
17 use of these two statements or at least drive the use
18 of these two different statements is that it is highly,
19 highly unlikely that any liability will attach to a
20 statement in an application such as the one under
21 consideration by the Panel here and relied upon it --
22 and relied upon by the Panel and which proves to be
23 overly promotional -- promotional -- promotional in the
24 passage of time. In the investment setting, very
25 significant liabilities can attach to a statement about
26 a proposed project's prospective economic viability

1 when relied upon by investors and which proves to be
2 unreliable.

3 Headwinds and the price differential for Western
4 Canadian Select heavy oil blend. Teck testified that
5 it holds the view that takeaway capacity for Alberta's
6 bitumen-to-tide water and, hence, the Asian markets
7 will narrow the differential in price between Western
8 Canadian Select, "WCS", and West Texas Intermediate,
9 "WTI". It stated: (as read)

10 It is confident that currently proposed or
11 previously approved pipelines will be built,
12 namely the Enbridge Line 3, the Keystone XL
13 pipeline, and the Trans Mountain pipeline,
14 providing greater takeaway capacity and
15 greater access to foreign markets, reducing
16 the dependency upon the dominant and almost
17 sole market for bitumen in the United States.

18 Now, Teck, when asked -- I asked them on -- Why is
19 there a differential? And, of course, there were a few
20 things, including the fact that it's an inferior
21 product to WTI and more costly to refine, but we know
22 in the public -- in the public's fear right now, the
23 discussion is about takeaway capacity. Pipelines; we
24 need pipelines; we need pipelines; we need them badly
25 to get a higher price for our oil.

26 Now, that confidence that Teck expressed in those

1 three pipelines being built and becoming operational
2 would have been misplaced in relation to Northern
3 Gateway and Energy East Pipeline. The Panel -- the
4 Panel knows well about the recent and highly publicized
5 production restriction recently imposed upon oil sands
6 producers to reduce total production by 8.75 percent,
7 or approximately 325,000 dollars -- barrels --
8 325,000 barrels per day. Indeed, the AER is involved
9 in that exercise with the government. And a rule was
10 passed by way of ordering council implementing that by
11 law.

12 This was done in an attempt to reduce record
13 differentials which had resulted in WCS prices being in
14 the range as low as 12 or \$14. It was disastrous and
15 scary for so many Albertans. And it appears to have at
16 least partial success. There's been a noticeable and
17 reasonably significant jump in the price of WCS and the
18 lowering of the differential.

19 The Panel will also know well and should take
20 judicial notice of the very public and notorious step
21 taken by the Government of Alberta in deciding to grant
22 a subsidy, I believe, in the amount of \$430 million to
23 bitumen producers and purchased thousands of railcars
24 on behalf of oil sands producers and some locomotives
25 to increase export to the US market. Now, these are
26 pretty drastic steps. I suppose only in time will we

1 know whether they cure the very serious situation for
2 bitumen producers or whether these types of steps will
3 never be needed again.

4 In its testimony, Teck dismisses, almost out of
5 hand, a conclusion of the Canadian Energy Research
6 Institute Study Number 175 of July 2018. That study is
7 entitled "An Economic Assessment of the International
8 Maritime Organization Sulphur Regulations on Markets
9 for Canadian Crude Oil".

10 And it deals with the impacts of the imposition in
11 2020 of a much reduced sulphur content in bunker fuels
12 used in the Maritime shipping industry. And they
13 conclude in that report the price discount on Western
14 Canada Select crude with respect to the West Texas
15 Intermediate price point will expand significantly due
16 to the IMO regulations. Teck based its dismissal of
17 that -- I'll call it "bleak" -- bleak picture coming to
18 pass because they said that Maritime shippers will
19 simply install scrubbers to remove sulphur emissions.

20 However, CERI goes on to state that once the new
21 regulation takes effect, almost 60 percent of the
22 shipping industry currently using high-sulphur,
23 refinery -- refinery-produced residual bunker fuel will
24 need to switch to either marine gas oil or a blend of
25 high sulphur and ultra low sulphur middle distillate
26 marine fuels. And in the Siri study, it is estimated

1 that scrubbers will be used for only about 3 percent of
2 the high-sulphur fuel oil volume by 2020, and the
3 adoption of scrubbers is likely to increase moderately
4 and peak by 2025, where about 5 percent of the residual
5 bunker fuel demand is consumed in tandem with
6 scrubbers.

7 So the widely respected Siri -- pardon me -- the
8 well-respected Siri holds a widely disparate view to
9 that of Teck that the simple resort to scrubbers on
10 ships takes care of the issue.

11 And if you view the prediction of Siri on the
12 widened and maintained differential and prices on its
13 chart in its report at page 4, they predict an
14 approximate and consistent \$15, and that's \$2,017 US
15 lower price per barrel for 'W' -- WCS in low
16 noncompliance and modern -- moderate noncompliance
17 scenarios when compared to the price of WCI -- WCS
18 without the IMO-mandated reduction, and that chart
19 carries that prediction out to about 2,030.

20 Two passages in the testimony of Regan Boychuk
21 speak about the low royalties this province receives,
22 and I'm going to read them. And these passages weren't
23 tested on cross-examination or refuted by other
24 evidence. (as read)

25 Bitumen land sales and royalties currently
26 collect much less than a nickel for every

1 dollar generated from oil sands development.
2 Alberta has never produced more oil or
3 collected fewer royalties than it does today.
4 This is simply not sustainable over the long
5 term. A proper public-interest evaluation of
6 Teck's proposed bitumen mine needs to
7 appropriately account for royalty risk. The
8 spectrum of potential royalty outcomes over
9 the course of the Frontier mine's life need
10 to be weighted by probability and
11 incorporated on the expected value basis into
12 the cost-benefit analysis of whether the
13 project is in the public interest.

14 So what -- we're facing a scenario of -- in which
15 tens of thousands of hectares of land are going to be
16 disturbed; massive amounts of tailings are going to be
17 placed on the landscape; there will be negative impacts
18 on the environment. And I say that if there exists the
19 slightest risk of reclamation failure and the slightest
20 risk that the public will be called upon to bear the
21 costs of remediation and reclamation, and that risk
22 does exist, one might question whether the royalty
23 returned to the Government of Alberta and tax returns
24 are adequate.

25 THE CHAIR: Mr. Stillwater.

26 MR. STILLWATER: Yes.

1 THE CHAIR: I don't want to interrupt, but
2 I just want to do a bit of a time check in terms of the
3 time available. You're kind of coming up on an hour,
4 and I heard Mr. Robinson's request that you might need
5 a bit more time. I'm willing to show a bit of
6 flexibility, but I know Mr. Robinson has a number of
7 topic areas he wants to talk about, so --

8 MR. STILLWATER: More than me.

9 THE CHAIR: Yeah.

10 MR. STILLWATER: Yeah.

11 THE CHAIR: Yeah. So we just need to kind
12 of keep it moving. Thanks.

13 MR. STILLWATER: Okay. All right. I will try
14 to pick out some of the more significant things and try
15 and be more brisk in reading.

16 I think the Panel knows well about the contest
17 between the -- using a single discount rate for both
18 the benefits of the expenditures and the costs incurred
19 by Teck and the -- and a discount rate -- an
20 appropriate discount rate to be applied to ecological
21 services and goods.

22 And Dr. Joseph used a high one and a lower one,
23 which has the effect of increasing the cost of
24 ecological services or their value and lowering the
25 monetary benefits arising out of Teck's expenditures.
26 He identifies the costs that he discounted at the lower

1 8 percent rate. Some of the more incremental costs to
2 government, impacts on other commercial activities, air
3 pollution, greenhouse gas emissions, impacts on water
4 resources, and impacts on ecosystem services. I
5 reiterate Teck did not refute that those costs arise
6 even when they cannot be monetized.

7 He -- he -- Dr. Joseph then, in his testimony,
8 went on to identify the extent of the use of
9 cost-benefit analysis. It's a standard method for
10 project evaluation in many other countries, including
11 Australia, New Zealand, EU countries, the US, and by
12 international development banks, et cetera.

13 Now, with respect to the use of the lower discount
14 rate for ecological services, he says: (as read)

15 Yet, from a sustainability perspective,
16 much -- much lower discount rates are often
17 advocated and used.

18 Borden, 2011; Freeman and Groom, 2016; a bunch of other
19 authors, '93, 2011, 2007. He points out in a United
20 Kingdom review on climate change adopted a 1.4 percent
21 discounted rate. And CBA is -- he says: (as read)

22 CBA is premised on people's actual
23 valuations, and future environmental quality
24 in human health are generally discounted
25 little or even valued more by people from
26 this standpoint. From this standpoint, a low

1 rate should be used in the Frontier CBA.

2 Probably impossible to know what -- what component
3 of the Canadian population might do this, but there are
4 Canadians that value clean water, clean air, a stable
5 climate more than they value purely monetary benefits.
6 And if they're valued higher, they should be discounted
7 at a lower rate.

8 Mr. Shewchuk criticized Dr. Joseph's work by
9 stating he didn't rely upon the Treasury Board guide
10 where, in that section of its report, it says whatever
11 discount rate you use, use the same one; use a uniform
12 one. And I asked Mr. Shewchuk -- I asked if there was
13 a rationale set out in the guide supporting the
14 insistence on using the same discount rate and not
15 using different rates. Mr. Shewchuk provided a long
16 answer; however, he starts by saying: (as read)

17 Mr. Chair, the document doesn't provide the
18 explicit argument with respect to the
19 application of a single discount rate.

20 Okay? These -- these learned authors provide a
21 rationale for using a low er one for ecological goods
22 and services. And if you read the document, you will
23 not find an argument, reasons, or rationale in that
24 guide from the Treasury Board as what you should use,
25 the same number for whatever you are discounting.

26 And then I asked Mr. Shewchuk if he thought the

1 guide should displace the exercise of professional
2 judgment on -- on the part of CBA analyst, and he said:
3 (as read)

4 Mr. Chair, I'm suggesting that simply
5 arriving at a different conclusion isn't
6 sufficient to deviate from the guidelines.
7 Arriving at a theoretically sound and
8 defensible argument for deviating from the
9 guidelines could be grounds for deviating
10 from them. [I say] Dr. Shewchuk did arrive
11 at a theoretically sound and defensible
12 argument for deviating from the guidelines
13 and had the grounds to do so.

14 I've just got a page and a quarter to do, and I'm
15 going to try to do it without reading to you. I'm
16 going to see if I can speed it up by just talking about
17 it. Mr. Fontaine used various aids in his
18 cross-examination, principally papers, the PhD thesis
19 of Dr. Joseph, his work on the Trans Mountain expansion
20 pipeline. And in those reports, even though some and
21 possibly all three of them were written after the dates
22 of the publications that Dr. Joseph relies upon in
23 deciding that you should use two different discount
24 rates, so Mr. Fontaine put that to him and asked him to
25 explain that. And Dr. Joseph said: (as read)

26 So it's standard to use this mix. Dual

1 discounting, the use of two different rates
2 is common around the world, and it makes
3 sense in this context to try and reconcile
4 these two very different perspectives of
5 environmental impacts and private market
6 investment. So, in my opinion, it's most
7 appropriate to use that dual discounted
8 procedure. I have chosen to vary from it
9 because -- vary -- vary from using just one
10 single discount rate, because, Number 1,
11 practice is evolving; Number 2, the guidance
12 that you are referring to is either referring
13 to a regulatory impact analysis context or a
14 public investment context, and the analytical
15 context here is a major private investment
16 with environmental impacts, so different
17 concerns.

18 [He adds] I've become more aware of the
19 evolving practice, and I made a judgment
20 that, in this context, the most appropriate
21 approach is a dual discounting rate because
22 of the analytical context here.

23 An opinion -- an expert changing his approach upon
24 reflection, upon new schools of thought emerging and
25 gaining prominence should not be criticized for doing
26 that. All experts should avoid being rigid in their

1 approach and remain receptive to new developing and
2 changing schools of thoughts in their respective areas
3 of expertise which arise from newer credible work and
4 studies. An expert that lacks flexibility in thought
5 and remains hidebound by views which have been
6 modified, questioned, and challenged over the passage
7 of time warrants lowered acceptance.

8 Those are my submissions, sir, and I apologize if
9 I took too much of the available time. Thank you.

10 THE CHAIR: Thank you, Mr. Stillwell.

11 Mr. Robinson.

12 Final Submissions by Mr. Robinson

13 MR. ROBINSON: Mr. Chairman, I can advise I
14 still have significant materials to go through. I will
15 endeavour to move through them expeditiously. However,
16 I believe that procedural fairness will dictate that we
17 have an opportunity for a fulsome, complete closing
18 argument.

19 I want to begin with the greenhouse gas emissions.
20 In its demand forecast and economic analysis of the
21 project, Teck relies on a world oil demand forecast
22 that is inconsistent with the Paris agreement. That's
23 inconsistent with the goal of limiting warming
24 2 degrees of preindustrial levels.

25 Canada is committed to implementing the Paris
26 agreement and to implementing the PanCanadian framework

1 on clean growth and climate change as Canada's
2 contribution to achieving the Paris agreement targets.
3 This includes a commitment to the Paris agreement's
4 goal of limiting global average temperature increase to
5 well below 2 degrees C and to pursue efforts towards an
6 increase of 1 point degree C. This commitment is in
7 the interest of all Canadians.

8 Teck, however, bases the need for and the
9 economics of -- benefits of the project on the world
10 demand for oil increasing from 95 million barrels a day
11 today to 110 million barrels a day by 2040. That also
12 relies on the world oil price of \$95 per barrel for
13 WTI, as Mr. Stillwell mentioned.

14 Yet, Teck's own climate action and portfolio
15 resilience document indicates that world oil demand
16 increasing to 104.9 million barrels per day by 2040 is
17 consistent not with a 2-degree increase, but a
18 2.7-degree warming scenario, exceeding the Paris
19 agreement target of 2 degrees C.

20 Teck's reliance is actually on a forecast even
21 higher than this, which is 110 million barrels per day
22 by 2040, which would exceed, then, even this 2
23 .7-degree scenario. Teck's own climate action and
24 portfolio resilience documents indicate that the world
25 demand for oil in 2040, consistent with the Paris
26 agreement target of 2 degrees C, would be 72.9 million

1 barrels per day. Yet, Teck does not use this forecast
2 in its economic forecasts and estimate of benefits for
3 the project.

4 Therefore, Teck's put a scenario in front of you
5 that requires a decision from you. You can accept a
6 scenario on which the Paris agreement target is met and
7 reject Teck's market and economic forecast. That would
8 also mean rejecting Teck's estimates of economic
9 benefits from the project based on a price of \$95 US
10 per barrel for oil.

11 Alternatively, you can accept Teck's economic
12 forecast and predict the benefits and reject Canada's
13 commitment to the Paris agreement goal to limit the
14 increase to 2 degrees that would be well below
15 2 degrees C as unreasonable.

16 You cannot find both that Teck's economic forecast
17 is accurate and that the Paris agreement targets are
18 also a reasonable future scenario. That does not
19 accord with the facts put forward by Teck itself. The
20 two scenarios are mutually exclusive. You must
21 determine which scenario you will rely on.

22 Whichever scenario you accept, you must be
23 explicit and explain your reasoning. If you accept
24 Teck's economic forecast based on a world oil demand of
25 110 million barrels per day by 2040 as reasonable, then
26 you must reject Canada's Paris commitment as

1 unreasonable and so state.

2 OSEC submits that such a determination would not
3 reflect the public interest in limiting global warming
4 to less than 2 degrees C. OSEC, therefore, submits
5 that you must reject Teck's economic forecast based on
6 a world demand of 110 million barrels a day and an oil
7 price of \$95 US.

8 Teck relies on Alberta's 100 megaton limit on oil
9 sands emissions. However, Alberta's 100 megaton limit
10 is not consistent with either Canada's mid-century
11 greenhouse emissions or the Paris agreement. Canada's
12 mid-century greenhouse gas reduction target is to
13 reduce Canada's national GHG emissions by 80 percent by
14 2050 from 2005 levels. This is consistent with the
15 Paris agreement's 1.5-to-2-degree target. This
16 requires a reduction in Canada's greenhouse gas
17 emissions from 748 megatons in 2005 annually to
18 approximately 149 megatons in 2015.

19 Under the mid-century target of 149 megatons
20 annually, greenhouse gas emissions from all
21 energy-related sources in Canada, including combustion
22 sources, transportation, fugitive emissions, and
23 including oil sands emissions, would have to decline to
24 67 megatons per year by 2050. This is an 89 percent
25 reduction for the energy sector from 2005. Clearly,
26 this is not compatible with an emissions limit of 100

1 megatons per year for the oil sands sector alone. The
2 oil sands sector will need to make significant
3 decreases in GHG emissions below the hundred megaton
4 limit either through reductions in emissions intensity
5 or reductions in production.

6 Teck suggests that the hundred megaton limit may
7 not be reached at all, depending on how the regulations
8 under the Oil Sands Emissions Limit Act is structured
9 and how emitters respond to it; however, this assertion
10 is contrary to Teck's own evidence.

11 In direct examination, Mr. Chaisson of Teck stated
12 that his markets 2017 update indicated, quote: (as
13 read)

14 The hundred megaton cap emission limit for
15 Canadian oil sands is not likely to be
16 exceeded [end of quote].

17 In fact, the his report to which he referred predicted
18 that the hundred megaton limit could limit oil sands
19 production by 2040. And with as little as
20 2-and-a-half percent variation in production growth,
21 the limit could be exceeded by 2030.

22 Further, the his forecast of GHG emissions was
23 based on an oil sands production increasing to
24 4.4 million barrels per day by 2040. However, Teck's
25 market analysis in which their whole economic analysis
26 and benefits are based is based on oil sand production

1 reaching 4.7 million barrels per day, more than the his
2 estimate, by 2025.

3 Teck's market analysis predicts an oil sands
4 output by 2025 that would exceed the production level
5 at which his market predicts the hundred megaton limit
6 would be met. Therefore, based on Teck's own oil sands
7 production forecast, the hundred megaton limit will be
8 reached prior to 2040, perhaps as early as 2025, before
9 the project even commences operation. Other sources
10 predict the hundred megaton limit will be met between
11 2024 and 2030. Therefore, Teck's assertion that the
12 hundred megaton limit may not be reach at all is not
13 supported by any evidence, including Teck's own
14 evidence.

15 Alternatively, Teck states that it expects to set
16 project emission performance targets that align with
17 the hundred megaton limit; however, Teck acknowledges,
18 quote: (as read)

19 Potential regulatory change may require
20 further action to comply with increasingly
21 stringent GHG standards [end of quote].

22 Teck acknowledged that to meet Canada's mid-century GHG
23 emissions targets, oil sands operators, including Teck,
24 would need to reduce GHG emissions by 50 to 80 percent
25 by 2050.

26 Mr. Ignasiak said in his comments this morning

1 that Teck was keeping its eye on new technologies.
2 Keeping your eye on new technologies is not sufficient.
3 Teck would not commit under cross-examination to any
4 technology option that would further reduce GHG
5 emissions. Therefore, while acknowledging a 50 to
6 80 percent reduction in GHG emissions is required by
7 2050, Teck has not built the cost of a single
8 technically and economically feasible technology to
9 reduce GHG emissions into their project engineering,
10 their project costs, or their project benefits assets.
11 Instead, Teck asks you to accept on blind faith that
12 technological fixes will arise in the future.

13 CEAA 2012 -- Canadian Environmental Assessment Act
14 2012 requires that you, the Panel, take into account
15 mitigation measures that are technically and
16 economically feasible, not ones that are dreamed about
17 for the future.

18 Teck does not commit to any measure that is
19 technically and economically feasible that would
20 contribute to the reduction that is required.

21 Further, Teck has underestimated the cost of
22 compliance with the Carbon Competitive Incentive
23 Regulation, or "CCIR". Tech calculated the cost of
24 compliance of the CCIR at a maximum of \$715 million
25 over the life of the project. However, Teck admitted
26 that it did not use an output-based allocation

1 declining at 0.2 percent per year as specified in the
2 CCIR. Rather, Teck speculated -- and Mr. Ignasiak said
3 something similar again this morning -- quote:

4 (as read)

5 It's not likely for output-based allocation
6 to become more stringent every year for the
7 next 50 years.

8 Rather, Teck argues that Canada and Alberta will
9 protect the oil sands as a trade-exposed industry if
10 the output-based allocation is more stringent in other
11 jurisdictions. These assertions are contrary again to
12 Teck's own statements and evidence. Teck stated,
13 quote: (as read)

14 Potential regulatory change may require
15 further action to comply with increasingly
16 stringent GHG standards [end of quote].

17 Further, Teck's own evidence states in order to meet
18 the Paris agreement target of less than 2 degrees C,
19 carbon pricing will become mainstream globally and
20 average carbon prices will rise to a high of \$140 per
21 ton, greatly exceeding the \$50 per ton price that was
22 used in both the Teck and OSEC carbon -- CCIR
23 compliance calculations.

24 It is not reasonable in an increasingly
25 carbon-strained world striving to meet the Paris
26 agreement targets that restrictions in carbon emissions

1 would become less stringent rather than more stringent.
2 Therefore, Teck's estimated cost of 750 million to
3 comply with the CCIR and other future regulations is
4 not reasonable.

5 As calculated by OSEC, based on a conservative
6 carbon price of \$50 per ton, not \$140 per ton, and the
7 current CCIR output-based allocation reduction rate of
8 0.2 percent per annum, the actual cost of compliance
9 with the CCIR is conservatively estimated at
10 \$3.1 billion over the life of the project, not
11 750 million.

12 Teck asks you to speculate that the output-based
13 allocations will not continue to decline at 0.2 percent
14 per year as specified in the CCIR. OSEC's calculation,
15 on the other hand, accepts the CCIR as it is today.
16 Teck's speculation that the Government of Alberta and
17 Canada will protect the oil sands from increasingly
18 stringent GHG regulation is without basis.

19 As this Panel stated in its rejection of certain
20 applicants' application to compel witnesses to appear
21 before you, you stated, quote: (as read)

22 Evidence about what legislation and
23 frameworks might be in place at some time in
24 the future is of little, if any, value. It
25 is speculative. The Panel's assessments,
26 recommendations, and decisions must be made

1 based upon the regulatory scheme in effect at
2 the time those recommendations, assessments,
3 and decisions are made. Speculation about
4 possible future government action is largely
5 irrelevant and therefore unnecessary.

6 Therefore, you must -- end of quote. Therefore, you
7 must reject Teck's speculation that the output-based
8 allocations will not decrease at 0.2 percent per year.
9 That's what the CCIR says, that they will continue to
10 decrease.

11 Again, Teck has put forth this scenario in front
12 of you that requires a decision. You can accept the
13 scenario in which Canada's mid-century GHG targets are
14 met in line with the Paris agreement and reject Teck's
15 assertion that it can reduce GHG emissions by 50 to
16 80 percent by 2050 without impacting the project's
17 costs or benefits. That seems unreasonable.

18 Alternatively, you could accept Teck's
19 costs-and-benefits analysis recognizing under this
20 scenario, the emissions of the project will be
21 inconsistent with Alberta's hundred megaton limit,
22 Canada's mid-century targets, and the Paris agreement.

23 Again, whichever scenario you accept, you must be
24 explicit in explaining your reasoning. If you accept
25 Teck's forecast that technologies will allow it to
26 reduce GHG emissions by 50 to 80 percent by 2050 with

1 no adjustment to the project costs and benefits, you
2 must explicitly state the evidence that supported that
3 determination. I would suggest that there is none.

4 I want to turn now to the project's GHG emissions
5 intensity. And this is where I may need to take some
6 additional time as a result of your earlier decision.

7 Throughout their direct testimony and on
8 cross-examination and again today, Teck has repeatedly
9 stated that the project will be in the top -- meaning
10 the best -- 25 percent or quartile of all oil sands
11 production sources in terms of GHG emissions intensity
12 on a wells to wheels basis. However, Teck did not
13 present any evidence to support this assertion. The
14 assertion that the project will be in the best 25
15 percent of all oil sands producers may have included
16 in situ operations in that comparison. We don't know.

17 However, Teck itself states that the best
18 comparator for the project is an oil sands mining
19 operation that includes mining in extraction
20 operations, paraffinic solvent use, and cogeneration.
21 The comparable projects would be the Muskeg River and
22 Jackpine Mine complex, which I will refer to as just
23 simply "Muskeg River"; the Kearl project; and the Fort
24 Hills project.

25 So let's look at that comparison. All of this
26 evidence comes directly from Teck's response to JRP,

1 IR 3.15(e). So this is Teck's evidence, not OSEC's
2 evidence. They quote first for the -- and these first
3 numbers are all for the Muskeg Mine complex. They
4 quote Alberta Environmental protection data, which says
5 that from 2018 [sic] to 2013, the emissions intensity
6 for the Muskeg River complex ranged between a low of
7 32.7 kilograms CO2 equivalent per barrel to a high of
8 42.6 CO2 kilograms of CO2 per barrel. So that range
9 was 32.7 to 42.6.

10 Teck's estimated output of 38.4 kilograms CO2 per
11 barrel does not fall in the top -- in the best
12 quartile. In fact, it falls below the best half in
13 terms of GHG emissions.

14 Environment and Climate Change Canada data also
15 for the Muskeg River Mine says that a range of
16 intensities between 2008 and 2014 ranged from a low of
17 32.5 kilograms CO2 per barrel to 42.4 kilograms CO2 per
18 barrel. Again, Teck's estimated intensity of 38.4 does
19 not fall in the best quartile, but falls in the worst
20 half.

21 Data from the oil sands information portal ranges
22 from a low of 26 point -- this is again from Muskeg
23 River -- 26.2 kilograms CO2 per barrel in 2006 to a
24 high of 41.2 kilograms per barrel. Teck's predicted
25 intensity falls not in the best quartile, but actually
26 almost towards the top of that range.

1 Muskeg River Mine data from a response to SIR 339,
2 the range goes from a low of 25 kilograms CO2 per
3 barrel to a high of 50. Teck falls somewhere right
4 around the middle of that.

5 The Kearl project. The Kearl project's intensity
6 as stated in response to SIR 339, ranges from 28 to
7 44 kilograms CO2 per barrel. Again, Teck falls in the
8 upper half of that, not in the best quartile, but in
9 the worst half.

10 Also, Teck's intensity of 38.4 kilograms per
11 barrel is not close to what will be the best quartile
12 standard set for 2026 under the Carbon Competitive
13 Incentive Regulation, which is 28.9 kilograms per
14 barrel.

15 This data corresponds with Environment and Climate
16 Change's conclusions that -- based on their analysis,
17 indicating that the project's estimated emissions
18 intensity of -- and they include the indirect
19 emissions -- 40.4 kilograms per barrel is approximately
20 25 percent higher than the best-in-class facility.

21 And there was a further quote that, in the
22 interests of time, I won't read, but I would urge you
23 to read in the written materials.

24 In fact, Environment and Climate Change Canada
25 predicts that the project's direct and indirect
26 emissions may be as high as 43 kilograms CO2 per

1 barrel.

2 Further, it's likely that once the Oil Sands
3 Emissions Limit Act is in place and the hundred megaton
4 limit is in place and the regulations around that, that
5 the Teck project will be compared to like projects,
6 that is, oil sands mining projects, with similar
7 extraction and processes. Teck will not be the best in
8 class and will not be in the -- in the top quartile.
9 That's a myth.

10 Further, the project's emissions are inconsistent
11 with Teck's own policy on GHG emissions. Teck's
12 document "Our Strategy for Climate Action", their
13 climate strategy, lays out a strategy with four pillars
14 to contribute to global climate action and adapt to a
15 low carbon economy. The four pillars are: reduce tax
16 carbon footprint, position Teck for a low carbon
17 economy, advocate for climate action, and adapt to
18 physical impacts of climate change.

19 However, Teck's position with respect to the
20 Frontier Project and the emissions expected at the
21 project are contrary to those strategies. Teck states
22 in its climate strategy that, quote: (as read)

23 We are working to shrink our carbon footprint
24 by reducing greenhouse gas emissions
25 associated with our mining and processing
26 activities. Our target is to reduce our

1 emissions by 450,000 tons by 2030 from 2011
2 levels, which would be the equivalent of
3 taking only 90 -- over 95,000 cars off the
4 road [end of quote].

5 However, the project will more than double Teck's
6 corporate GHG emissions of 3.0 megatons per year by
7 adding an additional 3.9 megatons per year. That is
8 the equivalent of putting 830,000 cars back on the
9 road.

10 The Teck climate strategy states with respect to
11 positioning Teck for the low-carbon economy, quote:
12 (as read)

13 As the world transitions to a low-carbon
14 economy, there will naturally be shifts in
15 demand for certain commodities. The demand
16 for those required for low-carbon
17 technologies may increase while others may
18 decrease. The minerals and metals
19 reproduced, including steel-making coal,
20 copper, and zinc are some of the basic
21 building blocks of a low-carbon technology
22 and infrastructure [end of quote].

23 In other words, Teck relies on increasing
24 electrification and the use of renewable technologies
25 such as wind and solar for an increase -- to create an
26 increase in demand for its steel-making coal, copper,

1 and zinc. Yet at the same time, Teck relies on a
2 market forecast in which all demand increases, not
3 decreases. So there's an inconsistency between Teck's
4 reliance on a carbon-constrained world to benefit their
5 steel-making coal, copper, and zinc business, but at
6 the same time, somehow oil demand continues to increase
7 as well.

8 The Teck climate strategy also states with respect
9 to advocating for climate change -- climate action,
10 quote: (as read)

11 Teck is a signatory to -- of the 2015 Paris
12 pledge in support of the Paris agreement on
13 climate change. The Paris agreement provides
14 a global framework for action on climate
15 change and targets to hold the increase in
16 global average temperature to well below
17 2 degree Cs above preindustrial levels [end
18 of quote].

19 Despite this pledge, Teck then relies on an oil market
20 forecast in the project applications, they explain,
21 that far exceeds the production levels consistent with
22 the Paris agreement.

23 Finally, Teck states in their climate strategy:
24 (as read)

25 We believe that as the world increasingly
26 moves towards broader carbon pricing in

1 addition to helping reduce emissions, it will
2 contribute to a more level playing field for
3 companies like Teck who already pay carbon
4 tax [end of quote].

5 Yet in the response with respect to carbon pricing
6 under the CCIR, Teck argues the opposite, that the
7 world will not move towards carbon pricing and that the
8 Government of Alberta will reduce its carbon pricing in
9 order to protect the trade-exposed industries, contrary
10 to their own statement in their climate strategy.

11 Frankly, it's hard to determine what Teck
12 believes, progressive move towards a more
13 carbon-reduced future reflected in its carbon strategy,
14 or business as usual as reflected in its project
15 application. The two are not compatible.

16 OSEC submits that the oil production forecast
17 relied on Teck to determine the economic viability and
18 the benefits to the project are not consistent with the
19 2 degree C target of the Paris agreement. Further,
20 Teck has not put forth technically and economically
21 feasible plan for reducing GHG emissions in a manner
22 consistent with Canada's targets; therefore, OSEC
23 submits that the economic benefits to the project and
24 the resulting benefits to Canada and Alberta and taxes
25 and other revenues have been overstated, and therefore
26 the project is not in the public interest.

1 In the event that you conclude that the proposed
2 project is in the public interest, a decision with
3 which OSEC would strongly disagree, OSEC would seek the
4 imposition of the following conditions. First, prior
5 to the commencement of the construction of the project,
6 Teck be required to submit a GHG management plan for
7 the project to the AER for approval which confirms the
8 steps Teck will take to ensure the project is in the
9 best performing quartile of oil sands mining producers
10 with respect to GHG emissions intensity. Best-in-class
11 performance would require direct and indirect GHG
12 emissions of less than 28.9 kilograms CO₂E per barrel
13 in 2026 when the project starts.

14 Prior to the commencement of the construction --
15 second, prior to the commencement and construction of
16 the project that Teck be required to submit a GHG
17 management plan for the project to the AER for approval
18 which demonstrates how GHG emissions will be reduced by
19 a further 50 percent between 2026 and 2050 consistent
20 with Canada's mid-century GHG targets.

21 Third, that Teck shall not commence construction
22 until the Oil Sands Emissions Limit Act Regulations
23 have been enacted.

24 And, fourth, that Teck shall not commence
25 construction of the project if the Government of
26 Alberta's ten-year forecast indicates cumulative oil

1 sands GHG emissions that will exceed 100 megaton CO2
2 per year at any time in the first five years of that
3 forecast.

4 I want to turn now to closure, reclamation, and
5 liability. Teck has provided a global cost for the
6 post-closure monitoring and mitigation but has not
7 provided any supporting evidence that would allow the
8 Panel to determine if those costs are reasonable.

9 Teck's evidence indicates the project will result
10 in certain substances exceeding reference conditions
11 far into the future. In particular, in Ronald Lake,
12 median concentrations of aluminum and iron and peak
13 concentrations of iron will exceed water quality
14 guidelines and reference conditions in 2181. That's
15 more than a hundred years after the mine has ceased
16 operation.

17 In Redclay Creek, median concentrations of
18 aluminum, iron, lithium, total nitrogen, and total
19 phosphorus and peak concentrations of lithium and
20 naphthenic acids exceed water quality guidelines and
21 reference conditions in 2181.

22 In Big Creek, medium concentrations of aluminum,
23 iron, lithium, and total phosphorus and peak
24 concentrations of aluminum, ammonia, cadmium, lithium,
25 and sulphide exceed water quality guidelines and
26 reference conditions in 2181.

1 In the Athabasca River, naphthenic acids exceed
2 reference conditions by more than 10 percent in both
3 2081 and 2181.

4 Chloride levels in groundwater flows into the
5 south reclamation lake exceed drinking water guidelines
6 for 580 years. Sulphide levels in groundwater flows
7 into the south reclamation lake exceed drinking water
8 guidelines for 600 years. Sulphide levels in
9 groundwater flow from the east reclamation lake exceed
10 drinking water guidelines for 550 years. Chloride
11 concentrations in groundwater flows into Big Creek peak
12 at 500 years post end of mine life. Chloride
13 concentrations and groundwater flows into the fish
14 habitat compensation lake peak at 850 years post end of
15 mine life. Chloride concentrations in groundwater
16 flows into the Athabasca River peak at 1,200 years post
17 end of mine life.

18 Teck estimates the external tailings area
19 hydraulic barrier might need to remain effective for
20 230 years. Teck's own evidence shows that reclaimed
21 tailings areas will continue to settle for 100 years or
22 more post end of mine life. And all that data is based
23 on Teck's -- that's Teck's evidence.

24 What's Teck's plan to manage these post-closure
25 effects? Well, they say, We have a groundwater
26 monitoring plan, and we have a draft hydrology and

1 water quality mitigation monitoring plan, and we've got
2 a draft reclamation plan. However, none of those plans
3 contain any details with respect to the cost of
4 long-term monitoring or the cost of additional
5 mitigation if it is found to be required.

6 Teck indicates only that it is allowed
7 \$500 million for seepage management, monitoring, and
8 additional mitigation post-2081, of which \$350 million
9 are allocated for the external tailings hydraulic
10 barrier. So that leaves only \$150 million for what
11 could be decades of monitoring groundwater, surface
12 water, and reclamation.

13 Teck suggests that pit lakes will be monitored for
14 40 years after filling. Other surface waters will be
15 monitored for some unspecified period. Groundwater
16 will be monitored for 20 to 40 years. Reclamation will
17 be monitored for 65 years after 2081. And
18 precipitation in flood events will be monitored for
19 65 years.

20 That would mean that Teck is committing as little
21 as 2 to \$3 million a year for all post-2081 monitoring,
22 not including any mitigation measures that may be
23 required, and Teck does not provide any evidence to
24 support the reasonableness of that cost.

25 I would note parenthetically 2 to \$3 million a
26 year -- that's, you know, half a dozen people with

1 trucks and equipment. That's what Teck is committing
2 to for decades after the project. That's all.

3 We've talked about -- Teck talked about the mine
4 financial security program. Teck has indicated it is
5 committed to complying with the MFSP based on the asset
6 value of the oil sands deposit.

7 The Auditor General of Alberta has stated the
8 following with respect to the mine financial security
9 program, and I quote: (as read)

10 The focus of our current audit was whether
11 the MFSP constitutes an approach that
12 provides sufficient financial security for
13 the design and operation of the MFSP to fully
14 reflect the intended objectives of the
15 program. We have concluded that improvements
16 are needed to both how security is calculated
17 and how security amounts are monitored.

18 Without these improvements, if a mine
19 operator cannot fulfill its reclamation
20 obligations and no other private investor
21 assumes the liability, the province is at
22 risk of having to pay substantial amounts of
23 money.

24 There is a significant risk that asset
25 values calculated by the department are
26 overstated within the MFSP asset calculation

1 which would result in security amounts
2 inconsistent with the MFSP objectives. The
3 MFSP acid calculations do not incorporate a
4 discount factor to reflect risk. They do not
5 use a forward price factor that -- or uses a
6 forward price factor that underestimates the
7 impact to future price declines and treats
8 proven and probable reserves as equally
9 valuable [end of quote].

10 The MFSP does provide that an approval holder may elect
11 to provide full security based on their annual
12 reporting of the unescalated and undiscounted estimated
13 costs required to carry out the suspension,
14 abandonment, remediation, and reclamation obligations
15 for the site. The full security option avoids the
16 issue that arises from the overestimation of the
17 project assets as identified by the Auditor General;
18 however, Teck would not commit to the full security
19 option.

20 I have to divert here for a moment to something
21 that Mr. Ignasiak said in his argument. He argued that
22 Teck can be secured for reclamation security against
23 Frontier Resources, and he questioned OSEC's testimony
24 with respect to what was -- what was valid forms of
25 security accepted by the AER. He suggested to you that
26 it could be secured against Frontier's other assets.

1 I turn to the AER's MFSP guide, and I quote from
2 Section 4.6 of that guide. It says: (as read)

3 Security is most often provided as a letter
4 of credit. Approval holders should contact
5 the AER for the approved form of the letter
6 of credit to be submitted. The government
7 may consider alternative forms of security on
8 a case-by-case basis as provided for in the
9 conservation and reclamation regulation, but
10 those alternatives must provide similar
11 levels of protection for the government. As
12 part of the regulatory amendments
13 implementing the MFSP, qualifying
14 environmental trusts were added to the
15 conservation and reclamation regulation as
16 the form of security that may be acceptable
17 to the Director. The AER must give prior
18 approval to any proposed alternative form of
19 security [end of quote].

20 I turn now to Section 21 of the conservation and
21 reclamation regulation. And I apologize, but I think
22 in order to clarify this, I need to read it fully:

23 (as read)

24 Security must be in one of -- or more of the
25 following forms as required by the Director:

26 (A) cash; (B) cheques or other similar

1 negotiable instruments payable to the
2 president of treasury board and minister of
3 finance; (C) government guaranteed bonds,
4 debentures, term deposits, certificates of
5 deposit and trust certificates, or investment
6 certificates assigned to the president of
7 treasury board and minister of finance; (D)
8 irrevocable letters of credit, irrevocable
9 letters of guarantee, performance bonds, or
10 surety bonds in a form acceptable to the
11 Director; (D.1) qualifying environmental
12 trusts within the meaning of
13 Subsection 248(1) of the Income Tax Act of
14 Canada; (E) any other form that is acceptable
15 to the Director.

16 Nowhere do I see in any of those documents that -- to
17 support the statement that Teck can be secured for
18 reclamation security against its other assets. It's
19 just not there, possibly with the approval of the AER,
20 but to state that they can do it is simply incorrect.

21 Instead of accepting the -- instead of committing
22 to full security option -- instead, Teck gave several
23 assurances that Teck Resources Limited, the corporate
24 parent of Teck group of companies, would be responsible
25 for any additional security and costs and any
26 outstanding reclamation and closure liabilities if the

1 cash flows from the projects were insufficient to meet
2 these obligations. However, when Teck was asked if
3 they would turn those assurances into a condition of
4 approval, Teck would not agree.

5 Although it was not indicated in any of the
6 application documents, Teck confirmed during the
7 hearings that, if approved, the project would be owned
8 and operated by Teck Frontier Energy Partnership. Teck
9 Frontier Energy Partnership is an ordinary partnership
10 in which Teck Resources Limited, the parent company,
11 holds a 99.99 percent interest and Frontier Energy
12 Project Corporation, a federally incorporated
13 corporation, holds a .01 percent interest.

14 Teck is correct in its assertion that as a partner
15 in Teck Frontier Energy Partnership, Teck Resources
16 Limited would be liable for all partnership
17 liabilities. However, that assertion holds through for
18 the project only if the permits and approvals for the
19 project are held by Teck Frontier Energy Partnership
20 and not Frontier Energy Project Corporation. Teck
21 Resources has no responsibility for the liability of
22 Frontier Energy Project Corporation. And it holds true
23 only if Teck Resources does not sell or otherwise
24 dispose of its interest in the Teck Frontier Energy
25 Partnership at any time for the life of the project.

26 You, as a Joint Review Panel, cannot control

1 future transactions that might result in Teck Resources
2 Limited no longer being responsible for the liabilities
3 of the project. As stated by the British Columbia
4 Supreme Court in *Gitxsan v. British Columbia* -- the
5 reference is in our written materials -- the change in
6 control is not neutral from a practical point of view.
7 A change in control in the mind of a corporate entity
8 may result in a change of the philosophy of the persons
9 making the decisions on behalf of the corporation.

10 However, by setting a condition requiring Teck
11 Frontier Energy Partnership as owner and operator of
12 the project to post security under the full security
13 option of the MFSP, you can protect the Alberta
14 taxpayer from assuming the costs of reclamation
15 enclosure for this project. This overcomes both the
16 weakness of the MFSP asset-to-liability calculation and
17 the possibility that Teck Resources Limited disposes of
18 its 99.9 percent interest in the project.

19 Teck provides assurances that it has good
20 intentions, intends to be a fully responsible -- fully
21 responsible for the cost of closure, reclamation,
22 post-closure monitoring, and mitigation of the project.
23 However, the Alberta oil and gas landscape is littered
24 with liabilities from companies with good intentions,
25 Redwater Energy Corporation, Lexin Resources Limited,
26 Sequoia Resources, Southern Pacific Resource

1 Corporation to name a few. "Trust us" is not good
2 enough. You must set a condition that protects the
3 Alberta taxpayer from the end-of-life liabilities of
4 the project.

5 OSEC submits that the closure reclamation,
6 post-closure monitoring, and mitigation costs presented
7 by Teck lack details and are not supported by any
8 evidence. Further, Teck is committed only to the
9 standard asset-based MFSP which does not protect the
10 Alberta public purse from post-closure liabilities.
11 Given these uncertainties, OSEC submits that you must
12 determine that the project is not in the public
13 interest.

14 In the event that you conclude the project is in
15 the public interest, a decision with which OSEC would
16 disagree, OSEC would seek the imposition of the
17 following conditions: Teck be required -- first, Teck
18 be required prior to commencing mining operations to
19 submit to the AER for approval a comprehensive economic
20 assessment of feasible active water treatment options
21 that Teck could implement to ensure that water released
22 from pit lakes will meet Alberta guidelines for the
23 protection of aquatic life.

24 Second, that Teck be required prior to commencing
25 mining operations to submit to the AER for approval a
26 comprehensive economic assessment of terrestrial

1 closure operations for landscapes containing the fluid
2 tailings which demonstrates how Teck will manage the
3 risks and uncertainties posed by the closure of fluid
4 tailings sites.

5 Third, that Teck be required to continue to meet
6 its commitments with respect to fluid tailings and
7 reclamation regardless of any future regulatory changes
8 that would reduce the regulatory obligations with
9 respect to the tailings treatment and reclamation.

10 Fourth, Teck be required to post security for
11 closure, remediation, reclamation of the project in
12 accordance with the full security option of the MFSP.

13 And, fifth, that Teck be required to have its
14 estimates of closure, remediation, reclamation costs in
15 each annual report under the MFSP, verified by an
16 independent third party.

17 I turn now to biodiversity management issues. In
18 OSEC's original statement of concern with respect to
19 the project which was submitted on June 4th, 2012, OSEC
20 stated that the project should not proceed until
21 thresholds had been established and managed cumulative
22 effects under the Lower Athabasca Regional Plan, or the
23 LARP. While LARP was released in August 2012,
24 biodiversity management framework still have not been
25 completed. The absence of a biodiversity management
26 framework precludes responsible decision-making under

1 accumulative effects management approach.

2 The regional sustainable development strategy for
3 the oil sands region was released in 1999. It promised
4 biodiversity objectives for management of the oil sands
5 would be completed in two years. 19 years later,
6 Alberta and Canada are no closer to managing the
7 cumulative effects of the projects in the oil sands
8 area for biodiversity or setting objectives for
9 acceptable impacts on biodiversity values.

10 This project has similar biodiversity impacts and
11 commits to similar inadequate measures as the Shell
12 Jackpine expansion did. Teck suggests that it may
13 consider conservational offsets but makes no commitment
14 to do so.

15 The Joint Review Panel for the Shell Jackpine
16 expansion project in its decision report concluded,
17 quote: (as read)

18 The Panel also believes the Lower Athabasca
19 Regional Plan, although still a work in
20 progress, is an appropriate mechanism for
21 identifying and managing regional cumulative
22 effects, including the proposed biodiversity
23 management framework and new Alberta wetlands
24 policy, both in development. The LARP is an
25 excellent, important framework for beginning
26 to introduce a more integrated regional

1 approach, and the Panel strongly encourages
2 Alberta to continue to implement this
3 regional plan. It is critical that the
4 frameworks, plans, and thresholds identified
5 in the LARP be put in place as quickly as
6 possible. Future project reviews will
7 benefit greatly from the completion of this
8 regional approach. Although the Panel
9 recognizes that LARP and other regulations
10 and policies of the Government of Alberta do
11 not currently mandate the use of conservation
12 offsets in the oil sands region, given that
13 there were few options available for avoiding
14 and minimizing the adverse effects of large
15 surface mines, the Panel believes that the
16 use of conservational offsets is necessary
17 [end of quote].

18 And there's a further portion of the quote you can see
19 in the -- in the written materials.

20 All of these findings continue to apply six years
21 later and are even more urgent with respect to the
22 proposed Teck Frontier Project. The biodiversity
23 framework is still not in place and must be in place
24 before this project is approved, and Teck must commit,
25 if it is approved, to conservational offsets before the
26 project proceeds.

1 Alberta has not completed biodiversity frameworks,
2 contrary to the requirements of LARP and the
3 recommendation of the Joint Review Panel in Shell
4 Jackpine. As such, it is not possible for this Panel
5 to responsibly determine if the Frontier Project has
6 acceptable cumulative impacts on biodiversity.
7 Environment and Climate Change Canada has concluded
8 that the project directly impacts the Red Earth caribou
9 herd and possibly impacts the Richardson herd.
10 Woodland caribou from the Red Earth range have been
11 documented using the proposed project site.

12 Alberta was required to have range plans for
13 woodland caribou completed by October 2017, five years
14 after the release of the recovery strategy for woodland
15 caribou. And I notice -- I'll note parenthetically the
16 woodland caribou strategy was also delayed five years
17 behind the deadline it was supposed to be prepared. A
18 range plan for the Red Earth herd that meets the
19 minimum 65 percent undisturbed habitat threshold as
20 required by the Federal Species at Risk Act has not
21 been completed.

22 The Joint Review Panel for the Shell Jackpine line
23 recommended, quote: (as read)

24 The Government of Alberta, in consultation
25 with the Government of Canada and interested
26 Aboriginal groups in the oil sands area

1 produced a range plan for caribou in a
2 designated critical habitat for the
3 Richardson range as soon as possible [end
4 quote].

5 Further, the Joint Review Panel for Shell Jackpine
6 recommended, quote: (as read)

7 The Government of Alberta work in cooperation
8 with Environment Canada towards the
9 expeditious completion of range plans for
10 caribou in the oil sands region to ensure
11 that immediate action occurs as prescribed in
12 the federal recovery strategy.

13 Further, the Joint Review Panel for Shell Jackpine
14 recommended, quote: (as read)

15 The Government of Alberta work with
16 Aboriginal groups during development of
17 biodiversity management framework under the
18 LARP to specifically address issues related
19 to caribou in the oil sands region.

20 The Government of Alberta failed to follow through
21 on any of those recommendations. The Government of
22 Alberta wants the economic benefits of oil sands
23 development and promises strict environmental
24 protection, but the government then reneges on those
25 assurances by failing to establish the promised
26 environmental protections. The Government of Alberta

1 has failed to produce the promised biodiversity
2 management framework in a timely manner and missed
3 deadlines for the production of caribou range plans.
4 This is negligent and deceptive.

5 It is time for this Panel to hold the government
6 accountable. You should not waste your time making
7 meaningless recommendations that will be ignored by the
8 Government of Alberta.

9 OSEC submits that the project is not in the public
10 interest given the absence of an enforceable framework
11 for the management of biodiversity and the absence of a
12 range plan for the Red Earth caribou herd as required
13 by the Species At Risk Act. OSEC submits that you must
14 find that the project is not in the public interest,
15 given the failure of the Government of Alberta to put
16 these protections in place.

17 In the alternative, if you find that the project
18 is in the public interest, to which OSEC strongly
19 objects, OSEC makes the following recommendations: The
20 project should not be approved until the Government of
21 Alberta has completed a biodiversity management
22 framework under the LARP and a range plan that protects
23 65 percent of the critical habitat of the Red Earth
24 caribou herd.

25 The Panel should set a condition requiring Teck to
26 include the important area for caribou that's been

1 identified and discussed north of the project site and
2 south of Wood Buffalo National Park. They should
3 direct to include that in the wildlife mitigation
4 monitoring plan.

5 And the Panel should set a condition requiring
6 that there is no net impact on biodiversity through a
7 mandatory requirement for conservation offset actions
8 at a mitigation ratio of at least 4-to-1 to ensure
9 projects -- the project impacts are fully mitigated.

10 I turn now to Water Act licences and approvals.
11 Teck failed to apply for the approvals and licences
12 necessary for the diversion of Unnamed Creek 2 and Big
13 Creek. The application is, therefore, incomplete and
14 should be rejected by the Panel.

15 Teck's plans for the diversion Unnamed Creek 2 and
16 Big Creek are as follows: A 25.6-kilometre channel
17 would be constructed to divert runoff in Big Creek and
18 Unnamed Creek watershed around the plant site beginning
19 in 2021. Diverted flows from Unnamed Creek 2 watershed
20 will discharge to Big Creek beginning in 2021. The
21 diversion will increase the two-year flood peak
22 discharge in Big Creek by 23 percent. The diversion
23 channel will be partially decommissioned in 2035 with
24 the advancing mine. The downstream reaches of the
25 diversion channel will operate until mine closure.

26 Then in 2035, a portion of the channel diverting

1 flows from Big Creek and Unnamed Creek 2 will be
2 relocated west of the main pit to facilitate ongoing
3 mine development. A new 14.6-kilometre channel will
4 begin to divert flows around the southwestern boundary
5 of the main pit. This channel will be an extension of
6 the previously constructed Big Creek and Unnamed
7 Creek 2 diversion with diverted waters discharging to
8 Big Creek.

9 Then, beginning in 2037, a flow-splitting
10 structure will be constructed on the Big Creek/Unnamed
11 Creek 2 diversion channel to divert a portion of Big
12 Creek and Unnamed Creek 2 flow into the offstream
13 storage pond. When the offstream storage pond is full,
14 it will operate as a flow-through structure with excess
15 flows released through a spillway to a downstream reach
16 of Unnamed Creek 2. This diversion will remain
17 operational until 2081.

18 Despite all those planned diversions, Teck's
19 revised activations for Water Act contains no
20 application with respect to Big Creek or Unnamed
21 Creek 2.

22 Section 49 of the Water Act provides that subject
23 to Subsection (2) no person shall commence or continue
24 a diversion to water for any purpose or operating works
25 unless it is otherwise authorized by this Act. The
26 exceptions in Section 49(2) are not relevant to this

1 project.

2 In failing to make the application for a licence
3 divert to Big Creek and Unnamed Creek 2, Teck appears
4 to be relying on its assertion that the diversion of
5 water from these two creeks into the offstream storage
6 pond will be passed through and returned to Big Creek
7 and Unnamed Creek 2 without being used. This assertion
8 misinterprets the licencing provision of the Water Act.

9 Teck may be, although we don't know, relying on
10 the definition of a diversion of water -- of diversion
11 water in Subsection 1(1)(m) of the Water Act. In
12 there, there is an exception where the licence -- the
13 diversion of water is for the sole purpose of a number
14 of things, but one is channel realignment. Although
15 not explicitly stated anywhere in the hearing record, I
16 wonder if Teck is relying on the exception of channel
17 realignment for the diversion -- for the definition of
18 "diversion of water".

19 Teck appears to be under the mistaken impression
20 that unless the project uses the water or fails to
21 return an equal volume following the diversion, no
22 Water Act licence is the required. This reliance is
23 unfounded for two reasons. First, Subsection 1(1)(m)
24 of the Water Act creates that exemption from the
25 licence requirement when the sole purpose is for
26 channel realignment.

1 The planned diversion of Big Creek and Unnamed
2 Creek 2 goes far beyond the sole purpose of channel
3 realignment. The project eliminates the longest
4 portion of the channels of Big Creek and Unnamed Creek,
5 diverts the flow from these creeks into a
6 25.6-kilometre diversion channel, later re-diverts a
7 portion of delivery into another 14.6-kilometre
8 diversion channel, and installs a flow-splitting
9 structure that diverts a portion of the flow into the
10 offstream storage pond. This cannot, in any reasonable
11 manner, be determined to be for the sole purpose of
12 channel realignment.

13 Second, Teck's own evidence states that a portion
14 of the flow from Big Creek and Unnamed Creek will be
15 diverted for the purpose of filling the offstream
16 storage pond. This is clearly not a purpose covered in
17 the exemptions in the Water Act. OSEC, therefore,
18 submits that Teck has failed to make the necessary
19 application for a licence in the Water Act.

20 Even if it were arguable that Teck's failure to
21 apply for a licence falls under the exemption in the
22 Water Act, which OSEC does not concede, it is clear
23 that Teck requires an approval under Section 36 of the
24 Water Act for the diversion of these two creeks. The
25 application does not include an application for such an
26 approval. Subsection 3061 of the Water Act states:

1 (as read)

2 Subject to Subsection (2), no person may
3 commence or continue an activity, except
4 pursuant to approval, unless it is otherwise
5 authorized under this Act.

6 Subsection 3602 is not relevant.

7 An "activity" is defined, and there's a rather
8 lengthy definition of it, but, in general terms, it's:

9 (as read)

10 Placing, constructing, operating,
11 maintaining, removing, or disturbing works;
12 maintaining, or removing, disturbing ground,
13 vegetation, other material; carrying out any
14 undertaking included but not included --
15 including anything that alters or may alter,
16 become capable of altering the flow or level
17 of water, whether temporarily or permanently.

18 And then it carries on with a number of definitions
19 that apply to this project.

20 The diversion of Big Creek and Unnamed Creek 2
21 clearly involves the construction of work that will
22 alter the flow and direction of those watercourses.
23 Further in that definition, it explicitly includes
24 "channel realignment" in the definition of an
25 "activity".

26 Teck might argue that the diversion falls under an

1 exemption that allows that an approval is not required
2 by a licensee in a works that is owned by the licensee.
3 However, as I just discussed, Teck didn't apply for a
4 licence either, so they can be neither a licensee nor
5 hold an approval at this point.

6 It is clear that Teck must obtain an approval to
7 divert Big Creek and Unnamed Creek 2. Teck has not
8 applied for such approval. I think the public would be
9 astonished to think that Teck thought that they could
10 divert 40 kilometres of rivers in Alberta without any
11 approval or licence. That seems absurd.

12 In fact, OSEC is concerned that not one of
13 Teck's -- authors of Teck's application nor its
14 witnesses nor its expert consultants, who Mr. Ignasiak
15 referred to as a "highly competent team" earlier today,
16 appear to have understood that an approval and a
17 licence under the Water Act were required for these
18 diversions.

19 OSEC recommends the project application cannot be
20 approved given that the Water Act application is
21 incomplete.

22 The AER has, in the past, rejected an oil sands
23 development application on the basis that it failed to
24 conclude a complete Water Act application for all
25 required diversions. And that's in the Prosper
26 Petroleum decision of last year, and it's referenced in

1 the footnote.

2 Mr. Chair, I note the time, but I believe I can
3 finish in about 15 or 20 minutes, if you are happy to
4 have me proceed.

5 THE CHAIR: Yes. Go ahead, Mr. Robinson.

6 MR. ROBINSON: Thank you.

7 Finally, I want to turn to commitments and
8 conditions. Throughout the hearing, there was a
9 distinction made between commitments and conditions.
10 For example, Teck committed to participate in caribou
11 focused habitat restoration projects but would not
12 accept that as a condition. Teck committed to use a
13 minimum of Tier 4 engines on its haul trucks, but it
14 did accept that, as that could also be a condition of
15 the project approval.

16 Teck asserted that Teck Resources Limited would be
17 responsible for all of the project's closure and
18 reclamation liabilities but would not accept that as
19 either a commitment or a condition. Teck agreed --
20 Teck's agreement with the ACFN, Athabasca Chipewyan
21 First Nations, contained commitments but not
22 conditions. Mikisew Cree First Nations' submission
23 indicated that the -- that they and Teck had reached an
24 agreement on proposed regulatory conditions, and both
25 the ACFN and MCFN documents contained recommendations
26 for actions by government agencies.

1 As you are well aware, under CEAA 2012, the
2 decision-maker, with respect to the project reviewed by
3 the Review Panel, must determine conditions with which
4 the project must apply, and you, as a panel, will
5 recommend those conditions to the decision-maker, and
6 those conditions, once set, are enforceable.

7 Similarly, under the Oil Sands Conservation Act,
8 the AER may grant an approval on any terms and
9 conditions the AER considers appropriate. It's an
10 offence to -- to contravene or fail to comply with
11 those conditions. You may also refuse to grant an
12 approval.

13 The Panel's role under the Oil Sands Conservation
14 Act is to grant approval of the project if it's the
15 opinion it's in the public interest, or it may reject
16 it. But if it does approve it, it can put on whatever
17 conditions it considers appropriate.

18 Conditions are requirements in addition to
19 other -- and expanding upon otherwise existing
20 regulations. Conditions may be enforced by the AER.
21 By contrast, the AER expects the proponent to comply
22 with commitments, but commitments are not enforceable.
23 Similarly, recommendations made by the Panel to the
24 federal and provincial governments are not enforceable.

25 One of the great failings of the Joint Review
26 Panel process is that a Panel may rely on commitments

1 by -- made by the proponent and recommendations made to
2 government departments in determining that the project
3 is in the public interest. As we've talked about, for
4 example, in the Shell Jackpine expansion decision, the
5 Joint Review Panel stated that it expected Shell to
6 adhere with all its commitments, and then it stated
7 that its recommendation to the federal and provincial
8 governments were, quote: (as read)

9 Important for the successful implementation
10 of the project and for the future development
11 of the oil sands area [end quote].

12 However, a review Panel has no recourse when a
13 proponent fails to meet its commitments or a government
14 agency ignores the recommendations. For example, in
15 the Shell -- again, in the Shell Jackpine expansion
16 process, the Panel's recommendation that the Government
17 of Alberta work toward timely completion of the LARP by
18 a diversity management framework was ignored, yet, the
19 Panel has relied on the framework to be in place to
20 manage the biodiversity impact. Other recommendations
21 made by the Joint Review Panel in that hearing were
22 similarly ignored.

23 Some panels have attempted to make commitments
24 enforceable by containing a condition that requires the
25 proponent to comply with all commitments that they made
26 in the project application and during the hearing

1 proceedings. However, such blanket conditions are
2 meaningless, as future enforcement requires someone,
3 either the regulator or a member of the public, to go
4 back to all of the hearing documents and -- and see
5 what the commitments were. Such familiarity is quickly
6 lost over time and would require significant effort to
7 review all such documents at some point in the future
8 to identify all the commitments. If you intend to rely
9 on commitments made by Teck, you must translate those
10 commitments into conditions.

11 Teck's agreements with the ACFN and the MCFN pose
12 unique considerations with respect to commitments. The
13 ACFN agreement with Teck presents mitigation and
14 management commitments in which Teck commits to certain
15 activities.

16 However, you cannot rely on those commitments made
17 by Teck in the ACFN agreement unless those commitments
18 are extracted and established as conditions. The ACFN
19 agreement is a private agreement between the parties
20 independent of this hearing process. The agreement
21 cannot -- can only -- can only be enforced by the
22 parties. The ACFN may decide in the future not to
23 enforce certain provisions of the agreement or may
24 decide to accept compensation for a breach of the
25 agreement. This does not protect the public interest
26 and undermines any reliance that you might put on such

1 an agreement. If you intend to rely on ACFN's -- the
2 commitments made in that agreement, turn them into
3 conditions.

4 Similarly, the proposed regulatory conditions
5 found in the MCFN's submission should be given no
6 weight unless extracted and set as conditions for the
7 project. The proposed regulatory conditions found in
8 the MCFN submission do not appear to be enforceable
9 even between the parties. MCFN simply state that they
10 do not object to the project, provided the Panel's
11 decision reflects the jointly developed conditions.
12 Again, this offers no protection to the public interest
13 unless you do, indeed, convert those agreements into
14 conditions.

15 Both the ACFN agreement and the MCFN submission
16 contain recommendations for the federal and provincial
17 governments. However, as discussed, Panel
18 recommendations to government agencies are nonbinding
19 and cannot be relied upon as evidence of mitigation
20 measures.

21 OSEC submits that if you intend to rely on a
22 commitment by Teck as evidence of a mitigation measure
23 that renders the project in the public interest, you
24 must translate that into an enforceable condition. If
25 you fail to do so, there is no mechanism by which to
26 protect the public interest if Teck fails to follow

1 through on a commitment.

2 In conclusion, OSEC submits that you cannot find
3 the project to be in the public interest. A project
4 that benefits only the proponent and is unlikely to
5 contribute to the welfare of all Albertans is not in
6 the public interest. A project that relies on a world
7 oil forecast that will take the planet well beyond the
8 2-degree target of the Paris agreement is not in the
9 public interest. A project that leaves elevated
10 contamination on the Alberta landscape for decades and,
11 in some cases, centuries is not in the public interest.
12 A project that relies on unproven and untested
13 technologies to deal with fluid tailings and
14 contaminated end pit lakes is not in the public
15 interest. A project that leaves the Alberta taxpayer
16 at risk for the cost of remediating and reclaiming a
17 destroyed landscape is not in the public interest. A
18 government's 19-year failure to meet its commitments to
19 protect the biodiversity and species at risk in the oil
20 sands area is not in the public interest.

21 This project is not just another oil sands
22 project. It is the latest in a long history of
23 devastating occupation of the land and destruction of
24 the landscapes, air, water, and wildlife in
25 northeastern Alberta and the communities that depend on
26 those resources. There comes a time when the level of

1 industrial development is enough. There comes a time
2 when a decision-maker must have the courage to say
3 "enough". Let us not live with the regret that we
4 failed to act.

5 Those are OSEC's submissions, subject to any
6 questions you may have.

7 THE CHAIR: Thank you, Mr. Robinson.
8 Just a minute.

9 We have no questions. Thank you, Mr. Robinson.

10 Thank you. And just give us a minute.

11 MR. ROBINSON: Thank you.

12 THE CHAIR: And just give us a minute.

13 Okay. Recognizing it's getting a little late, we
14 would like to take a break and carry on with Original
15 Fort McMurray First Nation. So I'm going to suggest
16 we're going to take a 15-minute break, and then we're
17 going to resume. Thank you.

18 (ADJOURNMENT)

19 THE CHAIR: Please be seated.

20 We're missing somebody. Okay. Just a minute,
21 Mr. Malcolm.

22 MR. IGNASIAK: My apologies.

23 THE CHAIR: Okay. Mr. Malcolm, whenever
24 you're ready.

25 Submissions by Mr. Malcolm

26 MR. MALCOLM: Thank you, Mr. Chairman.

1 THE CHAIR: You have to push the button.

2 Yeah.

3 MR. MALCOLM: Thank you, Mr. McManus and

4 Mr. Klassen. I'm sorry.

5 I have a couple of preliminary matters I just want
6 to go through. I feel it's important for the process.
7 And -- and then I'll get into the -- I have some legal
8 arguments I'd like to present for -- some more legal
9 questions, and then I get into the meat of the
10 environment.

11 First I'd like to start out with the fact that we
12 are -- as we stated, we're impecunious, and we're
13 difficult and hard to -- we have no capacity. So when
14 we were asked to come down to Calgary at the hearing,
15 we let you know that, Mr. Chairman. And I honestly
16 believe that you thought or felt that we would find
17 some way to be here financially for the process, and,
18 unfortunately, that did not arise. And everyone did
19 their best, and the ladies in CEAA did their best where
20 we got some finances today to be here, but it didn't
21 help me with my old Chevy get down here. Thank God
22 that it held out.

23 And so I take no -- no offence, but I do want to
24 state that prior to -- to read out the comment the
25 justice made in the case -- the case we have in Court
26 File Number T-436-15. It's also used a [sic] affidavit

1 for Ms. Flora Powder in the witness case. So I just
2 want to read out the decision by honourable justice.
3 And it's in paragraph 16, and it's regarding the
4 Clearwater River Band was reinstating their case. They
5 wanted it re -- put back into court, and they were
6 using Rule 221 to stop it from going in with an issue
7 estoppel and res judicata, but then the -- and then the
8 feds said that we were being frivolous and vexatious
9 and scandalous and -- undue fair process.

10 But the judge seen otherwise, and she seen through
11 the -- the un -- the bad intent of Canada and bad
12 intent of the former First Nation. She replied:

13 (as read)

14 In light of the foregoing facts, I believe
15 that this is a situation where the
16 abuse-of-process doctrine should not be
17 invoked to strike the statement of claim.
18 The merits of this action need to be
19 determined. I agree with the Paul Cree Band
20 that it appears Canada took advantage of the
21 poverty of the plaintiffs in the first action
22 to try and ensure that a long resolved
23 Aboriginal claim was quickly disposed of by
24 the dismissal at an early stage of
25 litigation.

26 So just the fact that, you know, our impecuniosity

1 seemed to be -- we seemed to be taken advantage of
2 throughout this process, and I just want it noted for
3 the record, undue -- unfair process.

4 The other thing is the ability to be here and do
5 the oral presentation. If I was to quote the
6 Delgamuukw case [1999], "Oral presentation is very
7 serious". And this process seems to belittle that
8 case. Our chief and councillors could not be here.
9 Our bands -- we could not be here to participate, to
10 help out, and to support us, and to be heard. That's
11 been neglected and ignored too, sir.

12 And even going back as far as -- back to -- well,
13 humanity with the Tibetans, with oral presentation and
14 how meaningful it is to be here and do it in person.
15 And that was not provided to us, we feel. It was by
16 the will of God is why we're here today.

17 And so, you know, it brings into question the
18 ethics of the AER and the intent of it. Anything there
19 have been breached by ethics will have to be reviewed.
20 I feel like it should be.

21 So I'm done with those preliminary matters, and
22 I -- I understand there could be miscommunications
23 between us and our ability to be here orally and the
24 meaning of oral presentation under the Delgamuukw
25 decision.

26 So I'll -- I'll get, now, into the legaler [sic]

1 arguments. And from what I seen, the questions of
2 constitutional notice were insufficient or the --
3 premature facts. And I understand that Canada still
4 has ability to make a decision, after you gentlemen are
5 done or we're done with this project, on whether or not
6 we're to be consulted with. It's not at this hearing
7 that we're to be deciding that, and I understand that.

8 But I also understand that we have rights that
9 need to be identified and put forth in -- in our
10 arguments so that they can be considered by Canada.

11 And thank you for the letter at the end of
12 September saying that we could go ahead and provide our
13 full arguments. I'm hoping that I'm not stepping on
14 anyone's toes or putting on an undue process when I say
15 these things that I'm coming up to here.

16 First off, legality reasons or legalities. The
17 Alberta government has refused to acknowledge that
18 we're Indigenous groups. Canada has acknowledged that
19 we're Indigenous groups by the funding they've awarded
20 us through CEAA. We've also been acknowledged by the
21 Wood Buffalo National Park as two new Indigenous groups
22 that need to be dealt with. That proved to them that
23 we have ties to the lands traditionally, and we have
24 lived and hunted there in the past. The evidence from
25 my mother and my aunt speaks volumes of that, and the
26 evidence from Team Power's affidavit. Clearwater River

1 Band has -- we can account for over 200 years of
2 history with the fur trade with our family. Paul Cree
3 was the only registered trapper in 1895 in Little Red
4 River, which is now Fort McKay.

5 And we believe that the grave sites that have been
6 identified through this process and that are not
7 claimed by Fort McKay -- they seem to waive their
8 responsibility over them. We feel, with the history
9 that Paul Cree has and the family -- the Clearwater
10 family has in the river area, along with my family, who
11 was acknowledged or identified by my mother that her
12 grandfather hunted and trapped in the Birch Mountains
13 and across Poplar Point, where the Frontier mine
14 project is today. We do not know where my
15 great-grandmother is buried. We know that there's some
16 mass graves, but we could also have family members that
17 are buried on Frontier mine site. We've never been
18 consulted with. We never had the opportunity.

19 We have done some knowledge -- traditional
20 knowledge studies done with some of our members, our
21 collective, our communities, but we feel that we need
22 to do more and more needs to be done about the grave
23 sites that could be potentially on Frontier mine and
24 nobody else wants to claim. But we feel, with our
25 history, that there's a good chance it could belong to
26 one of our descendants.

1 So part of this process and what's going on with
2 our -- trying to acknowledge our communities and our
3 collectives as Indigenous bands or groups falls in line
4 with the Alberta government failure to recognize us
5 with the Alberta consultation policy. There's triggers
6 in their policy that we feel are being triggered by us.
7 Fish and Wildlife, and natural resource development,
8 the loss of wildlife, grave sites, sacred sites, all
9 these things that apply to us are being ignored by
10 Canada, and they're telling Teck to treat us as persona
11 non grata and not recognize us at all. We admire Teck
12 for all the efforts they've done with all the other
13 Indigenous groups, but it's like a stick in -- stick in
14 the eye when they don't acknowledge you. We can
15 provide the proof. We have provided the proof, and
16 we'll continue to provide the proof that we are bands
17 from this area and deserve the right to be consulted
18 with and deserve the right to persona non -- I'm
19 sorry -- to profit a prendre.

20 We have a lot of hunters; we have a gentleman
21 Charles Beauchamp, who provided evidence. He's a
22 guider, an outfitter. Now he's impacted by the
23 development. He's not being compensated. He's hunted
24 the bison for over 20 years and had them genetically
25 DNA tested to make sure they're disease free with
26 Dr. Bob Gilbert, our veterinarian who's assisting us.

1 We have more history hunting the bison than any
2 other band in the area. We have knowledge of these
3 bison more than anyone else in the area that I'll
4 elaborate further. I wanted to complete my legal
5 arguments and why we should be consulted with, why we
6 should be included in this process. And I need to
7 quote the cases for profit a prendre arguments.
8 There's the cases of -- case law of Callan, [2015]
9 Alberta Queen's Bench 287; Saik'uz First Nation, [2015]
10 BCCA 154; the OH Ranch, [1995] CanL11 9187; Thomas,
11 [2013] BC Supreme Court 2303; the Bolton, [1985] CanL11
12 S79; James Smith, [1993] CanL11 9089; then the BC
13 Court, [1985] CanL11 -- 1995 CanL11 3949; and, lastly,
14 Chingee, [2016] BSC 760.

15 So there's several court case [sic] and case law
16 that we are entitled to profit a prendre, and to do
17 that, we probably have to establish our Indigenous
18 rights and treaty rights and Constitutional rights to
19 go along with that.

20 And we have some questions of -- legal questions
21 that we'd like to present. And I'm doing my best not
22 to repeat the duty to consult and requirements and the
23 assessment from you, but we do have other issues that
24 need to be dealt with.

25 I'll have to start with reiterating the question
26 of whether Section 35 of the Constitution Act of 1982

1 has been complied with and whether or not the Crown has
2 fulfilled their duty to consult with non-status
3 Clearwater band descendants. Section 35 of the
4 Constitutional Act of 1982 provides: (as read)

5 The existing Aboriginal and treaty rights of
6 the Aboriginal peoples of Canada are hereby
7 recognized and affirmed. In this Act,
8 Aboriginal peoples of Canada include Inuit,
9 Metis -- or Eskimos, and Metis people of
10 Canada, and Indians [I believe]. For
11 greatest certainty, Subsection (1), "treaty
12 rights" includes the rights that now exist by
13 way of land claims agreements or may be so
14 acquired.

15 Which is where the original from very First Nations is,
16 with the -- working with Canada on requiring our rights
17 and lands. And we're entitled to from being kicked out
18 of the bands 1915.

19 And whether section -- okay. So legislation
20 cases, Constitution Act, [1867], inter alia,
21 Section 91(24) and 132; Rupert's Land Act, [1862];
22 Temporary Government of Rupert's Land, [1869]; Rupert's
23 Land and North-Western Territory Order, [1870], inter
24 alia, Section 14, Schedule A; memorandum of agreement
25 between the delegates of the Government of Dominion and
26 directors of Hudson's Bay Company, Schedule C;

1 Treaty 8; Constitutional Act, Natural Resource Transfer
2 Agreement, [1930]; Constitutional Act, [1982],
3 Sections 15, 25, and 35; Calder v. A.G. B.C., Supreme
4 Court 13 -- 313; Frank v. The Queen, [1978] Supreme
5 Court 95; Nowegijick v. The Queen, [1983] Supreme
6 Court 29; Guerin v. The Queen, [1984] 3 -- Court 335;
7 R. v. Sioui, [1990] Supreme Court 1025; R. v. Sparrow,
8 [1990] Supreme Court 1075; R. v. Badger, [1996] Supreme
9 Court 771; Delgamuukw v. B.C., [1997] Supreme Court
10 1010; R. v. Sundown, [1999] Supreme Court 393;
11 R. v. Marshall, [1999] Supreme Court 456; Haida Nation
12 v. B.C. (Minister of Forests), [2004] Supreme Court
13 511; Taku River Tlingit First Nation v. B.C. (Project
14 Assessment Director), [2004] Supreme Court 550; R. v.
15 Marshall, [2005] Supreme Court 220; R. v. Mikisew,
16 [2005] Supreme Court 388; R. v. Morris, [2006] Supreme
17 Court 915; McIvor v. Canada (Registrar), BC Number 1251
18 [sic]; Harry Daniels decision Supreme Court 2013;
19 Deschaenoew [phonetic] decision, [2016]; and the Kinder
20 Morgan pipeline recent decision for the failure to
21 consult. Those are cases that we feel apply to us.

22 And since time immemorial, our ancestors have
23 lived on the lands -- our Indigenous communities, and
24 collectives -- on the lands of northern Alberta,
25 northern Saskatchewan, and Southwest/Northwest
26 Territories. The Rupert's Land and North-Western

1 Territory Order provided that any claims of Indians to
2 compensation for lands required for settlement shall be
3 disposed by the Canadian Government in communication
4 with the Imperial Government. The Queen of Great
5 Britain and Ireland entered into Treaty 8, 1899
6 providing that the Indians of this territory shall have
7 the right to pursue their usual vocations of hunting,
8 trapping, and fishing throughout Treaty 8 herefore
9 [sic] described. In 1930, the lands within the
10 province of Alberta were passed to the province of
11 Alberta subject to -- recognized the interest in all
12 Crown lands was subject to any trust existing in
13 respect thereof, and to any interest than that of the
14 Crown in the same, and provided that such further areas
15 as necessary to enable Canada to fulfill its
16 obligations under the treaties with the Indians the
17 province would be set aside. The Natural Resources
18 Transfer Agreement also provided that the right to
19 hunt, fish, and trap was assured to Indians for food at
20 all seasons of the year on all unoccupied Crown lands
21 and on any other lands to which the said Indians might
22 have right, access. The Indian Act has provisions in
23 place which discriminate against recognition of Indians
24 contrary to Treaty 8 and contrary to the Charter of
25 Rights and Freedoms Section 15. Pursuant to Section 35
26 of the Constitution Act, 1982, these treaty rights are

1 recognized and affirmed as constitutional rights.

2 The government -- the regional municipality of
3 Wood Buffalo, the province of Alberta, and Canada owe a
4 duty to consult with the non-status Fort McMurray Band.
5 In April 2009, the British Columbia Court of Appeal
6 determined that it is necessary to consult with
7 Aborigines early in the process of dealing with the
8 matters that affect Aborigines and treaty rights. In
9 Carrier Sekani Tribal Council v. British Columbia
10 (Utilities Commission), 2009 British Courts [sic] --
11 BCCA 67, paragraphs 52 and 57, and The Kwikwetlem First
12 Nation v. British Columbia (Utilities Commission), 2009
13 BCCA 68, paragraph 70, the British Columbia Court of
14 Appeal stated that consultation requires an interactive
15 process with the potentially affected Aborigines. The
16 interactive process must be carried out with respect to
17 all dispositions and developments of oil and gas rights
18 and the tar sands within the traditional lands of the
19 Tar Sands within the traditional lands of the
20 non-status Fort McMurray -- Original Fort McMurray
21 First Nation and the Clearwater River Band affected by
22 these developments.

23 The obligation of a duty to consult in
24 circumstances where Aboriginal title is claimed, is
25 discussed by Chief Justice McLachlan in Haida Nation v.
26 British Columbia (Minister of Forests), [2004] Supreme

1 Court 511 at paragraph 17: (as read)

2 The historical roots and honour of the Crown
3 suggests that it must be understood
4 generously in order to relect the underlying
5 realities from which it stems. In all
6 dealings with Aboriginals peoples, from the
7 assertion of sovereignty to the resolution of
8 the claims implementation of treaties, the
9 Crown must act honourably. Nothing less is
10 required if we are to achieve the
11 reconciliation of the pre-existence of
12 Aboriginal societies with the sovereignty of
13 the Crown, *Delgamuukw, supra*, at
14 paragraph 186, quoting *Van der Peet, supra*,
15 paragraph 31.

16 In the *Mikisew Cree First Nation*, [2005] Supreme
17 Court R. 388, Mr. Justice Binnie held at paragraph 51:
18 (as read)

19 The duty to consult is grounded -- in honour
20 of the Crown is not necessary for present
21 purposes to invoke fiduciary duties. The
22 honour of the Crown is itself a fundamental
23 concept governing treaty interpretation and
24 application that is referred to by Gwynn, J.
25 of this Court as a treaty obligation as far
26 back as 1895, four years before Treaty 8 was

1 concluded, *Province of Ontario v. Dominion of*
2 *Canada* (1895), 25 S.C.R. 434, at
3 paragraphs 511 to 512, per Gwynne, J,
4 dissenting. While he was of -- the minority
5 in his view that the treaty obligations to
6 pay Indians annuities imposed a trust on
7 provincial lands, nothing was said by the
8 majority in the case that to doubt that the
9 honour of the Crown was pledged to this
10 fulfilment and the obligations of the
11 Indians. This had been the Crown's policy as
12 far back as the Royal Proclamation 1763 and
13 is manifest in the promises recorded in the
14 report to the Commissioners. The honour of
15 the Crown exists as a source of obligation
16 independent of treaties as well, of course.
17 In *Sparrow, Delgamuukw v. British Columbia*
18 [1997], Supreme Court 1010, *Haida Nation* and
19 *Taku River*, the honour of the province would
20 be set aside.

21 As summarized in *Mikisew* at paragraph 63, 64, the Crown
22 owes a duty to consult and to achieve the overall
23 objective of modern law and treaty members and rights,
24 namely reconciliation. The Crown and the parties to
25 which the Crown purports to download this duty to
26 consult onto have failed to reconcile the treaty

1 members and rights of the Original Fort McMurray First
2 Nation and the Clearwater River Band 175. In fact,
3 these parties have failed to consult in any fashion or
4 meaningful fashion. This is a breach of treaty rights
5 under Section 35.

6 Further, to the extent that the members of the
7 Original Fort McMurray First Nation and Clearwater
8 River Band are not dealt with or consulted with in the
9 same fashion as registered Indians under the Indian
10 Act, R.S.C. 1985, c. I-5, the Indian Act and the
11 approach to these parties is discriminatory contrary to
12 Section 15 contrary -- Charter of Rights and Freedoms,
13 Section 35, 1982, demands, at a minimum, a thorough
14 examination of cumulative effects of oil sands
15 development and development of in situ projects
16 accomodation recognition of the constitutional rights
17 of the Original Fort McMurray First Nation and
18 Clearwater River Band to occur.

19 The original Fort McMurray First Nation and
20 Clearwater River Band and -- are -- a citizen of our
21 band, Charles Beauchamp, who is a guider and outfitter,
22 was specifically directed and adversely affected by
23 this project.

24 The test for directly and adversely affected is a
25 two-part test. The first question is a legal test of
26 whether the claim right or interest is one known to

1 law. Second question's a factual question and whether
2 or not the legal interest or rights are diversely [sic]
3 or adversely affected, Dene Tha' First Nation v. The
4 Alberta Energy Utilities Board, 2005 ABCA 68,
5 paragraphs 9 to 10.

6 The Clearwater River Band and the Original Fort
7 McMurray Nation have and use -- continue to use these
8 traditional lands since time immemorial prior to Treaty
9 8 and since that time. Historical evidence is present
10 in the recorded history since the late 1700s of their
11 presence and use of these lands.

12 As I mentioned, the Clearwater River Band and
13 trapping goes back over 200 years and at least since
14 time immemorial.

15 These lands are hunted, fished, trapped;
16 traditional foods are collected and gathered; spiritual
17 sites are visited and maintained.

18 This land has been held in this community since
19 the time when trap lines were first acknowledged in the
20 area back in the late 1950s. Just let it be known that
21 my mother's grandfather and my great-grandfather hunted
22 and trapped before the trap lines were established in
23 the site where Frontier Mine is today, and that's what
24 they testified at the hearing.

25 Family trap lines and family areas to hunt and
26 trap territories were not part of -- they're not part

1 of the communal ownership of a band as defined under
2 the Indian Act. Family trap lines were and are the
3 property of individuals, families, who trap on that
4 trap line.

5 We feel that Charles Beauchamp has the same rights
6 as a trapper. His outfitting outfit has been severely
7 impacted by the Frontier Mine and will be in the
8 future, no longer hunt the bison, and the moose habitat
9 is going to be really affected.

10 The moose migrate, and they migrate in the winter.
11 They herd up -- when there's enough moose, they herd up
12 to protect themselves, and they'll migrate to the river
13 valleys to eat their willows and look after their
14 calves.

15 Frontier mine is a major -- another roadblock to
16 stop them from migrating from the birch mountain area,
17 and it's just another roadblock along the whole river
18 from here to -- to CNRL where the moose and the
19 wildlife corridors have been diminished. Basically, I
20 see there are no wildlife corridors anymore because
21 they're all burnt up due to the neglect of the Alberta
22 government -- failure for them to protect our forests.

23 Our communities and collectives use these
24 traditional territories, extensive family groups to
25 exercise their treaty and Aboriginal rights, including
26 the rights to hunt, fish, and trap and gather under

1 Treaty 8 signed in 1899, recognized and affirmed by
2 Constitution Act, 1982, Section 35. Prior to the
3 institution of registered fur management areas and
4 continuing today --

5 THE COURT REPORTER: Can you slow down.

6 MR. MALCOLM: I'm sorry.

7 Prior to the institution -- is that where I should
8 start? Okay.

9 Prior to the institution of registered fur
10 management areas, and continuing today, these lands
11 [sic] are -- is a profit-a-prendre to us in these
12 lands.

13 Teck has not consulted with us or Charles
14 Beauchamp.

15 The study of wildlife is superficial in terms of
16 dealing with the wildlife and environment that is
17 required for sustaining wildlife. The issue of the
18 effects on wildlife is key to these Aborigines, to the
19 trappers, and to us traditional land users, which ...

20 Wetlands, bogs, muskegs are key to this way of
21 life. Wetlands will be destroyed since there's no
22 method of reclamation for wetlands. Indirect effects
23 to terrestrial plant communities, wetlands, and
24 peatlands from changes to surface water and groundwater
25 quality -- quantity and quality of groundwater surface
26 water interactions are difficult to predict because no

1 data availability.

2 All these models and studies that have been done
3 in these books, but there's still no data availability
4 of the loss of muskeg.

5 This has massive effect on the wildlife in the
6 area destroying trapping and destroying these
7 traditional uses.

8 The wildlife review contained in the application
9 for approval only focused on a limited review of
10 wildlife and fails to consider the entire lifecycles,
11 interactions of effects on the environment, wildlife,
12 and terrain. Old-growth forest areas are key to
13 majority of the animals that are trapped, and this
14 project will clear areas of old-growth forest resulting
15 in a period of over 60 to 100 years after reclamation
16 before old growth will begin again.

17 This destroys these lands for trapping and for
18 traditional use. Destruction of habitat occurs for
19 fish and other aquatic species, waterfowl, through to
20 muskrats, beaver, fisher, martin, otter, lynx, to moose
21 and woodland caribou.

22 Inherent in to [sic] the development of these
23 projects is increase in the population of wolves and
24 coyotes, which has a serious effect of the entire
25 profile of wildlife and on other well matters of human
26 safety, which -- areas such as proposed project.

1 Extensive problems with these animals has occurred
2 throughout the oil sands. Projects have failed to
3 utilize the knowledge of Aboriginals and specific
4 trappers to assist in increasing these problems [sic].

5 We are told that -- I was told that the fish and
6 wildlife -- Alberta Fish and Wildlife did a wolf cull
7 the last couple years. They killed off over 200 wolves
8 in the area from Conklin to here. That's their way of
9 management.

10 The project will impact the geography extensively
11 and result in destruction of habitat for woodland
12 caribou, beaver, fox, cougars, lynx, black bear,
13 martin, peregrine falcon, squirrel, rabbits, and other
14 wildlife populations --

15 THE CHAIR: Mr. Malcolm, slow down a
16 little bit, please.

17 MR. MALCOLM: Okay. Sorry, sir. I just --
18 the one hour-time frame just got -- threw me off.

19 Extensive problems with these animals -- inherent
20 in the development of these projects is the increase in
21 the population of wolves, coyotes -- extensive problems
22 with these animals is increasing the problem.

23 The project will impact the geograph --
24 geographically [sic] extensively and result in
25 destruction of habitat for woodland caribou, beaver,
26 fox, black bear, and martin, peregrine falcon,

1 squirrel, rabbits, and other wildlife populations which
2 are relied upon for sustenance of these traditional
3 lands and trapping income and hunting/guiding income.

4 All wildlife is stressed because of the
5 destruction of their habitat and extinction results in
6 cumulative developments including SAGD oil sands mines.
7 This is a severe destruction of wetlands, increased
8 presence of humans in the area, clearing of old-growth
9 forest vegetation resulting in drastic changes to
10 habitat for wildlife and stresses to traditional land
11 users.

12 The application of the Environmental Protection
13 Enhancement Act must be considered in conjunction with
14 the Alberta Energy Regulator application, which will
15 be -- directly affect these traditional lands and
16 trapping, profit-a-prendre rights and heavily impacted
17 the animals which are to be trapped. It would be
18 fundamentally wrong to prove this without any
19 information being supplied relating to these concerns.

20 A summary of concerns. Teck has failed to consult
21 to meet with Original Fort McMurray First Nation and
22 Clearwater River Band and Charles Beauchamp's guiding
23 outfit in any manner even though all these activities
24 are occurring within their traditional lands.

25 Teck has not dealt with these issues involving the
26 length of the time the project will be in place,

1 massive cumulative effects, the project, particular
2 area of the potential for contamination surrounding
3 area, including the watershed or the Athabasca River;
4 serious and permanent damage to wildlife, which we rely
5 on, and destruction of the habitat, including change to
6 the muskeg and wetland features overall.

7 These activities fail to accommodate our rights --
8 trapping rights, traditional rights, as well as
9 ceremonial matters and destruction of grave sites.
10 Efforts to work towards a settlement utilizing meetings
11 and consultation, including the guidelines for
12 consultation and compensation for Aboriginal trappers
13 within the community and petroleum industry have not
14 been addressed.

15 Since this application was filed, it does not deal
16 with the issues recently identified in a joint oil
17 sands monitoring program study environmental science
18 and technology profiling oil sands mixtures from
19 industrial development and natural groundwaters for
20 source identification, January 2014. Acid-extractable
21 organics, including naphthenic acids have been located
22 as well. Chloride, sulfate, nitrate, ammonium,
23 aromatic organic acids are unresolved issues for this
24 EPEA and Water Act applications. Arsenic leaching from
25 in situ steam injections has also not been addressed.

26 No innovative thought has been utilized considered

1 use of other source of water for this project. Rather,
2 water diversion, treated sewage for the municipality
3 Wood Buffalo could be utilized resulting in less impact
4 to this fragile environment.

5 There's thousands and thousands of gallons that
6 could be recycled and reused rather than using the
7 river water. All we'd have to do is put a polishing
8 unit on the sewage lagoon and the outlet, and they
9 would be able to re-use that water. But they don't
10 want to put a polishing unit, and it leaves it as a
11 deleterious substance that's still going into the river
12 from the sewage. It baffles me why with today's
13 technology they won't spend the extra dollar to help
14 clean it up.

15 No use of wildlife corridors is documented.
16 Wildlife corridors would alleviate some of the issues
17 created by cutting off portions of range of wildlife.

18 The forest fires have burnt up all the wildlife
19 corridors. The only old-growth forest left is in the
20 area of Frontier mine going north. Now that's going to
21 be removed. So there would be no more old-growth
22 forest between here and Wood Buffalo National Park. No
23 use of wildlife corridor.

24 A large portion of traditional land in this --
25 will be disturbed by the project -- project boundaries
26 with significant amount of disturbance occurrence on

1 this land. Disturbance will be presumed for up to
2 75 years based on the period projected, but we know it
3 goes several hundred years after that. We'll still
4 feel the impacts from this project.

5 Wastewater, human destruction caused by the rapid
6 pace of development will destroy these lands -- will be
7 extensively impacted by the project application which
8 extends throughout the construction, operation, and
9 reclamation phases. Concern must be expressed
10 regarding this application, which is completely
11 negligent in addressing the issues regarding our
12 traditional uses. Habitat loss and direct habitat
13 alteration and reduced effectiveness will all result.
14 Serious concerns are expressed about woodland caribou.
15 Habitat fragmentation and connectively will also be
16 disrupted and seriously affecting traditional land use.

17 In the current state, the environment section
18 information is outdated. Even LARP is not still
19 instilled.

20 Combined with other projects in this area,
21 extensive impact on the traditional lands and land use
22 and lands will occur, camps and associated
23 right-of-ways, waste sumps, pipelines, roads,
24 powerlines, bridges. And I'm not sure about the
25 airport yet, whether -- where that's going to go.

26 No consideration has been given to the extensive

1 intrusion that will occur particularly surrounding the
2 site of the developments. Location of the site will
3 result in destruction of wildlife patterns beyond the
4 precise area of the facilities and, accordingly,
5 seriously impact our traditional lands and trappers.

6 No emergency response plan has been discussed with
7 the communities downstream if -- major spill or if
8 there's a major flaring incident, the trappers are only
9 a mile and a half away. They're definitely going to be
10 gassed out. They're not informed. There's no -- no
11 emergency response plan for none of that. They don't
12 even acknowledge the flares, fugitive emissions in the
13 EIA. And the flaring is one of the major producers of
14 fugitive emissions, and -- and SO₂, sulphur dioxide,
15 nitrous oxide, carbon monoxide, carbon dioxide,
16 ammonia, and heavy metals will all come from that
17 flare.

18 Overall destruction of traditional land has been
19 observed, and land becomes more easily accessible to
20 the public because of this [sic] type of projects. No
21 consideration appears to have instituted to diminish
22 these cumulative effects.

23 And the third question we have is the line of
24 question is right of freedom or alleged to be
25 infringed [sic]. And it's another lengthy argument,
26 but I believe that we've covered it with the -- under

1 the Constitution Section 35, Constitution 1982, the
2 Royal Proclamation 1763, and the Rupert's Land and
3 North-Western Territory Order 1870 that the Canadian
4 government in communication with the Imperial
5 Government resolves all claims of Indians to
6 compensation for lands required for the purpose of
7 settlement to be considered and settle in conformity
8 with the equitable principles --

9 MS. LACASSE: Mr. Malcolm, I know you're
10 worried about the time, but you've got to slow down, or
11 our court reporters aren't going to make it.

12 MR. MALCOLM: I'm sorry. Okay. So
13 backtrack here. What was the last words I said?

14 MS. LACASSE: I recall hearing --

15 THE COURT REPORTER: "Resolve all claims of Indians
16 to compensation required" ...

17 MR. MALCOLM: Resolve all claims of Indians
18 to compensation for lands required for the purposes of
19 settlement to be considered and settled in conformity
20 with the equitable principles which have uniformly
21 governed the British Crown and its dealings with the
22 Aboriginal Treaty 8, Constitution Act 1930, the Statute
23 of Westminster 193, and the Human Declaration of Rights
24 of Indigenous Peoples.

25 To the extent that members of Original Fort
26 McMurray First Nation and Clearwater River Band are not

1 dealt with or consulted with in the same fashion as
2 registered Indians under the Indian Act, R.S.C. 1985,
3 c. 1-5. The Indian Act and the approach of these
4 parties is discriminatory contrary to Section 15
5 Charter of Freedoms and Rights [sic].

6 So those are the three legal questions I felt that
7 need to be included in our arguments, Mr. Chairman.

8 And as some of the reliefs that we're looking at:
9 Traditional land use study and mapping; investigation
10 resolution socioeconomic concerns attributed to the oil
11 sands development; resolution of the environmental
12 impacts that this project will cause; complete review
13 and resolution of the cumulative impacts of oil sands
14 development under Aboriginal and treaty rights and
15 appropriate methods of accommodation; review of the
16 health of these Aboriginals caused by oil sands
17 development.

18 As far as I know, there was an attempted study
19 done in 1999 from what I read in the EIA, and it was
20 for the polycyclic aromatic hydrocarbons, and it was
21 for the country foods, but that never did occur. They
22 never did do the testing, and the Teck Frontier Mine
23 decided on their own to make their own estimates on --
24 on that. And we find that their estimates are off and
25 properly [sic] testing should be done with us. No
26 tests have been done to date. They're only estimating

1 it. That's just a coverup.

2 Rights under the non-status in Alberta. I'm not a
3 lawyer, sir, but I have represented several of our
4 citizens involved in hunting cases and infractions, and
5 I have won, and I have -- as I -- in our evidence that
6 we supplied with Mr. Dafoe [phonetic] where they put
7 stay on the charges.

8 The Ferguson test is a case law that we use, and
9 the Alberta government ignores it. The Alberta Court
10 of Queen's Bench characterized the issue as whether the
11 accused is an "Indian" within the meaning of Section 12
12 of the Natural Resource Transfer Act of 1930, such that
13 the accused entitles certain immunities from the force
14 of certain provincial legislation. In dismissing the
15 appeal and confirming the accused's acquittal, the
16 Court held that the lower court made two key findings
17 firstly, that Mr. Ferguson was a non-treaty Indian
18 within the meaning of the Indian Act R.S.C. 1927,
19 something nine -- c. 98, being the act in force at the
20 time of the signing of the Natural Resource Transfer
21 Agreement [sic]; and, secondly, the term of "Indian" in
22 Section 12 of the Natural Resource Transfer Claim [sic]
23 included non-treaty Indians. Furthermore, I had
24 concern with Mr. Ferguson's current lifestyle, as more
25 recently identified with running tractors and building
26 roads could operate as a disqualification from the

1 Indian mode of life earlier followed by him as a child
2 and as a young man and prior to his move from Grimshaw
3 from Keg River. The facts in regard to his oil patch
4 or commercial-related activities were sparsely touched
5 upon in his direct examination and in cross-examination
6 at the trial. Also, Mr. Mandell was -- persuaded me
7 that a status with the consequences in issue should not
8 be placed in jeopardy through a casual intermittent
9 lifestyle pursuit without there being some clear
10 legislative disenfranchisement criteria in place.

11 The Court held that the appropriate test used for
12 definition of an "Indian" used in the Natural Resource
13 Transfer Agreement is the 1927 Indian Act definition.
14 Any person of Indian blood is reputed to belong to an
15 irregular band or follows Indian mode of life, even if
16 such a person is only a temporary resident of Canada.
17 They have the rights to harvest.

18 We have the rights to harvest as non-status
19 Indians in Alberta. Alberta government plays games
20 with us. They won't acknowledge us in the Alberta
21 consultation policy. We are First Nations under the
22 Indian Act, non-status and status under definition. So
23 we meet the definition of the consultation, but we are
24 ignored and neglected. We have won several hunting
25 cases proving that we have the rights. In response,
26 Alberta will withdraw the charge, put stays on the

1 charges, rather than allow us to access our rights that
2 we're entitled to. They -- they basically abuse the
3 justice system.

4 I do a miscellaneous quotation: (as read)

5 The essence, however, of the defendant's
6 defence is that he was entitled to hunt moose
7 because he is an Indian within the meaning of
8 the Natural Resource Transfer Agreement (1930
9 Constitution Act).

10 Something that the Alberta government does not pay
11 attention to.

12 And then we also -- if I was to use the 1928
13 Indian Act definitions, we meet the definitions of an
14 "Indian". We also meet the definition of an "irregular
15 band". An "irregular band" means any tribe or band or
16 persons of Indian blood who owns no interest, reserve,
17 or lands of which the legal title is vested, the Crown
18 will possess no common funds made by the Government of
19 Canada and will have not any treaty relations with the
20 Crown. We consider ourselves an irregular band.

21 A non-treaty Indian means any person of blood who
22 is reputed to belong to an irregular band and follows
23 the Indian mode of life, even a person that's only a
24 temporary resident of Canada.

25 And what we are entitled to is a special reserve.
26 "Special reserve" means any tracts of land and

1 everything belonging thereto, set apart for the use of
2 benefit of and held in trust for any band, irregular
3 bands of Indians, the title of which vested in a
4 society, corporation, or continue [sic] legally
5 established, capable of suing and being sued or in
6 person to persons of European decent.

7 So we're entitled to lands and reserves, and
8 that's being ignored by Alberta government issuing all
9 these land leases and such. We're entitled to lands
10 and mineral rights.

11 And we're entitled to lands and --

12 THE CHAIR: Mr. Malcolm, you know we've
13 talked about the fact this isn't really the venue to
14 try and seek a determination on rights or recognition
15 of rights, and the Panel doesn't have a role with
16 respect to assessing the adequacy of Crown
17 consultation. So it is your time to use as you see
18 fit. Again, I just remind you of that conversation
19 we've had.

20 MR. MALCOLM: Thank you, sir.

21 I understand that the Panel shall summarize the
22 claims of Aboriginal treaty rights and shall consider
23 the effects of the project on such rights. I also
24 understand that consultation still to be determined is
25 premature. So I'm basically done these arguments.

26 I'd like to get into the socioeconomic part. And

1 we have a picture that I wanted to put up of my father
2 who was evicted from his home. My father was a World
3 War II veteran. He had his second day in Cannes,
4 France. Second day of D-Day, to fight his way to
5 Cannes, got wounded, come home where he was born, to
6 have Syncrude come in and put a major development on
7 his home. Basically forced him and his family and
8 residents out from Auguston Flats [phonetic]. We're
9 in -- hopefully going to have a public inquiry over it.
10 We've also been dealing with Canada about it.

11 Canada and I have been talking about coming up
12 with solutions to all these problems and are working
13 with them and hopefully being acknowledged as a nearly
14 constituted band. So in the meantime, we have been
15 decimated. Genocidal activities displacement have been
16 started on this from the time of the treaty signing.

17 If I can have this put up next, please. Sorry.
18 These are -- this is a band pay list -- treaty band pay
19 list, I believe, from around 1910. It has -- Number 3
20 is Paul Cree. He's the head man for the Clearwater
21 River Band. And Number 4 is Alexi [phonetic] Cree,
22 which is my grandmother's husband, my father's
23 mother's -- she was a widow to Alexi Cree when she
24 married my grandfather Harry Malcolm. So my father was
25 born in this area. His mother raised him there. She
26 was there since time -- time started, since the time of

1 the treaty signing. And we've been kicked around, left
2 out, and we're persona non grata, and this needs to
3 stop.

4 I'll move on to some of the environmental issues.
5 I'll talk a little bit about herd methylmercury. And I
6 have an email from Dr. David Schindler I'd like to read
7 out. (as read)

8 As the measurements of methylmercury based on
9 actual fish taken from compensation lakes are
10 model fantasy?

11 In general, if methylmercury is high in
12 water, it is also high in fish. But the
13 correlation is poor because of a number of --
14 most important is the food chain. Predators
15 like pike and walleye and lake trout always
16 have higher methylmercury. Hard to
17 generalize. [And it's during contaminated
18 food]. But, in general, having higher
19 methylmercury at any level in aquatic system
20 is dangerous. To say that is not a problem
21 is absurd.

22 I can only think of Grassy Narrows and English River
23 with -- with the problems they're having with mercury
24 over there.

25 I have another email I'd like to read out from him
26 in saying: (as read)

1 Here are some things in closing. Huge
2 reclamation cost is proof that the industry
3 will be setting aside about 1 percent of what
4 is required as well as lying to the public.

5 End pit lakes -- if you can put off -- end
6 pit lakes are shown that they're --
7 productive ecosystems are not productive.

8 The company's promised based on research
9 reports to date, there should be certain --
10 certainly no more approved until at least one
11 lake proves to be viable.

12 I'm happy to hear that Teck is going to put these
13 compensation lakes or so-called compensation lakes
14 with -- I'm not sure if it has a liner, but they are
15 going to make sure that there are no topsoil and trees
16 and shrubs that are going to help increase the mercury
17 content. I'm not sure if that's going to eliminate the
18 mercury content that -- that they propose, and I wish
19 that if any liners are to be installed, it would be on
20 the tailings ponds.

21 Finally, the IPC analysis released last week says
22 that we have ten years to turn around our emissions of
23 greenhouse gases or risk billions of dollars in damage
24 to industry crops, ecosystems. The earlier predictions
25 have come true. We have all seen the more intense
26 fires, floods, hurricanes over the past few years.

1 Teck is a step in the wrong direction.

2 And I'd like to -- I think it needs to go to
3 mention, sir, as a leader -- and leaders like prime
4 minister and premiers -- when they take those
5 positions, there's also positions that are responsible
6 for the citizens, and some of the citizens die on the
7 streets, are frozen to death, and are neglected. And
8 development of all this process just increases
9 hardships on these people, and they're left out at the
10 end of the day. And there's just a start talking about
11 blood on your hands for being a leader with the forest
12 fires, how many people in Greece, California got burnt
13 up? When we go to BC, all we see is smoke now. Is
14 that what we're to expect now? These are predictions
15 that came from future scientists at the CNRL hearing,
16 True North hearing, and now they're happening today.
17 Decision-makers, whether you note -- like it or not,
18 your decisions are affecting populations around the
19 globe, and I hate to say it, but blood is on your hands
20 too. So I hope you can minimize it as much as
21 possible.

22 We have to talk about the airport, the aerodrome.
23 I don't see it on the site, where they're going to put
24 it. All I can hope is they don't put one there at all,
25 they follow the recommendations of the Regional
26 Municipality Wood Buffalo, use their airport, or

1 there's several other airports between there and the
2 CNRL site that can be utilized. Definitely going to
3 affect Wood Buffalo National Park whooping crane. And
4 hopefully -- like, the prime Directive 74 has been
5 issued -- they could also do something for the airfare
6 for people coming and going. We'd prefer that they,
7 you know, stayed in Fort McMurray. Then that creates
8 more of a hardship on us because that's what displaced
9 us to begin with.

10 And we discussed the grave sites were affected or
11 could be affected. Sacred battlegrounds for the -- for
12 the Crees and Chipewyans last fought during the fur
13 trade. There's people buried there.

14 And pipestone. No one else has told you about
15 pipestone, but we're the Aboriginal group that knows
16 about it. We've had the quarries protected. There's
17 notations put on a couple of quarries on Pierre River,
18 which is very close to the Frontier Mine, and there
19 could be pipestone quarries or pipe stones that could
20 be found on the Frontier mine site. It's never been
21 explored or identified mostly because probably nobody
22 knows what pipestone even looks like except us. We
23 have a sample. We provide it. Nobody else has one.

24 And I'd like to get into the -- if I could have
25 this Figure 4-36. It was showing the 24-hour
26 particulate matter concentrations, and we prove that

1 does not adhere to the calumet -- CALPUFF model, that
2 model that's used for the air dispersement plume
3 dispersements. And it was agreed with Environment
4 Canada Climate Change [sic] that the -- that this [sic]
5 predictions were wrong, need to be improved. And I
6 believe Mr. Ignasiak confirmed it today saying that
7 predictions of the lakes that Environment and Climate
8 Change Canada -- sorry -- Environment Canada Climate
9 Change said that the lakes are acidifying in the area,
10 and some actually going the other way where they're
11 becoming more base or -- I would refer to as a green
12 algae type situation.

13 THE CHAIR: Mr. Malcolm, I don't think
14 staff had that figure. I don't think you provided it.
15 Just for the record, could you clarify the figure
16 number and what document it's from.

17 MR. MALCOLM: Figure 4-36 and Volume 3,
18 Section 4, "Air Quality".

19 THE CHAIR: Okay. Thank you.

20 MR. MALCOLM: Okay. I'll just identify
21 that.

22 So with that being said -- and now Mr. Ignasiak
23 said that they'd come up with a new study on the waters
24 and the lakes that they've actually changed, and I'm --
25 I'm a little bit concerned with where they got that
26 study from and why it wasn't provided earlier, and was

1 it, like, new evidence? So if that study was wrong, so
2 were these studies. So were the studies in their
3 environment EIA for potential asset input depositions.
4 They're all wrong, and they need to be redone as well.

5 Alberta is not a -- a friendly place to the north.
6 The bands that we -- were mentioned earlier, Fort
7 Smith, Deninu Kue, and Fort Fitzgerald, Fort Smith
8 bands, they're feeling -- the -- the bad impacts -- the
9 wind blows pollution, the water flows pollution, sewage
10 from the plants, lack of fish habitat. They're --
11 they're feeling it. Whether or not the regional study
12 area doesn't go that far or because Teck feels it's not
13 impacted, they're not happy. In the Northwest
14 Territories, they're not saying good things about
15 Alberta. Alberta is not a good neighbour.

16 The fish -- I'll get into the fish habitat, and if
17 I could ask to have this put up. Just give me a second
18 here. It's Figure 30D-1 -- 1-1 2012 water quality fish
19 sampling locations, Round 2 supplementary SIRs.

20 If that's a problem, I can -- I can maybe refer to
21 this one instead. But I would like to go through both
22 if possible. The first one was Figure 30D1-1. It's
23 Round 2 of the SIRs 2012 water quality and fish
24 sampling locations.

25 MR. SCHUSTER: What's the other one?

26 MR. MALCOLM: It's Figure 15.2-2, fish

1 distribution revised aquatics local study area,
2 Round 2, the SIRs.

3 MR. SCHUSTER: It's going to take a few
4 minutes.

5 THE CHAIR: It sounds like it might take a
6 few minutes.

7 MR. MALCOLM: Okay. Well, basically, what I
8 wanted to show here, sir, is the fish sampling sites
9 that were done and also the streams that they deemed no
10 fish habitat. I have a problem with the way they've
11 done their fish sampling. They're -- they're not when
12 the fish spawn, and if you really want to know
13 what's -- that stream, if it's healthy or if it's a
14 fish habitat, you need to be there when the fish spawn.
15 If I could use -- I mentioned before Willow Lake and
16 the Jackfish Pond there in the streams; they're
17 spawning in the run -- run -- runoffs. We wouldn't
18 even call them "creeks". But they spawn in there, and
19 they're there two days of the year. The rest of the
20 time, they're not there. And if you're not there to
21 see them, then you're going to say, That's not fish --
22 that's not fish habitat. No way fish could live there.
23 And, to me, that's what they've done here in Figure
24 15.2-2; they've outlined a whack of streams in red
25 saying that, No fish habitat because we didn't find
26 any. But they've never gone there when the fish are

1 there. They've never been there to see what's in the
2 streams. They go there after when they're done. When
3 I see they found suckers, to me, that means the
4 suckers -- the walleye have already spawned and gone
5 down because the suckers go up and eat the eggs, and
6 they spawn after the walleye.

7 So they're -- they're -- you know, they need --
8 need to be a bit more studies done on the fish -- the
9 habitat and loss of this -- all these streams that
10 supply the Athabasca River. The Alberta government
11 shut down the fishing licences for commercial fishing
12 because there's no fish. That's their reason why they
13 shut it down. And when they -- they promote
14 recreational fishing, Alberta government says, Oh, we
15 sold all these licences. We sold -- between
16 2002 - 2011, we sold so many licences that -- it
17 doesn't quite give a figure, but it just says that they
18 sold -- estimates the number of anglers to increase and
19 that licence sales have gone up, but they fail to
20 mention that the Willow Lake was the only lake that
21 people in McMurray can fish in, is on
22 catch-and-release. They've been on catch-and-release
23 for the wildlife for the past 25 years, and now they
24 just instilled a catch-and-release on the northern
25 pike.

26 So Alberta's government is failing on us

1 protecting the lake. Clams have disappeared. Clams
2 have disappeared in the river. And the fish are
3 disappearing all because the habitat is disappearing
4 from the mines. All this is being overlooked because
5 people are buying fishing licences. It's absurd.

6 THE CHAIR: Mr. Malcolm, just a bit of a
7 time check. We're kind of at an hour. I'll give you a
8 few more minutes to kind of finish your -- your oral
9 argument. So I'll say another 10 to 15 minutes max.

10 MR. MALCOLM: Thank you, sir.

11 Touch up on the fish a little bit more, the fish
12 habitat, and the failure of the red -- compensation
13 lakes. I think it's important that I cover the
14 compensation lake. If I could call up Figure 7-13,
15 "Planned Development Case For 2081". And we'll discuss
16 how it's important that the fish -- we understand only
17 fish that spawn in the lake are the lake whitefish.
18 All the other species of fish spawn in streams,
19 muskegs, and pond -- tributaries.

20 If you look at the compensation lakes that are
21 proposed, there are no streams flowing into it. Big
22 Creek, Redclay Creek, all the other tributaries are
23 blocked. They don't flow into that lake. Where are
24 the fish going to spawn? Something that's being
25 overlooked in this whole process. All the compensation
26 lakes. None of them have any tributaries where the

1 fish can spawn.

2 And it's nothing that can't be replicated.

3 Calgary has been replicating the fish spawning grounds
4 since I was here in 1969 for Nose Creek. Centennial
5 Park, in north -- northern part of Calgary, water from
6 the blow -- Bow River is pumped into that park, and it
7 flows out. The outflow goes into Nose Creek. And when
8 I was fishing there in 1969 and 1970, I would watch the
9 trout spawning up this sewage. I thought it was
10 sewage, but it was actually outflow from that
11 Centennial Park. And they're spawning in there. It's
12 become inadvertently spawning grounds for the rainbow
13 trout, and it was working for years until, I think,
14 they shut the pipe down.

15 So there's ways that -- innovative ways it can be
16 done. It's been proven. Spawning grounds can be
17 replicated. It needs to be done with all the
18 technology we have today.

19 I'm running time short, so I'm going to get one
20 last thing in, is the key wildlife biodiversity zones.
21 Figure 9-2, "Vegetation, Wildlife Range Study Area",
22 Volume 2, and it -- and it -- it has the key wildlife
23 biodiversity zones that Alberta doesn't want to talk
24 about. But when I Googled it, the guidelines that have
25 been developed for selected wildlife species, species
26 groups and ecological regions of the province to assist

1 land manages [sic], landowners, and land users in
2 avoiding or minimizing potential adverse impacts to
3 wildlife from various land-use activities.

4 We ask the Panel to adhere to these key wildlife
5 biodiversity zones and to make some present in the --
6 in the area. So far, the footprint doesn't show any.
7 We want to minimize the footprint, maximize
8 restoration, not reclamation.

9 If I could put on -- call up for Figure 2-14,
10 "Developments and Activities by Assessment Case",
11 Volume 3, Section 2. I would like to ask you: Where
12 in there could you put a wildlife biodiversity zone?
13 The whooping crane need it. The animals need it.

14 And I'd like to add, Alberta government -- Charles
15 Beauchamp, our hunter and outfitter, reported 15
16 whooping crane at Kearn Lake about ten years ago, and
17 reported to Fish and Wildlife, and that's as far as it
18 got. Fish and Wildlife don't produce nothing here, so
19 we don't know how many whooping cranes. When people
20 are reporting to Fish and Wildlife, they're not
21 providing it.

22 Quickly try to get with the Ronald Lake bison herd
23 and comments from Dr. Gilbert. There has been much
24 concern over migratory waterfowl access to tailings
25 ponds in the form they currently exist. In the past,
26 wildlife access to plant sites in general has also been

1 a concern. Certain animals, such as beavers, have been
2 affected, as well as many birds. Chemical exposed to
3 hydrocarbon solvents and bitumen damage to hair,
4 coats, and feathers are extremely hazardous and
5 difficult to treat.

6 The First Nations' input and studies by doctors
7 who have noted other deleterious and cumulative effects
8 on fish and wildlife surround the oil sand plant
9 activity. It is hoped that this hearing will result in
10 curbing the loss of valued resource and, most
11 important, part of Indigenous way of life.

12 The Ronald Lake herd is the most important
13 example. These bison will be displaced by the Frontier
14 Project from an area they've naturally selected to
15 live. If this herd is moved by man to any other
16 location, much more thought and planning needs to
17 happen. They need a viable habitat to move without
18 stress away from planned hazards and must be kept from
19 moving back and must also be kept away from the
20 infected herd to the north. I believe this will be a
21 difficult process with no guarantees they will stay
22 there due to unknown, unpredictable factors, invariable
23 circumstances, such as predation [sic] and forest
24 fires.

25 It would be useful to radio-collar for some of the
26 animals in each herd to monitor their locations

1 relative to each other and the plant itself. Special
2 fencing is required to keep bison out. Bison are more
3 capable of escape than cattle, and they're well more
4 dangerous should they ever get into plant sites.

5 And it is my hope the results of this hearing will
6 make a difference to protection of wildlife, in
7 particular, the Ronald Lake bison herd, less tailing
8 ponds in their present form affect a big part of the
9 solution, as well as better security in general with
10 regard to wildlife accessing and being exposed to
11 various hazards associated with oils and activity.

12 Protecting wildlife, environment will also help
13 preserve much of First Nation's way of life. The sheer
14 size and location of the Frontier oil sands project
15 raises concerns toward the end. I would like to add
16 that, according to Charles Beauchamp, what the buffalo
17 eat, the bison -- what Ronald Lake bison herd eats are
18 plants, shrubs that grow in the muskeg. They don't
19 thrive on the prairies.

20 And the bison that they brought up from Elk Island
21 National Park, according to the leader from Fort Smith
22 Metis local, tells me that they've got to truck in hay
23 to feed those buffalo. They'll starve if they were
24 left to be naturally alone. The Ronald Lake bison
25 herd, if it gets disturbed, there's -- could be
26 problems with the reproduction, and it could affect it.

1 And monitoring wells, we've already discussed that
2 there need to be more monitoring wells around the plant
3 sites that are sufficient, and there's also the fact
4 that gravity goes straight down, and there's -- we've
5 already identified there's leaks in the limestone so
6 the Dene's pond seep is going to go directly into the
7 lower McMurray Formation more than it will spread out.
8 And there's a outcrop across Poplar Point about 10
9 miles on the west side of Athabasca River, north of
10 Frontier mine. This outcrop is known to the
11 traditional land users. They smell sulphur when they
12 go by there. Stinks, they say. Well, what it is is an
13 outcrop of the McMurray formation, and that could be
14 utilized as a sample point to ensure that if there's
15 any seepage occurring in the area, it might come out
16 there.

17 And, lastly, wind is something that's -- hasn't
18 been considered, climate change, and the fact that
19 Exxon is suing -- is being sued over the oil sands over
20 the climate risks, and this happens \$30 billion carbon
21 cost faced by 14 different Alberta oil sands operations
22 as it runs throughout a subsidiary, Imperial Oil. So
23 already climate change and effects of climate change,
24 people are jumping on board and suing the oil companies
25 over it. It's only a matter of time before the Alberta
26 government and Canada are involved in this as well as

1 us Indigenous peoples. We ask you that -- Wood Buffalo
2 First Nation, before, we had recognition, and -- and we
3 had some commitment from the Alberta Energy Regulators
4 with Imperial Oil, Kearl Lake, and commitments were
5 pushed aside by Kearl. So we ask you that if you do
6 anything for us, make it conditions, not commitments or
7 recommendations.

8 Thank you, Mr. Chairman, all respective Panel
9 Members.

10 THE CHAIR: Thank you, Mr. Malcolm.

11 Thank you, Mr. Malcolm. The Panel has no
12 questions.

13 Just a reminder -- we'll close in a minute -- the
14 elevators, I think, stop bringing you back up at 7, so
15 if you go down, you cannot come back up. So just be
16 aware if you take the elevator down after 7, you're not
17 coming back up.

18 So that's it for today. We will resume tomorrow
19 morning at 9 AM, and Keepers of Athabasca will be up
20 first tomorrow morning.

21 Thank you, everybody. Have a good evening.

22

23 PROCEEDINGS ADJOURNED UNTIL 9:00 AM, DECEMBER 12, 2018

24

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26

1 CERTIFICATE OF TRANSCRIPT:

2

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

8 Dated at the City of Calgary, Province of Alberta,
9 this 11th day of December 2018.

10

11

12

<Original signed by>



13

14

Christy Longacre, RPR, CSR(A)

15

Official Court Reporter

16

17

<Original signed by>

18

19

20

Angela Porco, CSR(A)

21

Official Court Reporter

22

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